Uttarakhand Board

Inter Syllabus 2026

Class 11 & Class 12

2025-26

Accountancy (132)

Class-XI

Time: 3 Hours **Theory One Paper** **Marks: 80**

Project: 20 Marks

Units		Marks
Part A: Financial Accounting-1		
	Unit-1: Theoretical Framework	**12**
	Unit-2: Accounting Process	**44**
Part B: Financial Accounting-II		
	Unit-3: Financial Statements of Sole Proprietorship	**24**
Part C: Project Work		**20**

PART A: FINANCIAL ACCOUNTING - I

Unit-1: Theoretical Frame Work

Units/Topics

Introduction to Accounting

- Accounting- concept, meaning, as a source of information, objectives, advantages and limitations, types of accounting information; users of accounting information and their needs. Qualitative Characteristics of Accounting Information. Role of Accounting in Business.
- Basic Accounting Terms- Entity, Business Transaction, Capital, Drawings. Liabilities (Non Current and Current). Assets (Non Current, Current); Expenditure (Capital and Revenue), Expense, Revenue, Income, Profit, Gain, Loss, Purchase, Sales, Goods, Stock, Debtor, Creditor, Voucher, Discount (Trade discount and Cash Discount)

Theory Base of Accounting

- Fundamental accounting assumptions: GAAP: Concept
- Basic Accounting Concept : Business Entity, Money Measurement, Going Concern,

Accounting Period, Cost Concept, Dual Aspect, Revenue Recognition, Matching, Full Disclosure, Consistency, Conservatism,

- Materiality and Objectivity
- System of Accounting. Basis of Accounting: cash basis and accrual basis
- Accounting Standards: Applicability of Accounting Standards (AS) and Indian Accounting Standards (IndAS)
- Goods and Services Tax (GST): Characteristics and Advantages.

Unit-2: Accounting Process

Units/Topics	Learning Outcomes
Recording of Business Transactions • Voucher and Transactions: Source documents and Vouchers, Preparation of Vouchers, Accounting Equation Approach: Meaning and Analysis, Rules of Debit and Credit. • Recording of Transactions: Books of Original Entry- Journal • Special Purpose books: • Cash Book: Simple, cash book with bank column and petty cashbook • Purchases book	**After going through this Unit, the students will be able to:** • explain the concept of accounting equation and appreciate that every transaction affects either both the sides of the equation or a positive effect on one item and a negative effect on another item on the same side of accounting equation. • explain the effect of a transaction (increase or decrease) on the assets, liabilities, capital, revenue and expenses. • appreciate that on the basis of source

• Sales book • Purchases return book • Sales return book • Journal proper ***Note: Including trade discount, freight and cartage expenses for simple GST calculation.*** • Ledger: Format, Posting from journal and subsidiary books, Balancing of accounts **Bank Reconciliation Statement:** • Need and preparation, Bank Reconciliation Statement **Depreciation, Provisions and Reserves** • Depreciation: Meaning, Features, Need, Causes, factors • Other similar terms: Depletion and Amortisation • Methods of Depreciation: i. Straight Line Method (SLM) ii. Written Down Value Method (WDV) ***Note: Excluding change of method*** • Difference between SLM and WDV; Advantages of SLM and WDV • Method of recoding depreciation i. Charging to asset account ii. Creating provision for depreciation/accumulated depreciation account • Treatment of disposal of asset • Provisions, Reserves, Difference Between Provisions and Reserves. • Types of Reserves: i. Revenue reserve ii. Capital reserve iii. General reserve iv. Specific reserve v. Secret Reserve • Difference between capital and revenue reserve **Trial balance and Rectification of Errors**	documents, accounting vouchers are prepared for recording transaction in the books of accounts. • develop the understanding of recording of transactions in journal and the skill of calculating GST. • explain the purpose of maintaining a Cash Book and develop the skill of preparing the format of different types of cash books and the method of recording cash transactions in Cash book. • describe the method of recording transactions other than cash transactions as per their nature in different subsidiary books . • appreciate that at times bank balance as indicated by cash book is different from the bank balance as shown by the pass book / bank statement and to reconcile both the balances, bank reconciliation statement is prepared. • develop understanding of preparing bank reconciliation statement. • appreciate that for ascertaining the position of individual accounts, transactions are posted from subsidiary books and journal proper into the concerned accounts in the ledger and develop the skill of ledger posting. • explain the necessity of providing depreciation and develop the skill of using different methods for computing depreciation. • understand the accounting treatment of providing depreciation directly to the concerned asset account or by creating provision for depreciation account. • appreciate the method of asset disposal through the concerned asset account or by preparing asset disposal account. • appreciate the need for creating reserves and also making provisions for events which may

• Trial balance: objectives, meaning and preparation **(Scope:** *Trial balance with balance method only*) • Errors: classification-errors of omission, commission, principles, and compensating; their effect on Trial Balance. • Detection and rectification of errors; (i) Errors which do not affect trial balance (ii) Errors which affect trial balance • preparation of suspense account.	belong to the current year but may happen in next year. • appreciate the difference between reserve and reserve fund. • state the need and objectives of preparing trial balance and develop the skill of preparing trial balance. • appreciate that errors may be committed during the process of accounting. • understand the meaning of different types of errors and their effect on trial balance. • develop the skill of identification and location of errors and their rectification and preparation of suspense account.

Part B: Financial Accounting - II

Unit 3: Financial Statements of Sole Proprietorship

Units/Topics	Learning Outcomes
Financial Statements Meaning, objectives and importance; Revenue and Capital Receipts; Revenue and Capital Expenditure; Deferred Revenue expenditure. Opening journal entry. Trading and Profit and Loss Account: Gross Profit, Operating profit and Net profit. Preparation. Balance Sheet: need, grouping and marshalling of assets and liabilities. Preparation. Adjustments in preparation of financial statements with respect to closing stock, outstanding expenses, prepaid expenses, accrued income, income received in advance, depreciation, bad debts, provision for doubtful debts, provision for discount on debtors, Abnormal loss, Goods taken for personal use/staff welfare, interest on capital and managers commission. Preparation of Trading and Profit and Loss account and Balance Sheet of a sole proprietorship with adjustments. **Incomplete Records**	**After going through this Unit, the students will be able to:** • state the meaning of financial statements the • purpose of preparing financial statements. • state the meaning of gross profit, operating profit and net profit and develop the skill of preparing trading and profit and loss account. • explain the need for preparing balance sheet. • understand the technique of grouping and marshalling of assets and liabilities. • appreciate that there may be certain items other than those shown in trial balance which may need adjustments while preparing financial statements. • develop the understanding and skill to do adjustments for items and their presentation in financial statements like depreciation, closing stock, provisions, abnormal loss etc. • develop the skill of preparation of trading and profit and loss account and balance sheet.

Features, reasons and limitations. Ascertainment of Profit/Loss by Statement of Affairs method. (excluding conversion method)	

Part C: Project Work (Any One)

1. Collection of source documents, preparation of vouchers, recording of transactions with the help of vouchers.

2. Preparation of Bank Reconciliation Statement with the given cash book and the pass book with twenty to twenty-five transactions.

3. Comprehensive project of any sole proprietorship business. This may state with journal entries and their ledgering, preparation of Trial balance. Trading and Profit and Loss Account and Balance Sheet. Expenses, incomes and profit (loss), assets and liabilities are to be depicted using pie chart / bar diagram. This may include simple GST related transactions.

Evaluation Scheme of Project

Project work / Internal Assessmet

1-Project Work	**Marks**
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous assessment (Unit Test)	5
Total	**20**

Note- Two projects for class 11th (One for Half yearly examination and other for annual examination)

PROJECT WORK

It is suggested to undertake this project after completing the unit on preparation of financial statements. The student(s) will be allowed to select any business of their choice or develop the transaction of imaginary business. The project is to run through the chapters and make the project an interesting process. The amounts should emerge as more realistic and closer to reality.

Note- Two projects for class 11th (One for Half yearly examination and other for annual examination)
Specific Guidelines for Teachers

Give a list of options to the students to select a business form. You can add to the given list:

1. A beauty parlour
2. Men's saloon
3. A tailoring shop
4. A canteen
5. A cake shop
6. A confectionery shop
7. A chocolate shop
8. A dry cleaner
9. A stationery shop
10. Men's wear
11. Ladies wear
12. Kiddies wear
13. A Saree shop
14. Artificial jewellery shop
15. A small restaurant
16. A sweet shop
17. A grocery shop
18. A shoe shop
19. A coffee shop
20. A music shop
21. A juice shop
22. A school canteen
23. An ice cream parlour
24. A sandwich shop
25. A flower shop

After selection, advise the student(s) to visit a shop in the locality (this will help them to settle on a realistic amounts different items. The student(s) would be able to see the things as they need to invest in furniture, decor, lights, machines, computers etc.

A suggested list of different item is given below.

1. Rent
2. Advance rent [approximately three months]
3. Electricity deposit
4. Electricity bill
5. Electricity fitting
6. Water bill
7. Water connection security deposit
8. Water fittings
9. Telephone bill
10. Telephone security deposit
11. Telephone instrument
12. Furniture
13. Computers
14. Internet connection
15. Stationery
16. Advertisements
17. Glow sign
18. Rates and Taxes
19. Wages and Salary
20. Newspaper and magazines
21. Petty expenses
22. Tea expenses
23. Packaging expenses
24. Transport
25. Delivery cycle or a vehicle purchased
26. Registration
27. Insurance
28. Auditors fee
29. Repairs & Maintenance
30. Depreciations
31. Air conditioners
32. Fans and lights
33. Interior decorations
34. Refrigerators
35. Purchase and sales

At this stage, performas of bulk of originality and ledger may be provided to the students and they may be asked to complete the same.

In the next step the students are expected to prepare the trial balance and the financial statements.

2025-26

Accountancy (132)

Class-XII

Theory: 80 Marks **3 Hours**

)Units			Marks
Part A	**Accounting for Partnership Firms and Companies**		
	Unit 1. Accounting for Partnership Firms		36
	Unit 2. Accounting for Companies		24
			60
Part B	**Financial Statement Analysis**		
	Unit 3. Analysis of Financial Statements		12
	Unit 4. Cash Flow Statement		8
			20
Part C	**Project Work**		20
	Project work will include:		
	Project Wotk and Viva	15 Marks	
	Continuous Assessment(Unit Test)	5 Marks	
OR			
Part B	**Computerized Accounting**		
	Unit 4. Computerized Accounting		20
Part C	**Project Work**		
	Project work will include:-		
	Project Wotk and Viva:-		15
	Continuous Assessment(Unit Test)		05
	Total		**20**

Part A: Accounting for Partnership Firms and Companies

Unit 1: Accounting for Partnership Firms

Units/Topics	Learning Outcomes
• Partnership: features, Partnership Deed. • Provisions of the Indian Partnership Act 1932 in the absence of partnership deed. • Fixed v/s fluctuating capital accounts. Preparation of Profit and Loss Appropriation account- division of profit among partners, guarantee of profits. • Past adjustments (relating to interest on capital, interest on drawing, salary and profit sharing ratio). • Goodwill: meaning, nature, factors affecting and methods of valuation - average profit, super profit and capitalization. ***Note:*** *Interest on partner's loan is to be treated as a charge against profits.* Goodwill: meaning, factors affecting, need for valuation, methods for calculation (average profits, super profits and capitalization), adjusted through partners capital/ current account. **Accounting for Partnership firms - Reconstitution and Dissolution.** • **Change in the Profit Sharing Ratio** among the existing partners - sacrificing ratio, gaining ratio, accounting for revaluation of assets and reassessment of liabilities and treatment of reserves, accumulated profits and losses. Preparation of revaluation account and balance sheet. • **Admission of a partner** - effect of admission of a partner on change in the profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and re-assessment of liabilities, treatment of reserves, accumulated profits and losses,	**After going through this Unit, the students will be able to:** • state the meaning of partnership, partnership firm and partnership deed. • describe the characteristic features of partnership and the contents of partnership deed. • discuss the significance of provision of Partnership Act in the absence of partnership deed. • differentiate between fixed and fluctuating capital, outline the process and develop the understanding and skill of preparation of Profit and Loss Appropriation Account. • develop the understanding and skill of preparation profit and loss appropriation account involving guarantee of profits. • develop the understanding and skill of making past adjustments. • state the meaning, nature and factors affecting goodwill • develop the understanding and skill of valuation of goodwill using different methods. • state the meaning of sacrificing ratio, gaining ratio and the change in profit sharing ratio among existing partners. • develop the understanding of accounting treatment of revaluation assets and reassessment of liabilities and treatment of reserves and accumulated profits by preparing revaluation account and balance sheet. • explain the effect of change in profit sharing ratio on admission of a new partner. • develop the understanding and skill of

adjustment of capital accounts and preparation of capital, current account and balance sheet. • **Retirement and death of a partner:** effect of retirement / death of a partner on change in profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and reassessment of liabilities, adjustment of accumulated profits, losses and reserves, adjustment of capital accounts and preparation of capital, current account and balance sheet. Preparation of loan account of the retiring partner. • Calculation of deceased partner's share of profit till the date of death. Preparation of deceased partner's capital account and his executor's account. • **Dissolution of a partnership firm:** meaning of dissolution of partnership and partnership firm, types of dissolution of a firm. Settlement of accounts - preparation of realization account, and other related accounts: capital accounts of partners and cash/bank a/c (excluding piecemeal distribution, sale to a company and insolvency of partner(s)). **Note:** (i) If the realized value of tangible assets is not given it should be considered as realized at book value itself. (ii) If the realized value of intangible assets is not given it should be considered as nil (zero value). (ii) In case, the realization expenses are borne by a partner, clear indication should be given regarding the payment thereof.	treatment of goodwill as per AS-26, treatment of revaluation of assets and re-assessment of liabilities, treatment of reserves and accumulated profits, adjustment of capital accounts and preparation of capital, current account and balance sheet of the new firm. • explain the effect of retirement / death of a partner on change in profit sharing ratio. • develop the understanding of accounting treatment of goodwill, revaluation of assets and re-assessment of liabilities and adjustment of accumulated profits, losses and reserves on retirement / death of a partner and capital adjustment. • develop the skill of calculation of deceased partner's share till the time of his death and prepare deceased partner's and executor's account. • discuss the preparation of the capital accounts of the remaining partners and the balance sheet of the firm after retirement / death of a partner. • understand the situations under which a partnership firm can be dissolved. • develop the understanding of preparation of realisation account and other related accounts.

Unit-3 Accounting for Companies

Units/Topics	**Learning Outcomes**
Accounting for Share Capital • Features and types of companies. • Share and share capital: nature and types.	**After going through this Unit, the students will be able to:** • state the meaning of share and share capital

• Accounting for share capital: issue and allotment of equity and preferences shares. Public subscription of shares - over subscription and under subscription of shares; issue at par and at premium, calls in advance and arrears (excluding interest), issue of shares for consideration other than cash. • Concept of Private Placement and Employee Stock Option Plan (ESOP), Sweat Equity. • Accounting treatment of forfeiture and re-issue of shares. • Disclosure of share capital in the Balance Sheet of a company. **Accounting for Debentures** • Debentures: Meaning, types, Issue of debentures at par, at a premium and at a discount. Issue of debentures for consideration other than cash; Issue of debentures with terms of redemption; debentures as collateral security-concept, interest on debentures (concept of TDS is excluded). Writing off discount / loss on issue of debentures. Note: Discount or loss on issue of debentures to be written off in the year debentures are allotted from Security Premium Reserve (if it exists) and then from Statement of Profit and Loss as Financial Cost (AS 16)	and differentiate between equity shares and preference shares and different types of share capital. • understand the meaning of private placement of shares and Employee Stock Option Plan. • explain the accounting treatment of share capital transactions regarding issue of shares. • develop the understanding of accounting treatment of forfeiture and re-issue of forfeited shares. • describe the presentation of share capital in the balance sheet of the company as per schedule III part I of the Companies Act 2013. • explain the accounting treatment of different categories of transactions related to issue of debentures. • develop the understanding and skill of writing of discount / loss on issue of debentures. • understand the concept of collateral security and its presentation in balance sheet. • develop the skill of calculating interest on debentures and its accounting treatment. • state the meaning of redemption of debentures.

Part B: Financial Statement Analysis

Unit 4: Analysis of Financial Statements

Units/Topics	Learning Outcomes
Financial statements of a Company: Meaning, Nature, Uses and importance of financial Statement. Statement of Profit and Loss and Balance Sheet in	**After going through this Unit, the students will be able to:** • develop the understanding of major headings and sub-headings (as per Schedule III to the

prescribed form with major headings and sub headings (as per Schedule III to the Companies Act, 2013) **Note:** *Exceptional items, extraordinary items and profit (loss) from discontinued operations are excluded.* • **Financial Statement Analysis: Meaning, Significance** Objectives, importance and limitations. • **Tools for Financial Statement Analysis:** Comparative statements, common size statements, Ratio analysis, Cash flow analysis. • **Accounting Ratios:** Meaning, Objectives, Advantages, classification and computation. • **Liquidity Ratios:** Current ratio and Quick ratio. • **Solvency Ratios:** Debt to Equity Ratio, Total Asset to Debt Ratio, Proprietary Ratio and Interest Coverage Ratio. Debt to Capital Employed Ratio. • **Activity Ratios:** Inventory Turnover Ratio, Trade Receivables Turnover Ratio, Trade Payables Turnover Ratio, Fixed Asset Turnover Ratio, Net Asset Turnover Ratio and Working Capital Turnover Ratio. • **Profitability Ratios:** Gross Profit Ratio, Operating Ratio, Operating Profit Ratio, Net Profit Ratio and Return on Investment.	Companies Act, 2013) of balance sheet as per the prescribed norms / formats. • state the meaning, objectives and limitations of financial statement analysis. • discuss the meaning of different tools of 'financial statements analysis'. • develop the skill of preparation of preparation of comparative and common size statement, understand their uses and difference between the two. • state the meaning, objectives and significance of different types of ratios. • develop the understanding of computation of current ratio and quick ratio. • develop the skill of computation of debt equity ratio, total asset to debt ratio, proprietary ratio and interest coverage ratio. • develop the skill of computation of inventory turnover ratio, trade receivables and trade payables ratio and working capital turnover ratio and others. • develop the skill of computation of gross profit ratio, operating ratio, operating profit ratio, net profit ratio and return on investment.

Note: Net Profit Ratio is to be calculated on the basis of profit before and after tax.

Unit 5: Cash Flow Statement

Units/Topics	**Learning Outcomes**
• Meaning, objectives Benefits, Cash and Cash Equivalents, Classification of Activities and preparation (as per AS 3 (Revised) (Indirect Method only)	**After going through this Unit, the students will be able to:** • state the meaning and objectives of cash flow statement.

Note: ***(i)*** *Adjustments relating to depreciation and amortization, profit or loss on sale of assets including investments, dividend (both final and interim) and tax.* ***(ii)*** *Bank overdraft and cash credit to be treated as short term borrowings.* ***(iii)*** *Current Investments to be taken as Marketable securities unless otherwise specified.*	• develop the understanding of preparation of Cash Flow Statement using indirect method as per AS 3 with given adjustments.

Note: *Previous years' Proposed Dividend to be given effect, as prescribed in AS-4, Events occurring after the Balance Sheet date. Current years' Proposed Dividend will be accounted for in the next year after it is declared by the shareholders.*

Project Work

One specific project based on financial statement analysis of a company covering any two aspects from the following:

1. Comparative and common size financial statements
2. Accounting Ratios
3. Segment Reports
4. Cash Flow Statements

OR

Part B: Computerised Accounting

Unit 4: Computerised Accounting

Overview of Computerised Accounting System

- Introduction: Application in Accounting.
- Features of Computerised Accounting System.
- Structure of CAS.
- Software Packages: Generic; Specific; Tailored.

Accounting Application of Electronic Spreadsheet.

- Concept of electronic spreadsheet.
- Features offered by electronic spreadsheet.
- Application in generating accounting information - bank reconciliation statement; asset accounting; loan repayment of loan schedule, ratio analysis
- Data representation- graphs, charts and diagrams.

Using Computerized Accounting System.

- Steps in installation of CAS, codification and Hierarchy of account heads, creation of accounts.
- Data: Entry, validation and verification.
- Adjusting entries, preparation of balance sheet, profit and loss account with closing entries and opening entries.
- Need and security features of the system.

PART C: Project Work

Evaluation Scheme of Project

Project work / Internal Assessmet

1-Project Work	Marks
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous Assessment (Unit Test)	5
Total	**20**

Prescribed Books:

Financial Accounting -I	Class XI	NCERT Publication
Accountancy -II	Class XI	NCERT Publication
Accountancy -I	Class XII	NCERT Publication
Accountancy -II	Class XII	NCERT Publication
Accountancy – Computerised Accounting System	Class XII	NCERT Publication

2025–26

कृषि–शस्य विज्ञान (134)

कक्षा–11

प्रथम प्रश्न–पत्र

(शस्य विज्ञान–साधारण फसलें, मिट्टी तथा खाद)

सैद्धान्तिक

पूर्णांकः 50 अंक **समय– 3 घण्टे**

यूनिट 1 20 अंक

फार्म की साधारण फसलें–गेहूं, धान,, मक्का, सोयाबीन, सरसों, अरहर, मटर, कपास, ज्वार, बाजरा, मूंगफली, सूर्यमुखी, तम्बाक,चना, बरसीम, आलू और गन्ने का निम्न शीर्षकों के अन्तर्गत अध्ययन–
संस्तुत प्रजातियां, उनके मुख्य गुण, प्रदेश के उपयुक्त क्षेत्र, बोने का समय, बीज दर, बोने की विधि, खाद देना, सिंचाई करना, फसल रक्षा उपर्युक्त फसलों के खर–पतवार उनके नियंत्रण, मुख्य कीट एवं रोगों के लक्षण तथा निवारण, फसल काटना, मड़ाई, उपज तथा इनका बीजोत्पादन।

यूनिट 2 05 अंक

मिट्टियां–मिट्टियों की उत्पत्ति, मिट्टियों का वर्गीकरण–बजरीली, बलुई, दोमट, सिल्ट तथा चिकनी मिट्टी, मिट्टी के भौतिक गुण, मिट्टी की रचना पर भौतिक एवं रासायनिक कारकों का प्रभाव, भूमि संरक्षण की विभिन्न विधियों के मूल सिद्धान्त।

यूनिट 3 15 अंक

खाद तथा खाद देना, पौधे की वृद्धि के लिये आवश्यक पोषक तत्व, खेत की मुख्य फसलों द्वारा मिट्टी से ली जाने वाली नाइट्रोजन, फासफोरस तथा पोटाश की मात्रा, खाद देने की आवश्यकता, जैव तथा अजैव खादें, फसलों तथा मिट्टियों पर उनके प्रभाव सम्बन्धी अन्तर, खाद तथा उर्वरकों के के डालने की विधियां, गोबर की खाद तथा कम्पोस्ट खाद का संरक्षण हरी खाद की फसलें और उनके उपयोंग।
निम्न खादों का अध्ययन, उर्वरकों एवं उनके प्रयोग विधियां–
गोबर की खाद, कम्पोस्ट अरण्डी की खली, मूंगफली की खली, यूरिया, अमोनियम सल्फेट, सुपर फास्फेट, राक फास्फेट, पोटैशियम सल्फेट, म्यूरेट आफ पोटाश, मिश्रित खाद, डाई अमोनिया फास्फेट तथा जैविक खादें–बर्मीकल्चर ब्लू ग्रीन एल्गी, राईजोवियम कल्चर।

यूनिट–4 10 अंक

(1) पर्यावरण की सामान्य जानकारी
(2) पर्यावरण प्रदूषण का जलवायु, मृदा और आधुनिक कृषि पर प्रभाव,
पर्यावरण प्रदूषण नियंत्रण के उपाय।
(3) आधुनिक कृषि का पर्यावरण पर प्रभाव–
(अ) अधिक उपज प्रदान करने वाली किस्मों का प्रभाव
(ब) नहर द्वारा सिचाई और जलक्रान्ति (वाटर लॉगिंग)
(स) उर्वरकों एवं फसल सुरक्षा रसायन के प्रयोग का पर्यावरण पर प्रभाव।
(4) नहर द्वारा सिचाई और जलक्रान्ति (वाटर लॉगिंग)
(5) भूमि प्रयोग जनसंख्या दबाव,वनों की क्षीणता, चारागाहों एवं फसलों का पर्यावरण पर प्रभाव।
(6) प्रदूषण नियंत्रण के उपाय

प्रयोगात्मक **50 अंक**

अंक की गणना–विभिन्न फसलों के लिये आवश्यक N. P. K.के आधार पर विभिन्न खादों एवं उर्वरकों की मात्रा का निर्धारण–
उन फसलों का जो सैद्धान्तिक के अन्तर्गत दी है उगना और देखभाल, निम्न क्रियाओं का अभ्यास–
(क) हल, कल्टीवेटर, हैरो, पाटा तथा रोलर से खेत तैयार करना।
(ख) हाथ तथा सीड ड्रिल से बीज बोना।
(ग) सिंचाई।
(घ) हाथ तथा बैल चालित यंत्रों से निराई तथा गुड़ाई।
(ङ) बैल चालित औजारों से मिट्टी चढ़ाना।
(च) मड़ाई, ओसाई तथा चारा काटना।
(छ) मिट्टियों, बीजों, खर–पतवारों, खादों तथा उर्वरकों की पहचान।
(ज) विभिन्न विधियों से खाद तथा उर्वरक देना।
(झ) फसलों की उत्पादन लागत की गणना।
(ञ) छात्र राजकीय फार्मों तथा किसानों की जोतों का अध्ययन करने भ्रमणार्थ जायेंगे।
(ट) फार्म पर किये गये कार्य तथा भ्रमण स्थानों के अध्ययन का अभिलेख रखा जायेगा।

पुस्तकें–कोई पुस्तक निर्धारित या संस्तुत नहीं की गयी है। अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप उपयुक्त पुस्तक का चयन कर लें।

प्रयोगात्मक
अधिकतम अंक : 50 **न्यूनतम उत्तीर्णांक : 17** **समय : 03 घंटा**

External Examiner	
1. बीज शैय्या का निर्माण	10 अंक
2. बीज, खाद, खरपतवार,यंत्र, फसलों की पहचान	10 अंक
3. मौखिक परीक्षा	05 अंक
Internal Examiner	
4. आंकिक प्रश्नों द्वारा खाद, परिकलन एवं आय–व्यय	14 अंक
5. सत्रीय कार्य	06 अंक
10 सतत मूल्याकन (इकाई परीक्षा)	05 अंक
योग	**50 अंक**

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–
व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे उन विद्यालयों के सम्बन्धित विषयों के अध्यापक द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

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2025–26
कृषि–वनस्पति विज्ञान (135)
कक्षा–11

सैद्धान्तिक
पूर्णांक–50 **समय 3 घण्टे**

इकाई–1 15 अंक

1–वनस्पति पादप अंगों की वाह्य आकारिकी–मूल स्तम्भ और पर्ण, उनके कार्य और रूपान्तर।
2–पुष्प की संरचना तथा उनके विभिन्न भागों का कार्य, पुष्पक्रम के विभिन्न प्रारूप
3–परागण–परागण का प्रारूपिक अध्ययन विधि तथा क्रियाविधि।
4–निषेचन–क्रिया विधि का अध्ययन एवं द्विनिषेचन का महत्व।
5–फल के प्रारूप, उनके कार्य तथा प्रकीर्णन।
6–बीज की संरचना तथा अंकुरण(एक बीज पत्री तथा द्विबीज पत्री बीजों का प्रारम्भिक अंकुरण) बीज के प्रारूप, कार्य और प्रकीर्णन। बीज अंकुरण को प्रभावित करने वाले कारक।

इकाई–2 10 अंक
अन्तः आकारिकी–वनस्पति कोशिका संरचना, कोशिका के अन्तर्वस्तु, कोषकीय विभाजन ''सूत्रीय विभाजन (माइटोसिस) तथा कोशिका विभाजन (मियासिस), कोशिकाओं का उतक के रूप में संगठनतथा विभिन्न ऊतकों के कार्य। एक बीजपत्री और द्विबीज–पत्री मूल, स्तम्भ तथा पर्ण की आन्तरिक आकारिकी द्विबीज पत्री स्तम्भ और मूल में द्वितीय वृद्वि (Secondary Growth) .

इकाई–3 10 अंक
1–पादप शरीर क्रिया (केवल प्रारम्भिक अध्ययन)।
(क) जल का पौधों द्वारा अन्तग्रहण मूल की संरचना
(ख) वाष्पोत्सर्जन तथा मूलीय दाब, उसका कार्य और महत्व।
(ग) कार्वन स्वांगीकरण ,रंध्रों की संरचना और कार्य, कार्बन स्वांगीकरण की दक्ष कार्य क्रिया में सहायक कारक।
(घ) पौधे–खाद्य पदार्थों का संग्रह एवं स्थानान्तरण।
(ड.) श्वसन के प्रारूप और कार्य।

इकाई–4 08 अंक

वर्गीकरण वनस्पति विज्ञान और वनस्पति जगत का प्रारम्भिक परिचय जहां तक सम्भव हो सके क्षेत्रीय उद्यान के सामान्य पौधों के वानस्पतिक (लक्षणों का अध्ययन) ग्रेमिनी, क्रूसीफेरी, लेगुमनेसी, कुकुरविदेसी सोलैनेसी, माल्बेसी ।

इकाई–5 07 अंक
सूक्ष्म जैविकी का प्रारम्भिक अध्ययन–
(क) वायरस।
(ख) ब्लू ग्रीन एल्गी।
(ग) फंजाई।
(घ) वैक्टीरिया।
(ड.) जन्तु (सूक्ष्म)

प्रयोगात्मक 50 अंक

1–प्राथमिक अंगों के वाह्य अकारिकी का अध्ययन करने के लिये नवोद्भिद् का परीक्षण।
2–मूल, स्तम्भ तथा पर्ण के विभिन्न प्रारूपों के भागों और रूपान्तरों का अध्ययन।
3–सूक्ष्मदर्शी का प्रयोग।
4–प्रारूपिक एक बीज–पत्री तथा द्विबीज–पत्री, मूल और स्तम्भ का अभिरंजन अभ्यास के साथ मुक्तहस्त काट (कटिंग)।
5–बीजों का अध्ययन वाह्य तथा आन्तरिक, विभिन्न प्रकार के अंकुरण।
6–फलों तथा बीजों का परीक्षण और अभिज्ञान। आर्थिक एवं कृषि महत्व।
7–पादप शरीर क्रिया के वाष्पोत्सर्जन, कार्बन स्वांगीकरण प्रकाश संश्लेषण तथा श्वसन से सम्बन्धित साधारण प्रयोगों के प्रदर्शन।
8–पुष्पों और उनके भागों का परीक्षण, विच्छेदन और वर्णन।
9–पाठ्य विषय में दिये हुये फूलों के सामान्य क्षेत्रीय उद्यान के पौधों और आप्तृण के वाह्य वानस्पतिक लक्षणों का अध्ययन
और अभिज्ञान।
10–पादक संग्रह(Plant Herbarium)।

पुस्तकें–
अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप उपयुक्त पुस्तक का चयन कर लें।

अधिकतम अंक : 50 **न्यूनतम उत्तीर्णांक : 17** **समय : 03 घंटा**

External Examiner	
1. जड़ या तने की अनुप्रस्थ काट काटना	10 अंक
2. स्पॉट पहचान (10 स्पॉट)	10 अंक
3. मौखिक परीक्षा	05 अंक
Internal Examiner	
4. पुष्प एवं पौधे की पहचान	08 अंक
5. पादप शरीर क्रिया का परीक्षण	04 अंक
6. सत्रीय कार्य	08 अंक
7. सतत मूल्याकन(इकाई परीक्षा)	05 अंक
योग	**50 अंक**

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे, उन विद्यालयों के सम्बन्धित विषयों के अध्यापक द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

2025–26

कृषि–भौतिकी एवं जलवायु विज्ञान (136)

सैद्धान्तिक

समय– 3 घण्टे **50 अंक**

इकाई–1–सामान्य मात्रक, मापन, विमा, विमा के उपयोग, वर्नियर तथा सूक्ष्म मापी पैमाने, बलों का संगठन और विघटन बल,समान्तर बल, बल युग्म, बल का घूर्ण, बल साम्यवस्था ।

10 अंक

इकाई–2–वेग तथा त्वरण, संवेग, गति के नियम, गुरुत्वाधीन गति, गुरुत्वाजनित त्वरण, वृत्तीय गति, अपकेन्द्रीय तथा अभिकेन्द्रीय बल। उपग्रह का कक्षीय वेग, पलायन वेग, द्रवों पर दाब, ठोस द्रव का आपेक्षिक घनत्व,निक्ल्सन हाइड्रोमीटर, कोशित्व तथा बल, तनाव, वायु मण्डलीय दाब, वायुदाबमापी, घनत्व बोतल। 10 अंक

इकाई–3 घर्षण और उनके नियमों के सरल उदाहरण, सरल मशीनें जैसे घिरी तथा उत्तोलक, साधारण पम्पों का कार्य चालन, ऊष्मा, संवाहकर्ता, आपेक्षिक ऊष्मा, मिट्टियों केविशेष संदर्भ में। कार्य शक्ति तथा ऊर्जा, ऊष्मा तथा ताप संवहन, संचालन तथा विकिरण ऊष्मा चालकता गुणांक, ऊष्मा के कारण मिट्टी में भौतिक परिवर्तन, गुप्त ऊष्मा एवं कार्य में सम्बन्ध, औसांक, अपेक्षिक आर्द्रता और इसका निवारण मेघ, कुहरा, कुहसा, पाला, हिम,ओला आदि की रचना मौसम पूर्वानुमान पर प्रारम्भिक विचार ऊष्मा और कार्य से सम्बन्ध। 10 अंक

इकाई–4–प्रकाश संचरण के नियम, सम तथा गोली तलों से परावर्तन तथा वर्तन ताल (लेन्स) , सूक्ष्मदर्शी अवरक्त, पराबैगनी तथा दृश्य विकिरण पर प्रारम्भिक विचार,व्यक्तिकरण एवं ध्रुवण की संक्षिप्त जानकारी, ध्वनि वेग आवृत्ति तरंग दैर्ध्य में सम्बन्ध, अनुप्रस्थ, अनुदैर्ध्य तरंग की परिभाषा, आवृत्ति तरंग, दैर्ध्य में सम्बन्ध, अनुप्रस्थ, अनुदैर्ध्य तरंग की परिभाषा, आवृत्ति आवर्तकाल में सम्बन्ध।

10 अंक

इकाई–5– विद्युत प्राथमिक तथा संचायक सेल, विद्युत् धारा, वोल्टता और प्रतिरोध ,प्राथमिक तथा संचालक सेल ,विद्युत शक्ति, शक्ति की यांत्रिक एवं विद्युत मापकों के सम्बन्ध, विद्युत् मात्रक, विद्युत् के उपयोग। व्हीट स्टोन सेतु का सिद्धान्त, मीटरसेतु, पोस्ट आफिस बाक्स, विभवमापी का संक्षिप्त अध्ययन।

10 अंक

प्रयोगात्मक

लम्बाई क्षेत्रफल सहित आयतन तथा घनत्व का शुद्ध निर्धारण, कैलीपर्स, पेंचमापी, तुला तथा वर्गीकृत–पत्र का प्रयोग, समान्तर चतुर्भुज का नियम का सत्यापन, उत्तोलक के सिद्धान्त का सत्यापन, द्रवों का आपेक्षिक घनत्व निकालना, घनत्व बोतल का प्रयोग, यथार्थ तथा आभासी घनत्वों का निकालना एवं मिट्टी का रंध्रावकाश, ब्वायल वायुदाब मापी (बैरोमीटर) पढ़ने का अभ्यास। विभिन्न तापमापक के गठन का अभ्यास, विशिष्ट ऊष्मा निकालना, गुप्त ऊष्मा निकालना, ओसांक तथा आपेक्षिक आर्द्रता निकालना।

प्रकाश का परावर्तन तथा वर्तन दर्पण के तालों (लेन्सों) का नाभ्यांतर (फोकस दूरी) निकालना, वर्तनांक निकालना।

साधारण सेल बनाना, वोल्टामापी तथा अमापी की विधि एवं मीटर सेतु से प्रतिरोध की माप श्रेणी तथा माप समान्तर क्रम में लैम्पों का जोड़ना पोस्ट आफिस, बाक्स आफिस द्वारा दिये गये अज्ञात प्रतिरोध का मान ज्ञात करना।

संस्तुत पुस्तकें–

विषय अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप उपयुक्त पुस्तक का चयन कर लें।

प्रयोगात्मक

अधिकतम अंक : 50 न्यूनतम उत्तीर्णांक : 17 समय : 03 घंटा

External Examiner	
1. एक प्रमुख प्रयोग	20 अंक
2. मौखिक परीक्षा	05 अंक
Internal Examiner	
3. एक सहायक प्रयोग	15 अंक
4. सत्रीय कार्य	05 अंक
5. सतत मूल्याकन (इकाई परीक्षा)	05 अंक
योग	**50 अंक**

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे, उन विद्यालयों के सम्बन्धित विषयों के अध्यापक/प्रधानाचार्य द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

2025–26
कृषि अभियन्त्रण (137)
कक्षा–11

सैद्धान्तिक
समय : 3 घण्टे **पूर्णांकः 50**

इकाई–1 05 अंक

कृषि यन्त्रों को बनाने में प्रयोग होने वाले लोहा (ढलवा लोहा, मृदु इस्पात, उच्च कार्बनयुक्त इस्पात), (साखू, शीशम, आम, बबूल) प्लास्टिक तथा टिन के प्रकार का अध्ययन।

इकाई–2 04 अंक

हल–हलों के विभिन्न प्रकार यथा–देशी हल, मेस्टन हल, केयर हल, सावाश हल, वाहवाह हल, यू0पी0 नं0–1 तथा यू0पी0 नं0–2 हल, विक्ट्री हल, प्रजा हल–इनकी बनावट विभिन्न भाग एवं उनके कार्य रचना में प्रयोग होने वाली सामग्री, चौड़ाई, गहराई कम अधिक करना, खड़ी तथा पड़ी झिरी उनके कार्य, कार्य करते समय आवश्यक समन्जन एवं सावधानियां, विभिन्न हलों का तुलनात्मक अध्ययन, प्रचलन में व्यावहारिक बाधायें।

इकाई–3

(अ) अन्य कृषि यन्त्र–कल्टीवेटर, हो, हैरो, खुरचरी (स्क्रपर) पाटा, बीज तथा उर्वरक, ड्रिल, स्प्रेयर, डस्टर, त्रिफाली, बलचलित कटाई यन्त्र, कम्बाइन मशीन, शक्ति चालित थ्रेसर, ओसाई पंखा के विभिन्न भाग एवं उनके कार्य, ट्रैक्टर–उसके प्रयोग, ट्रैक्टर चालन में आने वाली सामान्य समस्यायें और उनका निवारण। 03 अंक

(ब) हस्त चालित तथा शक्ति चलित कुट्टी काटने की मशीन, बैल चालित तथा शक्ति चालित गन्ना, कोल्हू, बैल चालित आलू खोदक यन्त्र के कार्य प्रमुख भाग एवं उनके प्रयोग में सावधानियां एवं रख–रखाव।

03 अंक

इकाई–4

'डायनमोमीटर, उसकी बनावट और प्रयोग विधि तथा खिंचाव पर प्रभाव डालने वाले कारक। शक्ति चयन के खिंचाव के प्रभाव का महत्व तथा अश्व सामर्थ्य और उस पर आधारित आंकिक गणना का अध्ययन।'' 10 अंक

इकाई–5–

(अ) जल उत्पादक (वाटर लिफ्टर), सेन्ट्री फ्यूगल पम्प, टरवाइन पम्प, सबमर्सिवल (जलप्लवनीय) पम्प की बनावट, कार्य विधि, जल निष्कासन की मात्रा प्रतिदिन सिंचित क्षेत्रफल रुकावट एवं निदान, सावधानियां तथा रख–रखाव। 08 अंक

(ब) एक सिलिण्डर डीजल इंजन एवं विद्युत मोटर की बनावट, शक्ति उत्पन्न करने की कार्य विधि साधारण व्यवधान तथा निदान, इंजन मोटर का चयन, रख–रखाव तथा सावधानियां।

(स) कृषि में तालाब, कुंआ, नलकूप का महत्व, निर्माण विधि, कमाण्ड क्षेत्र एवं रख–रखाव। 07 अंक

इकाई–6 भू–परिष्करण– 05 अंक

(अ) कर्षण के उद्देश्य, विधि प्रकार, समय तथा रासायनिक एवं भौतिक प्रभाव।
(ब) जुताई की विधियां, गुण–दोष तथा प्रभाव, अन्तः कृषि की आवश्यकता, विभिन्न फसलों में अन्तः, कृषि हेतु प्रयोज्य कृषि यन्त्रों के नाम, रासायनिक एवं भौतिक प्रभाव तथा कृषि यन्त्रो पर आधारित आंकिक
गणना।

इकाई–7

पट्टा घिरी और गेयर द्वारा शक्ति प्रेषण की विधि, सीमायें, सावधानियां तथा रख–रखाव। चाल एवं माप ज्ञात करने सम्बन्धी सामान्य प्रश्नों की गणना।

05 अंक

प्रयोगात्मक **50 अंक**

(1) कार्यशाला के विभिन्न औजारों का परिचय, उपयोग, सही प्रयोग विधि तथा रख–रखाव का व्यावहारिक ज्ञान प्राप्त करना
एवं नामांकित चित्र बनाना।
(2) आंकिक गणना, खिंचाव, अश्व सामर्थ्य, जुताई एवं शक्ति प्रेषण पर आधारित।
(3) कार्यशाला में कार्य–
(क) काष्ठ शिल्प– कुदाल, यंत्र के बेंट बनाना तथा फिट करना।
(ख) साधारण लौहशाला कार्य–शीतल लोहे के ऊपर कार्य,
(ग) गरम लोहे से विभिन्न आकार बनाना, धार धरना तथा लोहे के दो भागों को जोड़ना, कृषि यंत्रों को पीट कर पैना
करना।
(घ) सोल्डर (झालन) के द्वारा टिन के विभिन्न आकारों जैसे कीप को जोड़ना।
(ङ) विद्युत् अथवा गैस वेल्डिंग से लोहे के टुकड़े को जोड़ना।
(4) (अ) विभिन्न प्रकार के हल, हैरो, कल्टीवेटर, हो, कुट्टी काटने की मशीन, गन्ना कोल्हू, डस्टर, स्प्रेयर, थ्रेसर, कटाई यंत्र
(रीपर), ओसाई पंखा, बीज तथा उर्वरक ड्रिल की बनावट तथा विभिन्न भागों का व्यवहारिक ज्ञान प्राप्त करना और नामांकित चित्र
बनाना।
(ब) डीजल इंजन, विद्युत् मोटर तथा सेन्ट्रीफ्यूगल पम्प की बनावट, विभिन्न भाग तथा कार्य विधि का व्यावहारिक अध्ययन
और नामांकित चित्र बनाना।
(5) उपर्युक्त क्रम–2 (अ) पर उल्लिखित यंत्रों को खोलना, बांधना तथा उनका समन्जन करना।
(ब) डीजल इंजन/विद्युत् मोटर से चालित सेन्ट्रीफ्यूगल पम्प द्वारा कुंआ, तालाब व नलकूप से पानी उठाना, जलस्राव और
सिंचित क्षेत्र का मापन तथा लागत की गणना करना।
(6) मेस्टन हल, शावास हल, कल्टीवेटर, हैरो, गन्ना कोल्हू, कुट्टी काटने का यंत्र, पावर थ्रेसर, कुटाई यंत्र से स्वयं कार्य करना।

(7) कृषि यंत्रों का खिंचाव, हलों का आकार, हलों की खड़ी झिरी तथा पड़ी झिरी (वर्टिकल एवं होरीजेन्टल सेक्शन) का
मापन।
संस्तुत पुस्तकें–
विषय अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप पुस्तक का चयन कर लें।

प्रयोगात्मक परीक्षा

अधिकतम अंक : 50 न्यूनतम उत्तीर्णांक : 17 समय : 04 घंटा

External Examiner	
1. कार्यशाला का अभ्यास	04 अंक
2. यंत्रों का समायोजन	05 अंक
3. अभियन्ता परिकलन (H P व एरिया परिकलन)	10 अंक
5. मौखिक परीक्षा	06 अंक
Internal Examiner	
6. वस्तु पहचान	10 अंक
7. सत्रीय कार्य	10 अंक
8. सतत मूल्याकन(इकाई परीक्षा)	05 अंक
योग	**50 अंक**

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–
व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे, उन विद्यालयों के सम्बन्धित विषयों के अध्यापक द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

2025–26

कृषि–गणित तथा प्रारम्भिक सांख्यिकी (138)

कक्षा–11

सैद्धान्तिक

समय 3 घण्टे **पूर्णकः 50 अंक**

1–**बीजगणित**–घातांक सिद्धान्त, लघु गुणकों का व्यवहारिक ज्ञान, विवरण, समान्तर, गुणोत्तर, हरात्मक श्रेणियों , क्रम संचय तथा संचय पर सरल प्रश्न। 05 अंक

2–**त्रिकोणमिति**–वृत्तीय फलनों की परिभाषा तथा उनके कोणों 0^0, 30^0, 45^0, 90^0, 180^0 के वृत्तीय फलनों के माप को 90+ B, 180 +B तथा किसी भी चिन्ह और माप के कोण के लिए वित्तीय फलन।
दो कोणों के योग और अन्तर के ज्या, कोज्या और स्पंज्या के त्रिकोणमितीय अनुपात, ज्या और कोज्या के गुणनफलों का योग और अन्तर के रूप में व्यक्त करना।

05 अंक

3–**ठोस ज्यामिति**–आयताकार, ठोस गोला, बेलन, शंकु के आयतन और पृष्ठ को ज्ञात करने में सूत्रों का प्रयोग।

10 अंक

4–**निर्देशांक ज्यामिति**–कात्तीय निर्देशांक, दो बिन्दुओं के बीच की दूरी एवं उन्हें दिये हुये अनुपात में विभाजितकरने वाले चिन्ह के निर्देशांक, त्रिभुजों के क्षेत्रफल सरल रेखाओं एवं वृत्तों या उनके समीकरणों से आलेखन तथा इन पर प्रश्न। 10 अंक

5–**सांख्यिकी**–आंकड़ों का संग्रह, वर्गीकरण तथा सारिणीकरण बारम्बारता बंटन, केन्द्रीय माप, समान्तर माध्य,माध्यिका, बहुलक, माध्य, विचलन तथा मानक विचलन। 20 अंक

संस्तुत पुस्तकें–

विषय अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप पुस्तक का चयन कर लें।

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2025–26

कृषि शस्य विज्ञान (139)

कक्षा–12

षष्ठम प्रश्न–पत्र

सैद्धान्तिक

पूर्णांक–50 **समयः 3 घण्टा**

शस्य विज्ञान (सिंचाई, जल निकास एवं शाक तथा फल संवर्धन)–

1–सिंचाई तथा जल निकास–फसलों को पानी की आवश्यकता, जलमान प्रस्ताव एवं उसका मृदा गठन से सम्बन्ध, सिंचाई जल के अपव्यय की रोकथाम, सिंचाई जल के गुण और उनके प्रभाव। 10

2–सिंचाई की प्रणालियां एवं विधियां– भराव, सिंचाई थाला विधि, बौछारी सिंचाई, ड्रिप सिंचाई, उठाव सिंचाई, तोड़ सिंचाई, पट्टी सिंचाई (वार्डर विधि) प्रत्येक के लाभ और सीमायें। 05

3–सिंचाई जल की माप–बी कटाव हेक्टेयर, से0 मी0, मीटर माप की प्रणाली। 05

4–जल निकास की आवश्यकता– मिट्टी में अति नमी से हानियां, भूमि विकार एवं सुधार (अम्लीय मिट्टियां, उनका बनना, रोकथाम एवं सुधार, क्षारीय एवं प्रक्षेत्र फाम)। 05

5–दैवी आपदायें–बाढ़, अतिवृष्टि, अनावृष्टि, उपलवृष्टि, भूकम्प आदि का स्वरूप, संवेदनशील क्षेत्र, हानि, नियंत्रण के उपाय। 05

6–शाक तथा फल संवर्द्धन–निम्नलिखित शाकों तथा फलों की फसलों का अध्ययन, संस्तुत प्रजातियां तथा उनके मुख्य गुण, प्रदेश के उपयुक्त क्षेत्र, बोने का समय, बीज बोने की विधि, खाद देने , सिंचाई करना, रोग एवं कीट पहचान एवं निवारण, उपज एवं बीजोत्पादन। 20

(क) गोभी वर्गीय फसलें–फूल गोभी, गांठ गोभी।

(ख) बल्व फसलें–प्याज,।

(ग) कुकुरबिट– लौकी, कद्दू, करेला, खरबूजा, तुरई ।

(घ) जड़ फसलें–गाजर, मूली, शलजम, शकरकन्द ।

(च) लेग्यूम–मटर।

(छ) मसाले–लाल मिर्च।

(ज) विविध–बैगन, टमाटर, भिण्डी।

(झ) केला, सेव, लीची, आम, अमरूद, पपीता, बेर, नींबू, आडू।

(ञ) पुष्प उत्पादन– गुलाब ।

प्रयोगात्मक

शाक फसलों को उगाना और उनकी बाद की देखभाल, नर्सरी तैयार करना और उनके बीज उत्पादन (सिद्धान्त) निम्नलिखित क्रियाओं में अभ्यास–

(क) एक वर्षीय शाक फसलों की बीज शायिका की विभिन्न यत्रों द्वारा तैयारी।
(ख) हाथ तथा बैलों से चलित यंत्रों द्वारा अंतरकर्षण।
(ग) प्रतिचयन विधि से उपज का अनुमान।
(घ) विभिन्न विधियों से सिंचाई तथा सिंचाई की लागत।
(ङ) खाद तथा उर्वरकों के शाक फसलों के संदर्भ में प्रयोग की विधियां।
(च) शाक–भाजी के बीज तथा सम्बन्धित खर–पतवारों की पहचान।
(छ) शाक–भाजी के मुख्य बीमारियों तथा कीटों की पहचान।
(ज) बीमारियों तथा कीड़ों के निवारण के लिये दवाइयों का घोल बनाना तथा डस्टर एवं स्प्रेयर का प्रयोग।

छात्र किसानों के शाक फार्मों में अध्ययन करने भ्रमणार्थ जायेंगे। प्रयोगात्मक कार्य, फसलों का मुख्य अवलोकनों तथा भ्रमण स्थानों के अध्ययन का अभिलेख रखा जायेगा।

पुस्तकें–

विषय अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप पुस्तक का चयन कर लें।

अधिकतम अंक : 50 **न्यूनतम उत्तीर्णांक : 17** **समय : 03 घंटा**

वाह्य परीक्षक द्वारा मूल्यांकन – 25 अंक

1–बीज शैय्या का निर्माण	07 अंक
2–मौखिकी	06 अंक
3–(क) आंकिक प्रश्न द्वारा खाद की गणना करना–	06 अंक
(ख) फसलों की सिंचाई से सम्बन्धित आंकिक प्रश्न–	06 अंक

आन्तरिक परीक्षक द्वारा मूल्यांकन – 25 अंक

1–बीज, खर–पतवार, खाद तथा फसलों की पहचान	10 अंक
2–अभ्यास पुस्तिका	05 अंक
3–प्रोजेक्ट	05 अंक
4– सतत मूल्यांकन (इकाई परीक्षा)	05 अंक

नोट–अभ्यास पुस्तिका एवं प्रोजेक्ट कार्य विद्यार्थियों द्वारा परिषदीय प्रयोगात्मक परीक्षा के समय प्रस्तुत करना अनिवार्य होगा।

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे, उन विद्यालयों के सम्बन्धित विषयों के अध्यापक द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

2025–26

कृषि–अर्थशास्त्र (140)

कक्षा–12

सैद्धान्तिक

अधिकतम अंक–50 **समयः 3 घण्टा**

(1)–**प्रारम्भिक अर्थशास्त्र**–सिद्धान्त, अर्थशास्त्र का अर्थ और क्षेत्र, अन्य विज्ञानों से सम्बन्ध, राष्ट्रीय नियोजन में कृषि अर्थशास्त्र का महत्व। 15

उत्पादन के उपादान, प्रतिफल नियम, प्रदेश के प्रमुख उत्पादन आंकड़े–

भूमि–इसकी विशेषतायें, भूमि का उत्पादन के साधन के रूप में महत्व, सघन तथा विस्तृत खेती।

श्रम–श्रम की विशेषतायें, श्रम का संयोजन, श्रम की दक्षता, गतिशीलता।

पूंजी–पूंजी का वर्गीकरण, कृषि में पूंजी का महत्व।

संगठन– प्रबन्ध और उत्तम कृषि उत्पादन के उपादानों का संयोजन।

(2) **विनिमय**–परिभाषा एवं प्रकार, विनिमय के लाभ, बाजार के प्रकार, बाजार और सामान्य मूल्य, मांग और पूर्ति का नियम। 10

(3) **वितरण**–परिभाषा एवं निर्धारण के सिद्धान्त–लगान, मजदूरी, ब्याज और लाभ, मूल्य का सिद्धान्त, द्रव्य, अन्तर्राष्ट्रीय व्यापार के सिद्धान्त। 05

(4) **उपभोग**– परिभाषा, आवश्यकतायें, मूल्य सापेक्षता और जीवन स्तर, उनके लक्षण, ह्रासमान, तुष्टिगुण नियम, मांग का नियम। 05

(5) **सहकारिता** का प्रारम्भिक ज्ञान, सहकारिता के सिद्धान्त, उनके संगठन , एक धंधी बनाम बहुधंधी सहकारी समितियां, भूमि विकास बैंक, एवं ग्रामीण बैंकों का कृषि में योगदान। 05

(6) **प्रारम्भिक ग्रामीण समाजशास्त्र**, ग्राम जीव का उद्‌भव और विकास, ग्रामों का सामाजिक गठन, विभिन्न सामुदायिक संस्थाओं के कार्य, ग्राम शिक्षा, सामाजिक गतिशीलता तथा सामाजिक परिवर्तन। जनसंख्या दबाव एवं बेरोजगारी समस्या का समाधान। ग्राम विकास में योगदान। 05

(7) **पंचवर्षीय योजना में कृषि** का स्थान, प्रदेश में कृषि उत्पादन के प्रमुख आंकडे । 05

2025–26
कृषि–जन्तु विज्ञान (141)
कक्षा–12

सैद्धान्तिक

अधिकतम अंक–50 **समयः 3 घण्टा**

1–(अ) जीव द्रव्य का रासायनिक संगठन, भौतिक गुण एवं जैविक गुण सजीव, निर्जीव में भेद। 10
(ब) अमीबा, पैरामीशियम जैसे–जन्तुओं द्वारा जीवित पदार्थ का अध्ययन।

2–निम्नलिखित के वाह्य आकार, स्वभाव तथा जीवन–वृत्त का अध्ययन– 10
(क) अकशेरुकीय–, केचुआ, रेशम का कीट, मधुमक्खी, गोलाकृमि, तिलचट्टा, दीमक ।
(ख) कशेरुकीय–किसी एक पक्षी तथा एक स्तनधारी (गिलहरी या खरगोश)।

3–निम्नलिखित की आन्तरिक संरचना– 10
तिलचट्टा, केचुआ, तथा खरगोश।

4–(क) स्तनधारी के आमाशय, फुफ्फुस, वृक्क,रुधिर की हिस्टोलॉजी का प्रारम्भिक अध्ययन। 10
(ख) श्वसन ,पाचन तथा उत्सर्जन की क्रिया–विज्ञान का साधारण ज्ञान।

5–(क) अनुच्छेद–2 के जन्तुओं का वर्गीकरण। 10
(ख) मानव अनुवांशिकी का प्रारम्भिक ज्ञान।

(ग) कोशा विभाजन का महत्व।

<u>प्रयोगात्मक</u>

1–सिद्धान्त पाठ्यक्रम के अन्तर्गत अनुच्छेद 1(क), 2(क) व 2(ख) के जन्तुओं की पहचान।
2–सिद्धान्त पाठ्यक्रम के अन्तर्गत 2 जन्तुओं का वाह्य आकार एवं जीवन वृत्त का अध्ययन
3–प्रोजेक्ट कार्य–
(क) कृषि फसलों को नुकसान पहुंचाने वाले जन्तुओं की सूची।
(प्रत्येक फाइलम से कम से कम एक जन्तु) तैयार करें।
(ख) फसलों को नुकसान पहुंचाने वाले किन्हीं दो जन्तुओं के मुखांगों का चार्ट/मॉडल के माध्यम से अध्ययन अकशेरुकी अथवा पक्षी या स्तनधारी के संदर्भ में,
नोट–विषय अध्यापक छात्र की सुविधानुसार प्रोजेक्ट कार्य निर्धारित करेंगे।
4–स्पॉट पहचान (06 स्पॉट)–
(क) स्थायी स्लाइड का अध्ययन–सिद्धान्त पाठ्यक्रम–4(क) के अन्तर्गत उल्लिखित पदार्थों के स्थायी आरोपण का अध्ययन, सूक्ष्मदर्शीय ज्ञान।
(ख) उत्तराखण्ड में पाये जाने वाले कृषि महत्व के साधारण पक्षियों की पहचान, समाजशास्त्र वर्गीकरण का ज्ञान तथा उनके नाम।

5–सत्रीय कार्य– 05

प्रयोगात्मक उत्तर पुस्तिका जो कि अध्यापक द्वारा हस्ताक्षरित हो तथा जिसमें परीक्षार्थी का वास्तविक कार्य हो, प्रस्तुत करना होगा।

6–मौखिक–

(क) मौखिक प्रश्न–सैद्धान्तिक भाग में दिये गये पाठ्यक्रम के अन्तर्गत सामान्य ज्ञान सम्बन्धी प्रश्न आधारित होंगे।

(ख) सम्बन्धित जन्तुओं का संग्रह।

पुस्तकें–

कोई पुस्तक संस्तुत नहीं की गयी है। विद्यालय के विषय अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप उपयुक्त पुस्तक का चयन कर लें।

प्रयोगात्मक परीक्षा

अधिकतम अंक : 50 न्यूनतम उत्तीर्णांक : 17 समय : 03 घंटा

वाह्य परीक्षक द्वारा मूल्यांकन – 25 अंक

1–जन्तुओं एवं वस्तुओं की पहचान– 07 अंक

2–दिये गये पदार्थों का सूक्ष्म विवेचन– 05 अंक

3–सूक्ष्मदर्शीय स्लाइड की पहचान– 07 अंक

4–मौखिक 06 अंक

आन्तरिक परीक्षक द्वारा मूल्यांकन – 25 अंक

5–प्रोजेक्ट कार्य– 08 अंक

6–अभ्यास पुस्तिका– 05 अंक

7–मौखिक एवं सत्रीय कार्य– 07 अंक

8– सतत् मूल्यांकन (इकाई परीक्षा) 05 अंक

नोट–अभ्यास पुस्तिका एवं प्रोजेक्ट कार्य विद्यार्थियों द्वारा परिषदीय प्रयोगात्मक परीक्षा के समय प्रस्तुत करना अनिवार्य होगा।

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे, उन विद्यालयों के सम्बन्धित विषयों के अध्यापक/प्रधानाचार्य द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

2025–26

कक्षा–12

कृषि पशुपालन एवं पशु चिकित्सा विज्ञान(142)

सैद्धान्तिक

अधिकतम अंक–50 **समयः 3 घण्टा**

1–पशुओं के प्रमुख नस्लों के विवरण का अध्ययन, उदाहराणार्थ–गाय, भैंस, बकरी, भेड़ तथा मुर्गी।, पशुओं की आयु आंकना। उत्तम दधू देती गाय तथा भैंस के लक्षण, बैल और सांड़ो के लक्षण और उनका गुणांकन–पत्र विधि से चयन। 15

2–गाभिन गाय, ब्याने के समय गाय, नवजात बच्चों, हाल की ब्यानी गायों और दूध देती गायों तथा पशुओं का बंध्याकरण (बधियाकरण)। 07

3–विभिन्न वर्ग के पशुओं तथा बछड़ा–बछड़ी, गाभिन गायों, दूध देती गायों, मुर्गियों की देख–रेख और प्रबन्ध सम्बन्धी सामान्य सिद्धान्त। विभिन्न प्रकार के चारों और दानों को वर्ष भर सस्ती उपलब्धि पर सामान्य विचार, गायों को दोहने के लिये साफ करना और तैयार करना, गौशालाओं की सफाई और रोगाणु रहित करने पर सामान्य विचार। दोहन के सिद्धान्त और विधियों तथा दूध का स्वच्छता से उत्पादन, कृत्रिम दूध की पहचान, दूध अभिलेखण। 10

4–दूध से बनने वाले पदार्थों जैसे क्रीम, मक्खन, पनीर, दही, घी, आइसक्रीम की सामान्य जानकारी। आपरेशन पलड की संक्षिप्त जानकारी 08

5–पशु प्रजनन, उद्देश्य एवं विधियों की सामान्य जानकारी। 05

6–पशु चिकित्सा व्यवहार में प्रमुख साधारण औषधियों और उनकी प्रयोग विधि, उपचार के लिये पशुओं को सम्भालना, गिराना और बांधना, बछड़ों को बधिया करना। पशुओं में होने वाले रोग–खुरपका, मुंहपका, गलाघोंटू, थनैला, अफारा, रानीखेत बीमारियों के लक्षण एवं बचाव। 05

प्रयोगात्मक

1–गाय और बैलों की वाह्य शरीर रचना।
2–गाय, बैल और भैंस की आयु आंकना।
3–उत्तम गाय, भैंस, सांड़ और बैलों के लक्षणों का अध्ययन।
4–संतुलित आहार बनाना। पशु आहार के बाजार भावों पर मौखिक प्रश्न।
6–पशुओं की करने के लिये संभालना, गिराना और बांधना।
7–पशु चिकित्सा, व्यवहार में प्रयुक्त साधारण औषधियों की जानकारी और उनकी प्रयोग विधि।
8–पालतू पशुओं की ताप, नाड़ी और श्वास गति को ज्ञात करना।
9–डेरी फार्म पर रखे जाने वाले विभिन्न अभिलेखों की जानकारी।
10–वर्ष भर में किये गये प्रयोगात्मक कार्य का अभिलेख।

पुस्तकें–

विषय अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप पुस्तक का चयन कर लें।

प्रयोगात्मक परीक्षा

अधिकतम अंक : 50 न्यूनतम उत्तीर्णांक : 17 समय : 03 घंटा

वाह्य परीक्षक द्वारा मूल्यांकन –25 अंक

1–आहार परिकलन–	10 अंक
2–पशु प्रबन्ध / पशु चिकित्सा	
(क) पशु का नियंत्रण करना व गिराना–	04 अंक
(ख) पालतू पशुओं के तापक्रम, नाड़ी व श्वसन का ज्ञान	04 अंक
3–मौखिक–	07 अंक

आन्तरिक परीक्षक द्वारा मूल्यांकन – 25 अंक

4–पशुओं के वाह्य अंगों की पहचान–	04 अंक
5–आहार परिकलन–	04 अंक
6–औषधि एवं यंत्रों की पहचान–	05 अंक
7–अभ्यास पुस्तिका	07 अंक
8– सतत् मूल्यांकन (इकाई परीक्षा)	05 अंक

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे, उन विद्यालयों के सम्बन्धित विषयं के अध्यापक द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

2025–26

कृषि रसायन विज्ञान(143)

सैद्धान्तिक

अधिकतम अंक–50 **समयः 3 घण्टा**

प्रश्न–पत्र निम्नलिखित प्रकार से तीन भागों में विभाजित होगा–(1) भौतिक रसायन, (2) अकार्बनिक रसायन तथा (3) कार्बनिक रसायन।

1–भौतिक रसायन– 10

इकाई–1

(1) भौतिक व रसायनिक परिवर्तन।

(2) रसायनिक संयोग के नियम (आंकिक प्रश्न रहित)।

द्रव की अविनाशिता का नियम, स्थिर अनुपात का नियम, गुणित अनुपात का नियम, व्युत्क्रम अनुपात का नियम व गैसों का आयतन सम्बन्धी नियम। उपरिलिखित नियमों की आधुनिक परमाणु सिद्धान्त के आधार पर व्याख्या।

(3) परमाणु सिद्धान्त, आधुनिक एवं प्राचीन धारणायें (प्रारम्भिक विचार)।

(4) निम्नलिखित की परिभाषा, सरल व्याख्या व परस्पर सम्बन्ध–संयोजकता, परमाणु भार, अणुभार एवं तुल्यांक भार।

(5) परमाणु की संरचना एवं रेडियोएक्टिविटी

(6) एवोगेड्रो की परिकल्पना एवं उसके उपयोग

इकाई–2–(1) आयनवाद–सिद्धान्त, परमाणु और आयन में अन्तर और निम्न की आयनवाद की सहायता से व्याख्या वैद्युत् अपघटन, अम्ल, क्षार, लवण, जल, अपघटन और उदासीनीकरण। 05

(2) आक्सीकरण एवं अपचयन

(3) मृदा परीक्षण की सामान्य जानकारी– पी एच मान, जीवांश पदार्थ एवं मृदा के अम्लीय, क्षारीय गुणों का तुलनात्मक अध्ययन।

2–अकार्बनिक रसायन

इकाई–3–तत्वों का आवर्ती वर्गीकरण– 05

जल–स्थायी एवं अस्थायी कठोरता व कठोर जल को मृदु बनाने की विधियां। जल की सिंचाई कार्य में उपयुक्तता। निम्न तत्व उनके यौगिकों की उपस्थिति गुण व उपयोगिता के विशेष सन्दर्भ में।

इकाई–4– 15

अध्ययन–नाइट्रोजन, अमोनिया, नाइट्रिक अम्ल, कार्बन, कार्बन डाई आक्साइड, फास्फोरस, फास्फोरिक अम्ल। गन्धक, सल्फर डाइ आक्साइड, सल्फ्यूरिक एसिड, क्लोरीन, हाइड्रोक्लोरिक अम्ल ।

निम्नलिखित के प्राप्ति स्थल गुण और उपयोग तथा पौधों में कार्य, सोडियम, सोडियम क्लोराइड, सोडियम कार्बोनेट, सोडियम बाई कार्बोनेट, सोडियम नाइट्रेट, पोटैशियम, पोटैशियम नाइट्रेट, पोटैशियम

सल्फेट, कैल्शियम आक्साइड, कैलशियम कार्बोनेट, कैलशियम सल्फेट, लोहा, आयरन सल्फेट, एल्यूमिनियम फास्फेट, एल्यूमिनियम सल्फेट।
नाइट्रोजन चक्र, भूमि में नाइट्रोजन का स्थिरीकरण एवं फास्फोरस एवं पोटाश का पौधों में कार्य, कृषि में उपयोग होने वाली सामान्य खादें।

3–कार्बनिक रसायन

इकाई–5–कार्बनिक रसायन की परिभाषा एवं महत्व, कार्बनिक यौगिकों की रचना एवं स्रोत, भौतिक गुण, वर्गीकरण तथा नामकरण। 15
निम्नलिखित यौगिकों का सामान्य ज्ञान, सामान्य सूत्र बनाने की सरल विधियां, सामान्य गुण तथा मुख्य–मुख्य उपयोग, रचनात्मक सूत्र (खनिज तेल, वसा, कार्बोहाइड्रटे तथा प्रोटीन को छोड़कर)।
हाइड्रोजन कार्बन–संतृप्त तथा असंतृप्त।
अल्कोहल–एथिल अल्कोहल तथा ग्लिसरीन।
एल्डीहाइड तथा कीटोन–फार्मेल्डीहाइड, एसिटेल्डीहाइड, एसीटोन
अमीन तथा अमाइड–मेथिल तथा एथिल अमीन, यूरिया।

अम्ल–एसिटिक, व्यूटिरिक, लैक्टिक तथा आक्जैलिक अम्ल। वसा तथा तेल, साबुन एवं साबुनीकरण

कार्बोहाइड्रेट–ग्लूकोस, फ्रक्टोस, इंक्षु शंर्करा स्टार्च, बेन्जोन तथा फिनोल के बनाने की सामान्य विधियां तथा सामान्य गुण।

प्रयोगात्मक

अकार्बनिक

(1) निम्नलिखित की गुणात्मक अभिक्रियायें–
क्लोराइड, ब्रोमाइड, आयोडाइड, नाइट्रेट, सल्फेट, सल्फाइड, कार्बोनेट, फास्फेट, सीसा, तांबा, आर्सेनिक, लोहा, एल्यूमिनियम, जस्ता, मैगनीज, कैल्शियम, बेरियम, मैगनीशियम, सोडियम, पोटैशियम और अमोनियम।
जल या खनिज अम्लों में घुलनशील सरल मिश्रणों का जिसमें विभिन्न वर्गों के उपर्युक्त दो से अधिक अम्लीय और दो से अधिक क्षारीयमूलक न हों, का गुणात्मक विश्लेषण (साधारण विश्लेषण में व्यतिकरण न करने वाले)।
(2) उपयुक्त मानक विलयन को प्रमाणिक मानकर अम्लीय तथा क्षारीय घोलों का बनाना तथा इनका मानकीकरण।
सल्फ्यूरिक, हाइड्रोक्लोरिक, आक्जेलिक अम्लों, सोडियम कार्बोनेट, सोडा बाइकार्बोनेट तथा सोडियम हाइड्राक्साइडों का आयतन अनुमापन कार्बोनेट और हाइड्राक्साइडों का इनके मिश्रणों में आयतनी अनुमापन।
पोटैशियम परमैगनेट द्वारा फेरस अमोनियम सल्फेट का आयतनिक अनुमापन।
(3) मृदा परीक्षण– पी एच मान तथा अम्लीय क्षारीय मृदा की पहचान करना।

कार्बनिक

निम्नलिखित कार्बनिक यौगिकों की पहचान–

कार्बनिक यौगिकों में तत्वों एवं क्रियाशील समूहों का परीक्षण। साधारण परीक्षणों द्वारा निम्नलिखित कार्बनिक यौगिकों की पहचान–एथिल एलकोहल, ,आक्जेलिक अम्ल, द्राक्षशर्करा, फल शर्करा, ईख शर्करा, स्टार्च तथा प्रोटीन ।

संस्तुत पुस्तकें–

विषय अध्यापक के परामर्श से पाठ्यक्रम के अनुरूप उपयुक्त पुस्तक का चयन कर लें।

प्रयोगात्मक परीक्षा

अधिकतम अंक : 50 न्यूनतम उत्तीर्णांक : 17 समय : 04 घंटा

वाह्य परीक्षक द्वारा मूल्यांकन – 25 अंक

1. अकार्बनिक मिश्रण का विश्लेषण	6
2. कार्बनिक यौगिकों की पहचान	5
3. आयतनी विश्लेषण	6
4. मौखिक परीक्षा	8

आन्तरिक परीक्षक द्वारा मूल्यांकन – 25 अंक

5. रसायनों का अपचयन व उपचयन	10
6. सत्रीय कार्य	5
7. अभ्यास पुस्तिका	5
8. सतत मूल्याकन (इकाई परीक्षा)	5

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा–

व्यक्तिगत परीक्षार्थियों की प्रयोगात्मक परीक्षा हेतु जो विद्यालय प्रयोगात्मक परीक्षा केन्द्र निर्धारित किये जायेंगे, उन विद्यालयों के सम्बन्धित विषयों के अध्यापक द्वारा आन्तरिक परीक्षक रूप में व्यक्तिगत परीक्षार्थियों को पचास प्रतिशत अंक प्रदान किये जायेंगे, शेष पचास प्रतिशत अंक वाह्य परीक्षक द्वारा देय होंगे।

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2025-26

BENGALI (108)

CLASS: XI

Time: 3 Hours **Theory One Paper Maximum Marks- 80**

Section A	Reading	**10 Marks**
Section B	Grammar	**13 Marks**
Section C	Literature	**45 Marks**
Section D	Creative Writing	**12 Marks**
	Internal Assessment	**20 Marks**

SECTION	**DETAILS OF TOPICS/ CHAPTERS**	**WEIGHTAGE (MARKS)**
SECTION – A Reading	Comprehension: Two unseen passages of around 200 words each. Multiple Choice Questions from given passage each of 01 mark. Fifth question (01 mark) should be grammar based (Sandhi, Synonyms, Antonyms and Sadhu – Chalit)	10
SECTION- B Grammar	1. Bachyo (Voice) Paribartan 2. Ukti (Narration) Paribartan 3. Bangla Shabdabhandar (Tatsama ,Tadbhaba Ardha-Tatsama , Deshi and Bideshi)	13

SECTION – C **Literature**	Prose: - 1. Telenapota Abishkar - Premendra Mitra 2. Biral – Bankim Chandra Chattapadhyay 3. Puimancha – Bibhutibhushan Bandapadhyay Poetry: - 1. Nun - Joy Goswami 2. Lalan Shah Phakirer Gaan – Lalan Shah 3. Samyabadi – Kazi Nazrul Islam Indian Poetry (Translated into Bengali) 4. Charan Kobi – Bharbhara Rao Drama 5. Aagun – Bijon Bhattacharjya Supplementary Reader: - Panchatantra by Syed Mujtaba Ali 1. Boi kena 2. Ajab Shahar Kolketa 3. Aadda	45
SECTION - D **Creative Writing**	1. Dialogue Writing 2. Summary Writing	**12**

Prescribed Books:

1. SahityaCharcha: Bangla 'ka': Class XI Published by PaschimbangaUchchaMadhyamikSikshaSansad.
2. Ucchatara Bangla Byakoron (Nabam&Dashamshreni)- Bamon Deb Chakraborty(Published by AkashyayMalancha)

नोट– इस प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रकार के पूछे जायेगे जिनमें से आधे प्रश्न (8 अंक) बहुविकल्पीय प्रकार के होंगे।

INTERNAL ASESS MENT MARKS DIVISION

S. N.	Topic	Marks
1.	Listening Skills	4
2.	Speaking Skills	4
3.	**Project Work**	
	a) Project	4
	b) Viva based on Project	3
4.	Continuous Assessment(Unit Test)	5
	Total	**20**

2025-26

BENGALI (108)

CLASS: XII

Time: 3 Hours **Theory One Paper** **Marks- 80**

Section A	Reading	10
Section B	Grammar	13
Section C	Literature	45
Section D	Creative Writing	12
Internal Assessment	Project and Viva	07
	Listening	04
	Speaking	04
	Continuous Assessment(Unit Test)	05

SECTION	DETAILS OF TOPICS/CHAPTERS	WEIGHTAGE (MARKS)
SECTION – A Reading	Comprehension: Two unseen passages of around 200 words each • Multiple Choice Questions fromgiven passage each of 01 mark • Fifth question (01 mark) should be grammar based (Sandhi, Antonyms, Sadhu – Chalit and Synonyms)	10
SECTION – B Grammar	1. Dhwanitatwa (definition with **one** examples) a) Apinihiti b) Abhishruti c) Swarosangati d) Swarobhakti Shabdarthotatwa (definition with **two** examples) a. Orther Utkarsho b. Orther Opokarsho c. Orther Songkochan d. Orther Prosaran Proverbs and Idioms – Meaning and sentence making (Selected 50given). Please refer to Annexure 1in Page Nos. 16 & 17.	13

SECTION –C **Literature**	**Prose:** 1. Ke banchay, ke banche- Manik Bandyopadhayay 2. Bharatbarsho - Syed Mustafa Siraj 3. Bhat - Mahasweta Devi **Drama:** Nana Ranger Din (Drama) –Ajitesh Bandyopadhaya **Poetry:** 4. Roopnaraner Kule- Rabindra Nath Thakur 5. Aami Dekhi - Shakti Chattopadhyaya 6. Krandanrata Jananir Pashe - Mridul Dasgupta 7. Porte Jane Emon Ek Majurer Proshno -Bertolt Brecht (International Poem) **Supplementary Reader**: Amar Bangla - Subhash Mukhopadhyay 8. Garo Paharer Niche 9. Chhatir Badole Hati 10. Megher Gaye Jelkhana 11. Patalpurir Rajye	45
SECTION – D **Creative Writing**	1. Report Reading (News Headline/Focus on main topic inthree sentences) 2. Advertisement Writing (Nonclassified only)	12
Project (File+ Viva)	Any one of the following Project Work is tobe undertaken in Class XI and another one will be chosen in Class XII. 1. Translation: Students are to translate a story written in English or Hindi or in any Indian language to Bengali within 1000 words. 2. Interview: An interview of any distinguished personality can betaken by the students. 3. Dramatization: Students can transform a story written in any ofthe Indian languages into drama within 1000-2000 words. 4. Self-Composed Story: Students can write a story on any special incident or day they experienced in their life. 5. Project on any Field Trip	04+03(Viva)
INTERNAL ASSESSMENT	Speaking	04
	Listening	04
	Continuous Assessment(Unit Test)	05
	TOTAL	**100**

PRESCRIBED BOOKS:

1. Sahitya Charcha: Bangla 'ka': Class XII- Published by Paschimbanga Uchcha Madhyamik Siksha Sansad.
2. Ucchataro Bangla Byakoron (Nabam o Dasham shreni) BamandebChakraborty (Published by Akshay Malancha)

नोट– इस प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रकार के पूछे जायेगे जिनमें से आधे प्रश्न (8 अंक) बहुविकल्पीय प्रकार के होंगे।

INTERNAL ASESS MENT MARKS DIVISION

S. N.	Topic	Marks
1.	Listening Skills	4
2.	Speaking Skills	4
3.	**Project Work**	
	a) Project	4
	b) Viva based on Project	3
4.	Continuous Assessment(Unit Test)	5
	Total	**20**

nnexure 1

प्रवाद-प्रवचन ও বাগধারা¼ dgkorsa vkSj eqgkojs½

1) অকাল কু ষ্মাণ্ড

2) অন্ধের যষ্টি

3) অমাবস্যার চাদ

4) অরন্ধযা ররাদন

5) আঠারো মাসে বছর

6) ইচড়ে পাকা

7) উলুবনে মুক্তা ছড়োনো

8) উভয় সংকট

9) ওজন বুঝে চলা

10) রক্তচ গণ্ডুষ

11) কূ পমণ্ডুক

12) গাছে মানে না আপ্টন রমাঞ্চল

13) গভীর জলের মাছ

14) গড্ডডলিকা প্রবাহ

15) রগা'রচষ্টি কা

16) ঘুঁটে রপাড়ে রগাবর হাসে

17) চাদর হাট

18) রচানের রচানের মাসতুতো ভাই

19) রচাখে স্বষ ফুল রদখা

20) ছাই রফলতে ভাঙা কুলা

21) ছাই চাপা আগুন

22) জ্বাল বাস্ কার কু মীরর স্বাে বিবাদ
23) টনক নো
24) রঠাট কাটা
25) রটাক স্বগ িগয়ও ধান ভান
26) তাসস্র ঘর
27) তীিথর কাক
28) দধে ামাল কইর কাজ , হার জাত নাহ লাজ
29) দধে ের লাঠি এ্কর রবাে ো
30) দু-রনৌকায় পা রদওয়া
31) ধমর কল বাতাস্ নাে
32) ধনুক ভাঙা পয
33) নুন আনত পান্তা ফুরায়
34) নাচত না জানল উঠান রদাষ
35) পাকা ধান মই
36) বভ্র আটুন ফস্কা রগরা
37) ভক্ত ে ঘ ুালা
38) মাটির মানুষ
39) মাে াতার আমল
40) মিছার ছুির
41) রথ রদো কলা রবচা
42) রাঘব রবায়াল
43) যতক্ষয শ্বাস্ ততক্ষয আ
44) লাগাম ছাে ো
45) েন্ধতর ভত নরন্ধমর যম
46) ে াে ে ের করাত
47) স্ুনে ের পায়রা
48) হাতর পাচ
49) হাতর লক্ষী পায় রঠলা
50) হ-য-ব-র-ল

2025-26
BIOLOGY(131)
CLASS XI

Time: 03 Hours **Theory One Paper** **Marks: 70**

Unit	Title	Marks
I	Diversity of Living Organisms	15
II	Structural Organization in Plants and Animals	10
III	Cell: Structure and Function	15
IV	Plant Physiology	12
V	Human Physiology	18
	Total	**70**

Unit-I Diversity of Living

Organisms Chapter-1: The Living World

Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature

Chapter-2: Biological Classification

Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.

Chapter-3: Plant Kingdom

Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnospermae and Angiosperms.

Chapter-4: Animal Kingdom

Salient features and classification of animals, non-chordates up to phyla level and chordates upto class level (salient features and at a few examples of each category). (No live animals or specimen should be displayed.)

Unit-II Structural Organization in Plants and

Animals Chapter-5: Morphology of Flowering Plants

Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae

Chapter-6: Anatomy of Flowering Plants

Anatomy and functions of tissue systems in dicots and monocots.

Chapter-7: Structural Organisation in Animals

Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog.

Unit-III Cell: Structure and Function

Chapter-8: Cell-The Unit of Life

Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.

Chapter-9: Biomolecules

Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, and nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents Concept of Metabolism, Metabolic Basis of Living, The Living State)

Chapter-10: Cell Cycle and Cell Division

Cell cycle, mitosis, meiosis and their significance

Unit-IV Plant Physiology

Chapter-11: Photosynthesis in Higher Plants

Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis.

Chapter-12: Respiration in Plants

Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient.

Chapter-13: Plant - Growth and Development

Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes

in a plant cell; plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA.

Unit-V Human Physiology

Chapter-14: Breathing and Exchange of Gases

Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders.

Chapter-15: Body Fluids and Circulation

Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.

Chapter-16: Excretory Products and their Elimination

Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant.

Chapter-17: Locomotion and Movement

Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.

Chapter-18: Neural Control and Coordination

Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse

Chapter- 19: Chemical Coordination and Integration

Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease.

The following topics are included in the syllabus but will not be assessed.

Digestion and Absorption

Alimentary canal and digestive glands, role of digestive enzymes and gastrointestinal hormones; Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats; calorific values of proteins, carbohydrates and fats; egestion; nutritional and digestive disorders - PEM, indigestion, constipation, vomiting, jaundice, diarrhoea.

PRACTICALS

Time: 03 Hours **Max. Marks: 30**

Evaluation Scheme	Marks
One Major Experiment Part A (Experiment No- 1,3,7,8)	4 Marks
One Minor Experiment Part A (Experiment No- 6,9,10,11,12,13)	3 Marks
Slide Preparation Part A (Experiment No- 2,4,5)	4 Marks
Spotting Part B	5 Marks
Practical Record + Viva Voce	4 Marks
Project Record + Viva Voce	5 Marks
Continuous Assessment (Unit Test)	05 Marks
Total	30Marks

A: List of Experiments

1. Study and describe locally available common flowering plants, from family Solanaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).
2. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
3. Study of osmosis by potato osmometer.
4. Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb).
5. Study of distribution of stomata on the upper and lower surfaces of leaves.

6. Comparative study of the rates of transpiration in the upper and lower surfaces of leaves.
7. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.
8. Separation of plant pigments through paper chromatography.
9. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
10. Test for presence of urea in urine.
11. Test for presence of sugar in urine.
12. Test for presence of albumin in urine.
13. Test for presence of bile salts in urine.

B. Study and Observe the following (spotting):

1. Parts of a compound microscope.
2. Specimens/slides/models and identification with reasons - Bacteria, *Oscillatoria, Spirogyra, Rhizopus*, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
3. Virtual specimens/slides/models and identifying features of - *Amoeba, Hydra,* liver fluke, *Ascaris*, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.
4. Mitosis in onion root tip cells and animal's cells (grasshopper) from permanent slides.
5. Types of inflorescence (cymose and racemose).
6. Human skeleton and different types of joints with the help of virtual images/models only.

Prescribed Books:

1. Biology Class-XI, Published by NCERT
2. Other related books and manuals brought out by NCERT (including multimedia).

BIOLOGY (131)
CLASS XII
2025 - 26

Time: 03 Hours **Theory One Paper** **Max. Marks: 70**

Unit	Title	Marks
VI	Reproduction	**16**
VII	Genetics and Evolution	**20**
VIII	Biology and Human Welfare	**12**
IX	Biotechnology and its Applications	**12**
X	Ecology and Environment	**10**
	Total	**70**

Unit-VI Reproduction

Chapter-1: Sexual Reproduction in Flowering Plants

Flower structure; development of male and female gametophytes; pollination - types, agencies and examples; out breeding devices; pollen-pistil interaction; double fertilization; post fertilization events - development of endosperm and embryo, development of seed and formation of fruit; special modes- apomixis, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation.

Chapter-2: Human Reproduction

Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis -spermatogenesis and oogenesis; menstrual cycle; fertilisation, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (elementary idea); parturition (elementary idea); lactation (elementary idea).

Chapter-3: Reproductive Health

Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); birth control - need and methods, contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness).

Unit-VII Genetics and Evolution

Chapter-4: Principles of Inheritance and Variation

Heredity and variation: Mendelian inheritance; deviations from Mendelism – incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance; chromosome theory of inheritance; chromosomes and genes; Sex determination - in humans, birds and honey bee; linkage and crossing over; sex linked inheritance - haemophilia, colour blindness; Mendelian disorders in humans - thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.

Chapter-5: Molecular Basis of Inheritance

Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation; gene expression and regulation - lac operon; Genome, Human and rice genome projects; DNA fingerprinting.

Chapter-6: Evolution

Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution - variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy- Weinberg's principle; adaptive radiation; human evolution.

Unit-VIII: Biology and Human Welfare

Chapter-7: Human Health and Diseases

Pathogens; parasites causing human diseases (malaria, dengue, chikungunya, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology - vaccines; cancer, HIV and AIDS; Adolescence - drug and alcohol abuse.

Chapter-8: Microbes in Human Welfare

Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicious use.

Unit-IX Biotechnology and its Applications

Chapter-9: Biotechnology - Principles and Processes

Genetic Engineering (Recombinant DNA Technology).

Chapter-10: Biotechnology and its Applications

Application of biotechnology in health and agriculture: Human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms - Bt crops; transgenic animals; biosafety issues, biopiracy and patents.

Unit-X Ecology and Environment

Chapter-11: Organisms and Populations

Population interactions - mutualism, competition, predation, parasitism; population attributes

- growth, birth rate and death rate, age distribution.

Chapter-12: Ecosystem

Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy.

Chapter-13: Biodiversity and its Conservation

Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites.

PRACTICALS

Time allowed: 3 Hours **Max. Marks: 30**

Evaluation Scheme		External Examiner	Internal Examiner
One Major Experiment	Experiment No 5	4	-
One Minor Experiment	Experiment No 02,03	4	-
Slide Preparation	Experiment No 02,03	4	-
Viva Voice	Experiment No 01	3	-
Spotting		-	5
Practical Record		-	2
Investigatory Project and its Record		-	3
Continuous Assessment(Unit Test)		-	5
Total		**15**	**15**

A. List of Experiments

1. Prepare a temporary mount to observe pollen germination.
2. Study the plant population density by quadrat method.
3. Study the plant population frequency by quadrat method.

4. Prepare a temporary mount of onion root tip to study mitosis.
5. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, banana etc.

B. Study and observe the following (Spotting):

1. Flowers adapted to pollination by different agencies (wind, insects, birds).
2. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
4. Meiosis in onion bud cell or grasshopper testis through permanent slides.
5. T.S. of blastula through permanent slides (Mammalian).
6. Mendelian inheritance using seeds of different colour/sizes of any plant.
7. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
8. Controlled pollination - emasculation, tagging and bagging.
9. Common disease causing organisms like *Ascaris, Entamoeba, Plasmodium*, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.
10. Models specimens showing symbiotic association in lichens, root nodules of leguminous plants, and parasitic mode of nutrition shown by Cuscuta on host.
11. Flash cards / models showing examples of homologous and analogous organs.

Prescribed Books:

1. Biology, Class-XII, Published by NCERT.
2. Other related books and manuals brought out by NCERT

2025-26
BUSINESS STUDIES(133)
Class XI

Theory: 80 Marks **Theory One Paper** **3 Hours**

Units		**Marks**
Part A	**Foundations of Business**	
1	Nature and Purpose of Business	16
2	Forms of Business Organisations	
3	Public, Private and Global Enterprises	14
4	Business Services	
5	Emerging Modes of Business	10
6	Social Responsibility of Business and Business Ethics	
	Total	**40**
Part B	**Finance and Trade**	
7	Sources of Business Finance	20
8	Small Business	
9	Internal Trade	20
10	International Business	
	Total	**40**
	Project Work (One)	**20**

Part A: Foundation of Business
Concept includes meaning and features

Unit 1: Evolution and Fundamentals of Business

Content	**After going through this unit, the student/ learner would be able to:**
History of Trade and Commerce in India: Indigenous Banking System, Rise of Intermediaries, Transport, Trading Communities: Merchant Corporations, Major Trade Centres, Major Imports and Exports, Position of Indian Sub-Continent in the World Economy	• To acquaint the History of Trade and Commerce in India
Business – meaning and characteristics	• Understand the meaning of business with special reference to economic and non-economic activities. • Discuss the characteristics of business.

Business, profession and employment – Concept	• Understand the concept of business, profession and employment. • Differentiate between business, profession and employment.
Objectives of business	• Appreciate the economic and social objectives of business. • Examine the role of profit in business.
Classification of business activities - Industry and Commerce	• Understand the broad categories of business activities- industry and commerce.
Industry-types: primary, secondary, tertiary Meaning and subgroups	• Describe the various types of industries.
Commerce-trade: (types-internal, external; wholesale and retail) and auxiliaries to trade; (banking, insurance, transportation, warehousing, communication, and advertising) – meaning	• Discuss the meaning of commerce, trade and auxiliaries to trade. • Discuss the meaning of different types of trade and auxiliaries to trade. • Examine the role of commerce-trade and auxiliaries to trade.
Business risk-Concept	• Understand the concept of risk as a special characteristic of business. • Examine the nature and causes of business risks.

Unit 2: Forms of Business organizations

Sole Proprietorship-Concept, merits and limitations	• List the different forms of business organizations and understand their meaning. • Identify and explain the concept, merits and limitations of Sole Proprietorship.
Partnership-Concept, types, merits and limitation of partnership, registration of a partnership firm, partnership deed. Types of partners	• Identify and explain the concept, merits and limitations of a Partnership firm. • Understand the types of partnership on the basis of duration and on the basis of liability. • State the need for registration of a partnership firm. • Discuss types of partners –active, sleeping, secret, nominal and partner by estoppel.
Hindu Undivided Family Business: Concept	• Understand the concept of Hindu Undivided Family Business.
Cooperative Societies-Concept, merits, and limitations.	• Identify and explain the concept, merits and limitations of Cooperative Societies. • Understand the concept of consumers, producers, marketing, farmers, credit and housing co-operatives.
Company - Concept, merits and limitations; Types: Private, Public and One Person Company – Concept	• Identify and explain the concept, merits and limitations of private and public companies. • Understand the meaning of one person company. • Distinguish between a private company and a public company.
Formation of company - stages, important documents to be used in formation of a company	• Highlight the stages in the formation of a company. • Discuss the important documents used in the various stages in the formation of a company.
Choice of form of business organization	• Distinguish between the various forms of business organizations. • Explain the factors that influence the choice of a suitable form of business organization.

Unit 3: Public, Private and Global Enterprises

Public sector and private sector enterprises – Concept	• Develop an understanding of Public sector and private sector enterprises
Forms of public sector enterprises: Departmental Undertakings, Statutory Corporations and Government Company	• Identify and explain the features, merits and limitations of different forms of public sector enterprises
Global Enterprises – Feature Joint venture Public private partnership – concept	• Develop an understanding of global enterprises, public private partnership by studying their meaning and features.

Unit 4: Business Services

Business services – meaning and types. Banking: Types of bank accounts - savings, current, recurring, fixed deposit and multiple option deposit account	• Understand the meaning and types of business services. • Discuss the meaning and types of Business service Banking • Develop an understanding of difference types of bank account.
Banking services with particular reference to Bank Draft, Bank Overdraft, Cash credit. E-Banking: meaning, types of digital payments	• Develop an understanding of the different services provided by banks
Insurance – Principles. Types – life, health, fire and marine insurance – concept	• Recall the concept of insurance • Understand Utmost Good Faith, Insurable Interest, Indemnity, Contribution, Doctrine of Subrogation and Causa Proxima as principles of insurance • Discuss the meaning of different
	types of insurance-life, health, fire, marine insurance.
Postal Service - Mail, Registered Post, Parcel, Speed Post, Courier - meaning	• Understand the utility of different telecom services

Unit 5: Emerging Modes of Business

E - business: concept, scope and benefits	• Give the meaning of e-business. • Discuss the scope of e-business. • Appreciate the benefits of e-business • Distinguish e-business from traditional business.

Unit 6: Social Responsibility of Business and Business Ethics

Concept of social responsibility	• State the concept of social responsibility.
Case of social responsibility	• Examine the case for social responsibility.
Responsibility towards owners, investors, consumers, employees, government and community	• Identify the social responsibility towards different interest groups.
Role of business in environment protection	• Appreciate the role of business in environment protection.
Business Ethics - Concept and Elements	• State the concept of business ethics. • Describe the elements of business ethics.

Part B: Finance and Trade

Unit 7: Sources of Business Finance

Concept of business finance	• State the meaning, nature and importance of business finance.
Owners' funds- equity shares, preferences share, retained earnings	• Classify the various sources of funds into owners' funds. • State the meaning of owners' funds.
Borrowed funds: debentures and bonds, loan from financial institution and commercial banks, public deposits, trade credit, Inter Corporate Deposits (ICD)	• State the meaning of borrowed funds. • Discuss the concept of debentures, bonds, loans from financial institutions and commercial banks, Trade credit and inter corporate deposits. • Distinguish between owners' funds and borrowed funds.

Unit 8: Small Business and Enterprises

Entrepreneurship Development (ED): Concept, Characteristics and Need. Process of Entrepreneurship Development: Start-up India Scheme, ways to fund start-up. Intellectual Property Rights and Entrepreneurship	• Understand the concept of Entrepreneurship Development (ED), Intellectual Property Rights
Small scale enterprise as defined by MSMED Act 2006 (Micro, Small and Medium Enterprise Development Act)	• Understand the meaning of small business
Role of small business in India with special reference to rural areas	• Discuss the role of small business in India

Government schemes and agencies for small scale industries: National Small Industries Corporation (NSIC) and District Industrial Centre (DIC) with special reference to rural, backward areas	• Appreciate the various Government schemes and agencies for development of small scale industries. NSIC and DIC with special reference to rural, backward area.

Unit 9: Internal Trade

Internal trade - meaning and types services rendered by a wholesaler and a retailer	• State the meaning and types of internal trade. • Appreciate the services of wholesalers and retailers.
Types of retail-trade-Itinerant and small scale fixed shops retailers	• Explain the different types of retail trade.
Large scale retailers-Departmental stores, chain stores – concept	• Highlight the distinctive features of departmental stores, chain stores and mail order business.
GST (Goods and Services Tax): Concept and key-features	• Understand the concept of GST

Unit 10: International Trade

International trade: concept and benefits	• Understand the concept of international trade. • Describe the scope of international trade to the nation and business firms.
Export trade – Meaning and procedure	• State the meaning and objectives of export trade. • Explain the important steps involved in executing export trade.
Import Trade - Meaning and procedure	• State the meaning and objectives

	of import trade. • Discuss the important steps involved in executing import trade.
Documents involved in International Trade; indent, letter of credit, shipping order, shipping bills, mate's receipt (DA/DP)	• Develop an understanding of the various documents used in international trade. • Identify the specimen of the various documents used in international trade. • Highlight the importance of the documents needed in connection with international trade transactions
World Trade Organization (WTO) meaning and objectives	• State the meaning of World Trade Organization. • Discuss the objectives of World Trade Organization in promoting international trade.

Project Work

Assessment of Project Work:

	Topics	Marks
	Project	
1	Initiative, cooperativeness and participation	2 Marks
2	Creativity in presentation	2 Marks
3	Content, observation and research work	4 Marks
4	Analysis of situations	4 Marks
5	Viva	3 Marks
	Total Marks of Project	**15 Marks**
6	Continuous Assessment (Unit Test)	5 Marks
	Total	**20 Marks**

Detailed Guidelines are given at the end of this document.

Business Studies

(133)

CLASS–XII

(2025-26)

Theory: 80 Marks **Theory One Paper** **3 Hours**

Units		Marks
Part A	**Principles and Functions of Management**	
1.	Nature and Significance of Management	16
2	Principles of Management	
3	Business Environment	
4	Planning	14
5	Organising	
6	Staffing	20
7	Directing	
8	Controlling	
	Total	**50**
Part B	**Business Finance and Marketing**	
9	Financial Management	15
10	Financial Markets	
11	Marketing Management	15
12	Consumer Protection	
	Total	**30**
Part C	**Project Work (One)**	**20**

Part A: Principles and Functions of Management

Unit 1: Nature and Significance of Management

Concept	After going through this unit, the student/ learner would be able to:
Management - concept, objectives, and importance	• Understand the concept of management. • Explain the meaning of 'Effectiveness and Efficiency. • Discuss the objectives of management. • Describe the importance of management.
Management as Science, Art and Profession	• Examine the nature of management as a science, art and profession.
Levels of Management	• Understand the role of top, middle and lower levels of management
Management functions-planning, organizing, staffing, directing and controlling	• Explain the functions of management

Coordination- concept and importance	• Discuss the concept and characteristics of coordination. • Explain the importance of coordination.

Unit 2: Principles of Management

Principles of Management - concept and significance	• Understand the concept of principles of management. • Explain the significance of management principles.
Fayol's principles of management	• Discuss the principles of management developed by Fayol.
Taylor's Scientific management - principles and techniques	• Explain the principles and techniques of 'Scientific Management'. • Compare the contributions of Fayol and Taylor.

Unit 3: Business Environment

Business Environment- concept and importance	• Understand the concept of 'Business Environment'. • Describe the importance of business environment
Dimensions of Business Environment - Economic, Social, Technological, Political and Legal Demonetization - concept and features	• Describe the various dimensions of 'Business Environment'. • Understand the concept of demonetization

Unit 4: Planning

Planning: Concept, importance and limitation	• Understand the concept of planning. • Describe the importance of planning. • Understand the limitations of planning.
Planning process	• Describe the steps in the process of planning.
Single use and Standing Plans. Objectives, Strategy, Policy, Procedure, Method, Rule, Budget and Programme	• Develop an understanding of single use and standing plans • Describe objectives, policies, strategy, procedure, method, rule, budget and programme as types of plans.

Unit 5: Organising

Organising: Concept and importance	• Understand the concept of organizing as a structure and as a process. • Explain the importance of organising.
Organising Process	• Describe the steps in the process of organizing
Structure of organisation- functional and divisional concept. Formal and informal organization - concept	• Describe functional and divisional structures of organisation. • Explain the advantages, disadvantages and suitability of functional and divisional structure. • Understand the concept of formal and informal organisation. • Discuss the advantages, disadvantages of formal and informal organisation.
Delegation: concept, elements and importance	• Understand the concept of delegation. • Describe the elements of delegation. • Appreciate the importance of Delegation.
Decentralization: concept and importance	• Understand the concept of decentralisation. • Explain the importance of decentralisation. • Differentiate between delegation and decentralisation.

Unit 6: Staffing

Staffing: Concept and importance of staffing	• Understand the concept of staffing. • Explain the importance of staffing
Staffing as a part of Human Resource Management concept	• Understand the specialized duties and activities performed by Human Resource Management
Staffing process	• Describe the steps in the process of staffing
Recruitment process	• Understand the meaning of recruitment. • Discuss the sources of recruitment. • Explain the merits and demerits of internal and external sources of recruitment.
Selection – process	• Understand the meaning of selection. • Describe the steps involved in the process of selection.
Training and Development - Concept and importance, Methods of training - on the	• Understand the concept of training and development.

job and off the job - vestibule training, apprenticeship training and internship training	• Appreciate the importance of training to the organisation and to the employees. • Discuss the meaning of induction training, vestibule training, apprenticeship training and internship training. • Differentiate between training and development. • Discuss on the job and off the job methods of training.

Unit 7: Directing

Directing: Concept and importance	• Describe the concept of directing. • Discuss the importance of directing
Elements of Directing	• Describe the various elements of directing
Motivation - concept, Maslow's hierarchy of needs, Financial and non-financial incentives	• Understand the concept of motivation. • Develop an understanding of Maslow's Hierarchy of needs. • Discuss the various financial and non-financial incentives.
Leadership - concept, styles - authoritative, democratic and laissez faire	• Understand the concept of leadership. • Understand the various styles of leadership.
Communication - concept, formal and informal communication; barriers to effective communication, how to overcome the barriers?	• Understand the concept of communication • Understand the elements of the communication process. • Discuss the concept of formal and informal communication. • Discuss the various barriers to effective communication. • Suggest measures to overcome barriers to communication.

Unit 8: Controlling

Controlling - Concept and importance	• Understand the concept of controlling. • Explain the importance of controlling.
Relationship between planning and controlling	• Describe the relationship between planning and controlling
Steps in process of control	• Discuss the steps in the process of controlling.

Part B: Business Finance and Marketing

Unit 9: Financial Management

Financial Management: Concept, role and objectives	• Understand the concept of financial management. • Explain the role of financial management in an organisation. • Discuss the objectives of financial management
Financial decisions: investment, financing and dividend - Meaning and factors affecting	• Discuss the three financial decisions and the factors affecting them.
Financial Planning - concept and importance	• Describe the concept of financial planning and its objectives. • Explain the importance of financial planning.
Capital Structure – concept and factors affecting capital structure	• Understand the concept of capital structure. • Describe the factors determining the choice of an appropriate capital structure of a company.
Fixed and Working Capital - Concept and factors affecting their requirements	• Understand the concept of fixed and working capital. • Describe the factors determining the requirements of fixed and working capital.

Unit 10: Financial Markets

Financial Markets: Concept	• Understand the concept of financial market.
Money Market: Concept	• Understand the concept of money market.
Capital market and its types (primary and secondary)	• Discuss the concept of capital market. • Explain primary and secondary markets as types of capital market. • Differentiate between capital market and money market. • Distinguish between primary and secondary markets.
Stock Exchange - Functions and trading procedure	• Give the meaning of a stock exchange. • Explain the functions of a stock exchange. • Discuss the trading procedure in a stock exchange.

	• Give the meaning of depository services and demat account as used in the trading procedure of securities.
Securities and Exchange Board of India (SEBI) - objectives and functions	• State the objectives of SEBI. • Explain the functions of SEBI.

Unit 11: Marketing

Marketing – Concept, functions and philosophies	• Understand the concept of marketing. • Explain the features of marketing. • Discuss the functions of marketing. • Explain the marketing philosophies.
Marketing Mix – Concept and elements	• Understand the concept of marketing mix. • Describe the elements of marketing mix.
Product – branding, labelling and packaging – Concept	• Understand the concept of product as an element of marketing mix. • Understand the concept of branding, labelling and packaging.
Price - Concept, Factors determining price	• Understand the concept of price as an element of marketing mix. • Describe the factors determining price of a product.
Physical Distribution – concept, components and channels of distribution	• Understand the concept of physical distribution. • Explain the components of physical distribution. • Describe the various channels of distribution.
Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations	• Understand the concept of promotion as an element of marketing mix. • Describe the elements of promotion mix. • Understand the concept of advertising. • Understand the concept of sales promotion. • Discuss the concept of public relations.

Unit 12: Consumer Protection

Consumer Protection: Concept and importance	• Understand the concept of consumer protection. • Describe the importance of

	consumer protection. • Discuss the scope of Consumer Protection Act, 2019
The Consumer Protection Act, 2019: *Source:* http://egazette.nic.in/WriteReadData/2019/210422.pdf Meaning of consumer Rights and responsibilities of consumers Who can file a complaint? Redressal machinery Remedies available	• Understand the concept of a consumer according to the Consumer Protection Act, 2019. • Explain the consumer rights • Understand the responsibilities of consumers • Understand who can file a complaint and against whom? • Discuss the legal redressal machinery under Consumer Protection Act, 2019. • Examine the remedies available to the consumer under Consumer Protection Act, 2019.
Consumer awareness - Role of consumer organizations and Non-Governmental Organizations (NGOs)	• Describe the role of consumer organizations and NGOs in protecting consumers' interests.

C: Project Work, Detailed Guidelines are Given below

PROJECT WORK IN BUSINESS STUDIES FOR CLASS XI AND XII

Objectives

After doing the Project Work in Business Studies, the students will be able to do the following:

- develop a practical approach by using modern technologies in the field of business and management;
- get an opportunity for exposure to the operational environment in the field of business management and related services;
- inculcate important skills of team work, problem solving, time management, information collection, processing, analysing and synthesizing relevant information to derive meaningful conclusions
- get involved in the process of research work; demonstrate his or her capabilities while working independently and
- make studies an enjoyable experience to cherish.

CLASS XI: GUIDELINES FOR TEACHERS

This section provides some basic guidelines for the teachers to launch the projects in Business Studies. It is very necessary to interact, support, guide, facilitate and encourage students while assigning projects to them.

The teachers must ensure that the project work assigned to the students whether individually or in group are discussed at different stages right from assignment to drafts review and finalization. Students should be facilitated in terms of providing relevant materials or suggesting websites, or obtaining required permissions from business houses, malls etc for their project. The periods assigned to the Project Work should be suitably spaced throughout the academic session. The teachers MUST ensure that the students actually go through the rigors and enjoy the process of doing the project rather than depending on any readymade material available commercially.

The following steps might be followed:

1. Students must take any one topic for half yearly examination and one for annual examination during the academic session of Class XI.
2. The project may be done in a group or individually.
3. The topic should be assigned after discussion with the students in the class and should then be discussed at every stage of submission of the draft/final project work.
4. The teacher should play the role of a facilitator and should closely supervise the process of project completion.
5. The teachers must ensure that the student's self esteem should go up, and he /she should be able to enjoy this process.
6. The project work for each term should culminate in the form of Power Point Presentation/Exhibition/ Skit before the entire class. This will help in developing ICT and communication skills among them.

The teacher should help students to identify any one project from the given topics.

I. Project One: Field Visit

The objective of introducing this project among the students is to give a first hand experience to them regarding the different types of business units operating in their surroundings, to observe their features and activities and relate them to the theoretical knowledge given in their text books. The students should select a place of field visit from the following: – (Add more as per local area availability.)

1. Visit to a Handicraft unit.
2. Visit to an Industry.
3. Visit to a Whole sale market (vegetables, fruits, flowers, grains, garments, etc.)
4. Visit to a Departmental store.
5. Visit to a Mall.

The following points should be kept in mind while preparing this visit.

1. Select a suitable day free from rush/crowd with lean business hours.
2. The teacher must visit the place first and check out on logistics. It's better to seek permission from the concerned business- incharge.
3. Visit to be discussed with the students in advance. They should be encouraged to prepare a worksheet containing points of observation and reporting.
4. Students may carry their cameras (at their own risk) with prior permission for collecting evidence of their observations.

1. Visit to a Handicraft Unit

The purpose of visiting a Handicraft unit is to understand nature and scope of its business, stake holders involved and other aspects as outlined below

a) The raw material and the processes used in the business: People /parties/firms from which they obtain their raw material.
b) The market, the buyers, the middlemen, and the areas covered. c) The countries to which exports are made.
d) Mode of payment to workers, suppliers etc.
e) Working conditions.
f) Modernization of the process over a period of time.
g) Facilities, security and training for the staff and workers.
h) Subsidies available/ availed.
i) Any other aspect that the teachers deem fit.

2. Visit to an Industry.

The students are required to observe the following:

a) Nature of the business organisation.
b) Determinants for location of business unit.
c) Form of business enterprise: Sole Proprietorship, Partnership, Undivided Hindu Family, Joint Stock Company (a Multinational Company).
d) Different stages of production/process
e) Auxiliaries involved in the process.
f) Workers employed, method of wage payment, training programmes and facilities

available.
g) Social responsibilities discharged towards workers, investors, society, environment and government.
h) Levels of management.
i) Code of conduct for employers and employees.
j) Capital structure employed- borrowed v/s owned.
k) Quality control, recycling of defective goods.
l) Subsidies available/availed.
m) Safety Measures employed.
n) Working conditions for labour in observation of Labour Laws.
o) Storage of raw material and finished goods.
p) Transport management for employees, raw material and finished goods.
q) Functioning of various departments and coordination among them (Production, Human Resource, Finance and Marketing)
r) Waste Management.
s) Any other observation.

3. Visit to a whole sale market: vegetables/fruits/flowers/grains/garments etc.

The students are required to observe the following:

a) Sources of merchandise.
b) Local market practices.
c) Any linked up businesses like transporters, packagers, money lenders, agents, etc.
d) Nature of the goods dealt in.
e) Types of buyers and sellers.
f) Mode of the goods dispersed, minimum quantity sold, types of packaging employed.
g) Factors determining the price fluctuations.
h) Seasonal factors (if any) affecting the business.
i) Weekly/ monthly non-working days.
j) Strikes, if any- causes thereof.
k) Mode of payments.
l) Wastage and disposal of dead stock.
m) Nature of price fluctuations, reason thereof.
n) Warehousing facilities available\availed.
o) Any other aspect.

4. Visit to a Departmental store

The students are required to observe the following:
a) Different departments and their lay out.
b) Nature of products offered for sale.
c) Display of fresh arrivals.
d) Promotional campaigns.
e) Spaces and advertisements.
f) Assistance by Sales Personnel.
g) Billing counter at store – Cash, Credit Card/ Debit Card, swipe facility. Added attractions and facilities at the counter.
h) Additional facilities offered to customers
i) Any other relevant aspect.

5. Visit to a Mall.

The students are required to observe the following:

a) Number of floors, shops occupied and unoccupied.
b) Nature of shops, their ownership status
c) Nature of goods dealt in: local brands, international brands,
d) Service business shops- Spas, gym, saloons etc.
e) Rented spaces, owned spaces,
f) Different types of promotional schemes.
g) Most visited shops.
h) Special attractions of the Mall- Food court, Gaming zone or Cinema etc.
i) Innovative facilities.
j) Parking facilities. Teachers may add more to the list.

II. Project Two: Case Study on a Product

a) Take a product having seasonal growth and regular demand with which students can relate. For example,
    - Apples from Himachal Pradesh, Kashmir.
    - Oranges from Nagpur,
    - Mangoes from Maharashtra/U.P./Bihar/Andhra Pradesh etc.
    - Strawberries from Panchgani,
    - Aloe vera from Rajasthan,
    - Walnuts/almonds from Kashmir,
    - Jackfruit from South,
    - Guavas from Allahabad,
    - Pineapples from North East India,
    - Tea from Assam,
    - Orchids from Sikkim and Meghalaya,
    - Pottery of Manipur,
    - Fishes from coastal areas.

Students may develop a Case Study on the following lines:

(i) Research for change in price of the product. For example, apples in Himachal Pradesh during plucking and non plucking season.
(ii) Effect on prices in the absence of effective transport system.
(iii) Effect on prices in the absence of suitable warehouse facilities.
(iv) Duties performed by the warehouses.
(v) Demand and supply situation of the product during harvesting season, prices near the place of origin and away.

Students may be motivated to find out the importance of producing and selling these products and their processed items along with the roles of Transport, Warehousing, Advertising, Banking, Insurance, Packaging, Wholesale selling, Retailing, Co-operative farming, Co-operative marketing etc.

The teacher may develop the points for other projects on similar lines for students to work on.

The teacher may assign this project as ‘group’ project and may give different products to different groups. It could conclude in the form of an exhibition.

III. Project Three: Aids to Trade

Taking any one AID TO TRADE, for example Insurance and gathering information on following aspects

1. History of Insurance Lloyd's contribution.
2. Development of regulatory Mechanism.
3. Insurance Companies in India
4. Principles of Insurance.
5. Types of Insurance. Importance of insurance to the businessmen.
6. Benefits of crop, orchards, animal and poultry insurance to the farmers.
7. Terminologies used (premium, face value, market value, maturity value, surrender value) and their meanings.
8. Anecdotes and interesting cases of insurance. Reference of films depicting people committing fraudulent acts with insurance companies.
9. Careers in Insurance.

Teachers to develop such aspects for other aids to trade.

IV. Project Four: Import /Export Procedure

Any one from the following

1. Import /Export procedure

The students should identify a product of their city/country which is imported /exported. They are required to find the details of the actual import/export procedure. They may take help from the Chambers of Commerce, Banker, existing Importers/Exporters, etc.

They should find details of the procedure and link it with their Text knowledge.

The specimens of documents collected should be pasted in the Project file with brief description of each. They may also visit railway godowns/dockyards/ transport agencies and may collect pictures of the same.

Presentation and submission of project report.

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

1. The total project will be in a file format, consisting of the recordings of the value of shares and the graphs.
2. The project will be handwritten.
3. The project will be presented in a neat folder.
4. The project report will be developed in the following sequence-
   - Cover page should project the title, student information, school and year.
   - List of contents.
   - Acknowledgements and preface (acknowledging the institution, the news papers read, T.V. channels viewed, places visited and persons who have helped).
   - Introduction.
   - Topic with suitable heading.
   - Planning and activities done during the project, if any.
   - Observations and findings while conducting the project.
   - News paper clippings to reflect the changes of share prices.
   -
   -
   -
   -
   -

Conclusions (summarised suggestions or findings, future scope of study).
Appendix (if needed).
Teachers report.
Teachers will initial preface page.
At the completion of the evaluation of the project, it will be punched in the centre so that the report cannot be reused but is available for reference only.
 The projects will be returned after evaluation. The school may keep the best projects.

V. Project Five: A visit to any State Emporium (other than your school state).

The purpose of this project is that it leads to -

 Development of deeper understanding of the diversity of products in the states like Assam, Tripura, Nagaland, Mizoram, Manipur, Meghalaya, Sikkim, Arunachal Pradesh, Jammu and Kashmir, Kerala, Chhatisgarh, Telangana, Andhra Pradesh and other states of the country.
 Sensitization and orientation of students about other states, their trade, business and commerce,
 Understanding the cultural and socio-economic aspects of the state by the students,
 Developing the understanding of role of folk art, artisanship and craftsmanship of the state in its growth and economic development
 Understanding the role of gifts of nature and natural produce in the development of trade, business and commerce
 Understanding the role of vocational skills and abilities on the livelihood of artisans/ craftsman
 Understanding of entrepreneurial skills and abilities of the artisans/craftsman
 Understanding of the unemployment problem of the state and role of art and craft of the state in generating employment opportunities
 Value aspect -
 Sense of gratitude - by appreciating the contributions made by others in the betterment of our lives
 Appreciating the dignity of work
 Sensitivity towards social, cultural, ethnical and religious differences Benefits of social harmony and peace
 Understanding and appreciating the unity in diversity in India
 Appreciating differences in race, skin colour, languages, religion, habits, festivals, clothing coexistence

Presentation and Submission of Project Report

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.
1. Nature of the business organisation (emporium)
2. Determinants for location of the concerned emporium
3. Is the space rented or owned
4. Nature of the goods dealt in
5. Sources of merchandise of the emporium
6. Role of co-operative societies in the manufacturing and/or marketing of the merchandise

7. Role of gifts of nature or natural produce in the development of goods/merchandise
8. Types of buyers and sellers
9. Modes of goods dispersed, minimum quantity sold and type of carrying bag or package used for delivery of the products sold
10. Factors determining the pricing at the emporium
11. Comparison between the prices of goods available at the emporium with the prices in the open market. Also highlight probable causes of variations if any.
12. Kind of raw material available naturally, used in making the products
13. The technique used in making the products i.e., hand made or machine made
14. Has the child labour being used in making the products sold at the emporium
15. Are the products eco-friendly, in terms of manufacturing, disposal and packing
16. Seasonal factors if any affecting the business of the emporium
17. Weekly/ Monthly non-working days
18. Mode of billing and payments - Cash, Credit Card/ Debit Card, Swipe facility.
19. Does the emporium sell its merchandise in installment / deferred payment basis
20. Do they provide home delivery and after sales services.
21. Different types of promotional campaigns / schemes
22. Assistance by Sales Personnel
23. Export orientation of this emporium and procedure used
24. Policies related to damaged/ returned goods
25. Any government facility available to the emporium
26. Warehousing facilities available / availed
27. Impact of tourism on the business of emporium
28. Additional facility offered to customers
29. Any Corporate Social Responsibility (CSR) assumed by the emporium
30. Contribution made by the emporium to its locality

ASSESSMENT

	Topics	**Marks**
	Project	
1	Initiative, cooperativeness and participation	2 Marks
2	Creativity in presentation	2 Marks
3	Content, observation and research work	4 Marks
4	Analysis of situations	4 Marks
5	Viva	3 Marks
	Total Marks of Project	**15 Marks**
6	Continuous Assessment (Unit Test)	5 Marks
	Total	**20 Marks**

Note- Two projects for class 11th (One for Half yearly examination and other for annual examination)

CLASS XII: GUIDELINES FOR TEACHERS

Students are supposed to select one unit out of four and are required to make only **ONE project** from the selected unit.

1. Help students to select any ONE Topic for the entire year.
2. The topic should be assigned after discussion with the students in the class and

should then be discussed at every stage of the submission of the project.

The teacher should play the role of a facilitator and should closely supervise the process of project completion. The teachers must ensure that the project work assigned to the students whether individually or in group are discussed at different stages right from assignment to drafts review and finalization. Students should be facilitated in terms of providing relevant materials or suggesting websites, or obtaining required permissions from business houses, malls etc for their project. The periods assigned to the Project Work should be suitably spaced throughout the academic session. The teachers MUST ensure that the student actually go through the rigors and enjoy the process of doing the project rather than depending on any readymade material available outside.

3. The students must make a presentation of the project before the class.
4. The teachers must ensure that the student's self-esteem and creativity is enhanced and both the teacher and the student enjoy this process.
5. The teachers should feel pride in the fact that they have explored the different dimensions of the project in an innovative way and their students have put in genuine work.

I. Project One: Elements of Business Environment

The teachers should help the students in selecting any one element of the following:

1. Changes witnessed over the last few years on mode of packaging and its economic impact. The teacher may guide the students to identify the following changes:
a) The changes in transportation of fruits and vegetables such as cardboard crates being used in place of wooden crates, etc. Reasons for above changes.
b) Milk being supplied in glass bottles, later in plastic bags and now in tetra-pack and through vending machines.
c) Plastic furniture [doors and stools] gaining preference over wooden furniture.
d) The origin of cardboard and the various stages of changes and growth.
e) Brown paper bags packing to recycled paper bags to plastic bags and cloth bags.
f) Re use of packaging [bottles, jars and tins] to attract customers for their products.
g) The concept of pyramid packaging for milk.
h) Cost being borne by the consumer/manufacturer.
i) Packaging used as means of advertisements.

2. The reasons behind changes in the following:
Coca – Cola and Fanta in the seventies to Thums up and Campa Cola in the eighties to Pepsi and Coke in nineties.
The teacher may guide the students to the times when India sold Coca Cola and Fanta which were being manufactured in India by the foreign companies.

The students may be asked to enquire about
a) Reasons of stopping the manufacturing of the above mentioned drinks in India THEN.
b) The introduction of Thums up and Campa cola range.
c) Re entry of Coke and introduction of Pepsi in the Indian market.
d) Factors responsible for the change.
e) Other linkages with the above.
f) Leading brands and the company having the highest market share.
g) Different local brands venturing in the Indian market.
h) The rating of the above brands in the market.
i) The survival and reasons of failure in competition with the international brands.
j) Other observations made by the students

The teacher may develop the following on the above lines

3. Changing role of the women in the past 25 years relating to joint families, nuclear families, women as a bread earner of the family, changes in the requirement trend of mixers, washing machines, micro wave and standard of living.
4. The changes in the pattern of import and export of different Products.
5. The trend in the changing interest rates and their effect on savings.
6. A study on child labour laws, its implementation and consequences.
7. The state of ‘anti plastic campaign,’ the law, its effects and implementation.
8. The laws of mining /setting up of industries, rules and regulations, licences required for running that business.
9. Social factors affecting acceptance and rejection of an identified product. (Dish washer, Atta maker, etc)
10. What has the effect of change in environment on the types of goods and services?
The students can take examples like:
a) Washing machines, micro waves, mixers and grinder.
b) Need for crèche, day care centre for young and old.
c) Ready to eat food, eating food outside, and tiffin centres.

11. Change in the man-machine ratio with technological advances resulting in change of cost structure.
12. Effect of changes in technological environment on the behaviour of employee.

II. Project Two: Principles of Management

The students are required to visit any one of the following:
1. A departmental store.
2. An Industrial unit.
3. A fast food outlet.
4. Any other organisation approved by the teacher.

They are required to observe the application of the general Principles of management advocated by Fayol.

Fayol's principles
1. Division of work.
2. Unity of command.
3. Unity of direction.
4. Scalar chain
5. Espirit de corps
6. Fair remuneration to all.
7. Order.
8. Equity.
9. Discipline
10. Subordination of individual interest to general interest.
11. Initiative.
12. Centralisation and decentralisation.
13. Stability of tenure.
14. Authority and Responsibility

OR

They may enquire into the application of scientific management techniques by F.W. Taylor in the unit visited.

Scientific techniques of management.
1. Functional foremanship.
2. Standardisation and simplification of work.
3. Method study.
4. Motion Study.
5. Time Study.
6. Fatigue Study
7. Differential piece rate plan.

Tips to teacher

(i) The teacher may organize this visit.
(ii) The teacher should facilitate the students to identify any unit of their choice and guide them to identify the principles that are being followed.
(iii) Similarly they should guide the students to identify the techniques of scientific management implemented in the organisation.
(iv) It may be done as a group activity.

(v) The observations could be on the basis of

- The different stages of division of work resulting to specialisation.
- Following instructions and accountability of subordinates to higher authorities.
- Visibility of order and equity in the unit.
- Balance of authority and responsibility.
- Communication levels and pattern in the organisation.
- Methods and techniques followed by the organisation for unity of direction and coordination amongst all.
- Methods of wage payments followed. The arrangements of fatigue study.
- Derivation of time study.
- Derivation and advantages of method study.
- Organisational chart of functional foremanship.
- Any other identified in the organisation

vi. It is advised that students should be motivated to pick up different areas of visit. As presentations of different areas in the class would help in better understanding to the other students.

vii. The students may be encouraged to develop worksheets. Teachers should help students to prepare observation tools to be used for undertaking the project.

Examples; worksheets, questionnaire, interviews and organisational chart etc.

III. Project Three: Stock Exchange

The purpose of this project is to teach school students the values of investing and utilising the stock market. This project also teaches important lessons about the economy, mathematics and financial responsibility.

The basis of this project is to learn about the stock market while investing a specified amount of fake money in certain stocks. Students then study the results and buy and sell as they see fit.

This project will also guide the students and provide them with the supplies necessary to successfully monitor stock market trends and will teach students how to calculate profit and loss on stock.

The project work will enable the students to:

- understand the topics like sources of business finance and capital market
- understand the concepts used in stock exchange
- inculcate the habit of watching business channels, reading business journals/newspapers and seeking information from their elders.

The students are expected to:

a) Develop a brief report on History of Stock Exchanges in India. (your country)

b) Prepare a list of at least 25 companies listed on a Stock Exchange.

c) To make an imaginary portfolio totalling a sum of Rs. 50,000 equally in any of the 5 companies of their choice listed above over a period of twenty working days.

The students may be required to report the prices of the stocks on daily basis and present it diagrammatically on the graph paper.

- They will understand the weekly holidays and the holidays under the Negotiable Instruments Act.

They will also come across with terms like closing prices, opening prices, etc.

 During this period of recording students are supposed to distinctively record the daily and starting and closing prices of the week other days under the negotiable instrument act so that they acquire knowledge about closing and opening prices.
 The students may conclude by identifying the causes in the fluctuations of prices. Normally it would be related to the front page news of the a business journal, for example,
 Change of seasons.
 Festivals.
 Spread of epidemic.
 Strikes and accidents
 Natural and human disasters.
 Political environment.
 Lack of faith in the government policies.
 Impact of changes in government policies for specific industry.
 International events.
 Contract and treaties at the international scene.
 Relations with the neighbouring countries.
 Crisis in developed countries, etc.

The students are expected to find the value of their investments and accordingly rearrange their portfolio. The project work should cover the following aspects;
1. Graphical presentation of the share prices of different companies on different dates.
2. Change in market value of shares due to change of seasons, festivals, natural and human disasters.
3. Change in market value of shares due to change in political environment/ policies of various countries/crisis in developed countries or any other reasons
4. Identify the top ten companies out of the 25 selected on the basis of their market value of shares.
It does not matter if they have made profits or losses.

IV. Project Four: Marketing

1. Adhesives
2. Air conditioners
3. Baby diapers
4. Bathing Soap
5. Bathroom cleaner
6. Bike
7. Blanket
8. Body Spray
9. Bread
10. Breakfast cereal
11. Butter
12. Camera
13. Car
14. Cheese spreads
15. Chocolate
16. Coffee
17. Cosmetology product
18. Crayons
19. Crockery
20. Cutlery
21. Cycle
22. DTH
23. Eraser
24. e-wash
25. Fairness cream
26. Fans
27. Fruit candy
28. Furniture
29. Hair Dye
30. Hair Oil
31. Infant dress
32. Inverter
33. Jams
34. Jeans
35. Jewellery
36. Kurti
37. Ladies bag
38. Ladies footwear

39. Learning Toys
40. Lipstick
41. Microwave oven
42. Mixers
43. Mobile
44. Moisturizer
45. Music player
46. Nail polish
47. Newspaper
48. Noodles
49. Pen
50. Pen drive
51. Pencil
52. Pickles
53. Razor
54. Ready Soups
55. Refrigerator
56. RO system
57. Roasted snacks
58. Salt
59. Sarees
60. Sauces/ Ketchup
61. Shampoo
62. Shaving cream
63. Shoe polish
64. Shoes
65. Squashes
66. Suitcase/ airbag
67. Sunglasses
68. Tea
69. Tiffin Wallah
70. Toothpaste
71. Wallet
72. Washing detergent
73. Washing machine
74. Washing powder
75. Water bottle
76. Water storage tank
77. Wipes

Any more as suggested by the teacher.

The teacher must ensure that the identified product should not be items whose consumption/use is discouraged by the society and government like alcohol products/pan masala and tobacco products, etc.

Identify one product/service from the above which the students may like to manufacture/provide [pre-assumption].

Now the students are required to make a project on the identified product/service keeping in mind the following:
1. Why have they selected this product/service?
2. Find out '5' competitive brands that exist in the market.
3. What permission and licences would be required to make the product?
4. What are your competitors Unique Selling Proposition.[U.S.P.]?
5. Does your product have any range give details?
6. What is the name of your product?
7. Enlist its features.
8. Draw the 'Label' of your product.
9. Draw a logo for your product.
10. Draft a tag line.
11. What is the selling price of your competitor's product?
(i) Selling price to consumer
(ii) Selling price to retailer
(iii) Selling price to wholesaler

What is the profit margin in percentage to the
- Manufacturer.
- Wholesaler.
- Retailer.

12. How will your product be packaged?
13. Which channel of distribution are you going to use? Give reasons for selection?
14. Decisions related to warehousing, state reasons.
15. What is going to be your selling price?
    (i) To consumer
    (ii) To retailer
    (iii) To wholesaler
16. List 5 ways of promoting your product.
17. Any schemes for
    (i) The wholesaler
    (ii) The retailer
    (iii) The consumer
18. What is going to be your 'U.S.P?
19. What means of transport you will use and why?
20. Draft a social message for your label.
21. What cost effective techniques will you follow for your product.
22. What cost effective techniques will you follow for your promotion plan.

At this stage the students will realise the importance of the concept of marketing mix and the necessary decision regarding the four P's of marketing.

- Product
- Place
- Price
- Promotion

On the basis of the work done by the students the project report should include the following:

1. Type of product /service identified and the (consumer/industries) process involve there in.
2. Brand name and the product.
3. Range of the product.
4. Identification mark or logo.
5. Tagline.
6. Labeling and packaging.
7. Price of the product and basis of price fixation.
8. Selected channels of distribution and reasons thereof.
9. Decisions related to transportation and warehousing. State reasons.
10. Promotional techniques used and starting reasons for deciding the particular technique.
11. Grading and standardization.

Presentation and Submission of Project Report

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

1. The total length of the project will be of 25 to 30 pages.
2. The project should be handwritten.
3. The project should be presented in a neat folder.
4. The project report should be developed in the following sequence-
   - Cover page should include the title of the Project, student information, school and year.

 List of contents.
 Acknowledgements and preface (acknowledging the institution, the places visited and the persons who have helped).
 Introduction.
 Topic with suitable heading.
 Planning and activities done during the project, if any.
 Observations and findings of the visit.
 Conclusions (summarized suggestions or findings, future scope of study).
 Photographs (if any).
 Appendix
 Teacher's observation.
 Signatures of the teachers.
 At the completion of the evaluation of the project, it should be punched in the centre so that the report may not be reused but is available for reference only.
 The project will be returned after evaluation. The school may keep the best projects.

ASSESSMENT

	Topics	**Marks**
	Project	
1	Initiative, cooperativeness and participation	2 Marks
2	Creativity in presentation	2 Marks
3	Content, observation and research work	4 Marks
4	Analysis of situations	4 Marks
5	Viva	3 Marks
	Total Marks of Project	**15 Marks**
6	Continuous Assessment (Unit Test)	5 Marks
	Total	**20 Marks**

2025-26
Carnatik Music(Vocal)
(Code: 117)
CLASS XI

One Theory paper **Marks :30**
Time : 3 Hours

A. History and Theory of Indian Music

1. (a) Brief history of Carnatic music with special reference of Silappadikaram, Natyasastra, Sangita

Ratnakara and Chaturdandi Prakasika.

(b) Life-sketch and contributions of the following composers-Purandaradasa, Tyagaraja, Muthuswamy Dikshitar, Syama Sastri and Bhadrachala Ramdas. Jayadeva of Narayana Tirtha, Swati Tirumal.

(c) Study of the lakshanas of musical forms: Varnam, kriti, lakshanagitam and padam, Pada Varnam, Daru, Svarajati, Geetam

2. Definition and explanation of the following terms:

Nada, sruti, svara, jaati, raga, tala, jati, yati, Dhatu, Matu

3. Candidate should be able to write in notation of the compositions in the prescribed ragas.

4. Brief lakshanas of the ragas prescribed.

5. Brief Introduction to Manodharma Sangitam

One Practical Paper **Marks: 70**

1. Ragas prescribed:

2. Varnams (atleast 5) in Aditala in two degrees of speed.

Bhairavi, Sankarabharanam, Kharaharapriya, Kalyani, Kambhoji, Mohanam, Bilahari,

Madhyamavati,

3. Traditionally rendered (atleast one) compositions in the prescribed ragas covering the main talas Adi, Rupakam and Chapu.

4. Brief alapana of the ragas prescribed.

5. Kalpana Svaras in Adi and Rupaka talas rendered in Vilamba and Madhyama kalas.
6. Continuous Assessment(Unit Test)

2025-26
Carnatic Music (Vocal)
(117)
CLASS XII
Time : 3 Hours

One Theory paper **Marks :30**

Part A :Theory

History and Theory of Indian Music

1- (a) Brief history of Karnatak music with special reference to SangitaSaramte and SangitaSampradayaPradarshni, Raga Vibodham, Brihaddesi, Dattillam.

(b) Short life-sketch and contribution of the following:
Annamaacharya, Kshetrajna Swati TirunalGopala Krishna Bharti, Mahavaidyanathalyer;

(c) Brief History and evolution of the musical form Tiruppugarh, pada, javaliandtillana.

2. Definition and the explanation of the following –
Janakajanya System of Ragas, Bhashanga, Upanga, Varja, Varka, Ragas, GamakasArudi, Eduppu, Probandhams, Grama, MurchchanaJaati&VikashaPrayoga.

3- Description of the ragas prescribed forPractical

4- Candidates should be able to write in notation composition in the ragas prescribed.

5- Brief description of concert instruments their construction andtechnique.

Part B **One Practical Paper** **Marks -70**

1- Ragas Prescribed
Pantuvarli, Todi, Nata, Gowla, Varali, Sri SaveriMukhari, Kedaragowla, Purvikalyani.

2- Two Varnam in Atatala in two degrees of speed.

3- Alapana of the ragasprescribed.

4- Compositions in authentic tradition atleast one in each of the prescribed ragas, covering musical forms kirtanas, Kirtis, Padams, Javalis, Tillanas and Ragamalikas.

5- Niraval and KalpanaSvaras in Adi, rupakam, and Chaputalas in two degrees of speed.

6- Chapu and DesadiTalas.

Talas prescribed

SuladiSaptaTalas with their Jaati and Gati and Bhedas :Chapputalas and their varieties.

7- Continuous assessment (Unit Test)

कर्नाटक संगीत (गायन)	**External Examiner**	
	1. For tuning the Tanpura/drone and question related to it	5
	2. A kriti as per the choice of the candidate with all Manodhrma asked	16
	3. A kriti with manodharma may be asked as per the choice of the examiners	10
	4. One post pallavi item	4
	Internal Examiner	
	5. One Ata Tala Varnam in two degrees of speed	4
	6. Exposition of one simple Pallavi	10
	7. Testing the knowledge on Raga Lakshanas	4
	8. Testing the knowledge on Talas	4
	9. Testing the knowledge on Musical forms	4
	10. Testing the Svarajnanam of the candidate	4
	11. Continuous Assessment (Unit Test)	5
	Total	**70**

2025-26

Carnatic Music (Melodic Instrumental)

Code-118

Class XI

One Theory Paper **3 Hours** **Marks: 30**

A. History and theory of Indian Music

1. (a) Brief history of Karnatak music with special reference to silappadikaram natyasastra, sangita Ratnakara, Savra Mela, Kalanidhi and Chaturdandi Prakasika.

   (b) Short life- sketch and contributions of the following:

   Purandara Dasa, Syamasatry, Tyagaraja, Muthuswamy Dikshitar and Tansen.

   (c) Brief history and evolution of the musical forms Kirtana and kirti, Varnams, Geetams& Svarajati.

2. Definition and explanation of the following:

   Nands, Sruti, Svara. Jaati, Raga, Tala Jaati, Yati, suladi, Sapta Talas, Nadai, Arohana,Avarohana.

3. Candidates should be able to write in notation the compositions in the prescribed ragas.

4. Description of the ragas prescribed for Practical.

5. Talas Prescribed : Suladi Sapta talas with their Jaagi and Gati bhedas

One Practical Paper **Marks: 70**

B. Practical Activites

1. Ragas Prescribed :

Mayamalavagowlam, Madhyarmavati, Arabhi.	Sankarabharanam,	Kharaharapriya Kalyani, a,	Harikamobji,

2. Varnams (atleast four) in Adi tala in two degree of speed.

3. At least one authentic compositions traditionally rendered in each of the prescribed ragas,covering the man Talas Adi, Rupakam and Chapu.

4. Brief alapana of the ragas prescribed.

5. Kalpana svaras in Adi, and Rupaka talas in Vilamba and Madhyama kalas. Technicalities of playing svara and sahitya portions.

6. The candidate should be able to produce all the gamakas pertaining to instrumental music.

7. Continuous assessment (Unit Test)

2025-26

Carnatic Music (Melodic Instrumental)

Code-118

CLASS XII

Time : 3 Hours

One Theory paper **Marks : 30**

Part A Theory

History and Theory of Indian Music

1- (a) Brief history of Karnatak music with special reference to Sangita Saramrta and Sangita Sampradaya Pradarshni, Raga

(b) Short life-sketch and contribution of the following : Annamaacharya, Swati Tirunal, Kshetrajna, Gopala Krishna Bharti, Maha Vaidyanatha Iyer;

(c) Brief History and evolution of the musical form Tiruppugarh, Padam, javali and Tilana.

2- Definition and the explanation of the following : Janaka janya System of Ragas, bhushanga, upanga, Varjavakra, Ragas Gamakas Arudi, Eduppu, Probandhams, Grama Murchchana Jaati & Visksha Prayoga.

3- Description of the ragas prescribed for Practical

4- Candidates should be able to write in notation composition in the ragas prescribed.

5- The Candidate should be able to describe the construction of the instrument opted for alongwith the basic techniques of playing.

6- The candidate should have an outline knowledge of the classification of the instruments in general & a brief history of the instrumental opted for.

Part B One Practical Paper Marks -70

1- Practical Activities
Ragas Prescribed
Pantuvarli, Todi, Nata, Gowla, Sri, Saveri, Kederagowla.

2- One Varnam in Ata Tala in two degrees of speed. 3-
Alpana of the ragas prescribed.

4- Atleast one authentic compositons traditionally rendered. In each of the prescribed Ragas covering the musical forms Kirtanas, Kirtis, Padams, Javalis, Tillans and Ragamalikas.

5- Kalpana Svaras in Adi, Rupakam and Chapu Talas in two degrees of speed. 6-
Desadi and chapu Talas.
Talas prescribed
Suladi Sapta Talas with their Jaati and Gati and Bhedas, Chappu talas and their varieties.

7- Continuous Assessment (Unit Test)

कर्नाटक संगीत (मैलोडिक वादन)	**External Examiner**	
	1. Tuning of condidate's instrument and questions related to it	5
	2. A kirti as per the choice of the candidate with all Manodharma asked	16
	3. A kirti or two with manodharma asked as per the examiner's choice	10
	4. Testing the Knowledge of Rage Lakshanas	4
	Internal Examiner	
	5. One Ata tala varnam in two degrees of speed	4
	6. Expositions of one simple pallavi	10
	7. Questions about unique features of respective instruments	4
	8. Testing the Knowledge of Talas	4
	9. Testing he Knowledge of Musical forms	4
	10. Details regarding different techniques of play	4
	11. Continuous Assessment (Unit Test)	5
	Total	**70**

2025-26

Carnatic Music (Percussion Instrumental)

Code:119

Class XI

One Theory Paper **3 Hours** **Marks: 30**

A. History and theory of Indian Music

1. (a) Brief history of Karnatak music with special reference to laya and percussion silappadikaram, Natya, Sastra Tala Deepikai.
   (b) Short life- sketch and contributions of the following:
   Purandar Dasa, and the trinity Tyagaraja Dikshitar & Syamasastry.
   (c) Unique contribution of the following luminaries Nayayana Swamy Appa, Mamunidya Pillai, Dadshinamurti Pillai & Alagunambi Pillai.
2. Defination and explanation :
   Nada, Sruti, Svara, Laya, Raga, Tala, Jati, Suladi, Sapta, Talas Karani, Vettu Thattu, Hechchu, Tangu Mohra and Korvai.
3. The candidate should be able to write in notation the percussion korvais in Adi & Rupaks Talas.
4. Knowledge of the construction of the chosen percussion instrument.
5. Basic knowledge of the construction and Technique of Ghatam. The candidate should be able to describe the kanjira and Tavali.
6. Basic knowledge about other percussion instruments. Its construction and technique .

One Practical Paper **Marks: 70**

1. Ability to play the following talas with
   elaboration Adi and Rupkam
   Talas powering at least two nadais
2. Thekas and Moharas in different talas with Timanams and Korvais
3. Tuning of the instrument.
4. Ability to render orally the sollukattus of the various patterns in Adi, Rupaka and Chapu Talas :
5. Continuous Assessment (Unit Test)

2025-26
Carnatic Music
(Percussion Instrumental)
(119)
CLASS XII

Time : 3 Hours

One Theory paper **Marks : 30**

Part A : Theory

History and Theory of Indian Music

1- (a) Brief history of Karnatak music with special reference to Laya and percussion in chaturdandi Prakashika ,Sangita Ratanakaar ,Laya Vadhyas
   (b) Short life-sketch and contribution of the following lemeneries
   (c) Needemangalam Meenakshi Sundaram Pillai and
   (d) Tanjore Vaidyanathe Iyer
   (e) Brief History and evolution of the musical form , Pullavis ,sollukattus and Tillana

2. Definition and the explanation of the following – Padagrabham,Arudi,Eduppu,Gati-bhedaAnuloma,Pradiloma,Tisram,Trikalan, Tekka,108 Tala,Shadangas,Tiruppugazh Tala,TalaVadya ensemble.

3. The candidate should have an outline knowledge of the classification of the instruments in general and a brief history of the instrumental opted for :

4. Technical terms : (Villambra,Madhya,Druta),Atitam,Anagatam,Pharan,Kalaprama nam,Ghumki, Konnakkoi Choru,Varu

5. The candidate should possess knowledge of the fundamental structure technique and playing of other percussion instruments like moresing Tabla, Chenda, Edakka and Gettu Vadhya

Part B One Practical Paper **Marks -70**

1. Ability to construct Mohra ,Korvai to the talas from the 35 tala scheme
2. An exhibition of the accompanying ability
3. Demonstration of the various types and usage of Gumki
4. Ability to play Tani Avertanam, in Chapu Talas and some of the 35 talas.
5. Continuous Assessment (Unit Test)

कर्नाटक संगीत (पर्कसन वादन)	**External Examiner**	
	1. Tuning of instrument and questions regarding instrument	10
	2. Choice tala	15
	3. Tala of Examiner's choice	10
	Internal Examiner	
	4. Reciting the sollukattu with talas.	8
	5-Accompanying vocal music and Instrumental Music in general	8
	6. Accompanying Trikalam and other pallavi techniques, and Tillanas	10
	7. Questions regarding laya and tala	4
	8. Continuous Assessment (Unit Test)	5
	Total	**70**

2025-26
Chemistry
CLASS XI
Theory One Paper

Time: 3 Hours **Total Marks: 70**

S. No	UNIT	Marks
1	Some Basic Concepts of Chemistry	7
2	Structure of Atom	9
3	Classification of Elements and Periodicity in Properties	6
4	Chemical Bonding and Molecular Structure	7
5	Chemical Thermodynamics	9
6	Equilibrium	7
7	Redox Reactions	4
8	Organic Chemistry: Some basic Principles and Techniques	11
9	Hydrocarbons	10
	TOTAL	**70**

Unit 1: Some Basic Concepts of Chemistry

General Introduction: Importance and scope of Chemistry, Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules, atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry.

Unit 2: Structure of Atom

Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half-filled and completely filled orbitals.

Unit 3: Classification of Elements and Periodicity in Properties

Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements -atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electronegativity, valiancy, Nomenclature of elements with atomic number greater than 100.

Unit 4: Chemical Bonding and Molecular Structure

Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory, concept of hybridization, involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules (qualitative idea only), Hydrogen bond.

Unit 5: Chemical Thermodynamics

Concepts of System and types of systems, surroundings, work, heat, energy, extensive and intensive properties, state functions.

First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of ΔU and ΔH, Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Second law of Thermodynamics (brief introduction), Introduction of entropy as a state function, Gibb's energy change for spontaneous and non- spontaneous processes, criteria for equilibrium, Third law of thermodynamics (brief introduction).

Unit 6: Equilibrium

Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium – Le Chatelier's principle, ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of poly basic acids, acid strength, concept of pH, hydrolysis of salts (elementary idea), buffer solution, Henderson Equation, solubility product, common ion effect (with illustrative examples).

Unit 7: Redox Reactions

Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number, applications of redox reactions.

Unit 8: Organic Chemistry – Some Basic Principles and Techniques

General introduction, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond: inductive effect, electrometric effect, resonance and hyper conjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions, electrophiles and nucleophiles, types of organic reactions.

Unit 9: Hydrocarbons

Aliphatic Hydrocarbons

Alkanes - Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis.

Alkenes - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.

Alkynes - Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water.

Aromatic Hydrocarbons

Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of functional group in mono substituted benzene, carcinogenicity and toxicity

Note: The following topics are included in the syllabus but will not be assessed .

1. **s & p Block Elements**
   Electronic configuration, atomic & Ionic radii, Ionization Enthalpy, Hydration Enthalpy and general trends in physical and chemical properties of s and p block elements across the periods and down the groups; unique behavior of the first element in each group.
2. **The Gaseous State**
   Qualitative treatment of Gas laws, Ideal gas equation and deviations from it.

PRACTICAL

Evaluation Scheme for Examination	Marks
Volumetric Analysis	06
Salt Analysis	06
Content Based Experiment	05
Project Work	04
Class record and viva	04
Internal Assessment (Unit Test)	05
Total	**30**

PRACTICAL SYLLABUS

Micro-chemical methods are available for several of the practical experiments, wherever possible such techniques should be used.

A. Basic Laboratory Techniques

1. Cutting glass tube and glass rod
2. Bending a glass tube
3. Drawing out a glass jet
4. Boring a cork

B. Characterization and Purification of Chemical Substances

1. Determination of melting point of an organic compound.
2. Determination of boiling point of an organic compound.
3. Crystallization of impure sample of any one of the following: Alum, Copper Sulphate, Benzoic Acid.

C. Experiments based on pH

1. Any one of the following experiments:
   - Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator.
   - Comparing the pH of solutions of strong and weak acids of same concentration.
   - Study the pH change in the titration of a strong base using a universal indicator.
2. Study the pH change by common-ion in case of weak acids and weak bases.

D. Chemical Equilibrium

Any one of the following experiments:

- Study the shift in equilibrium between ferric ions and thiocyanate ions by increasing/decreasing the concentration of either of the ions.
- Study the shift in equilibrium between $[Co(H_2O)_6]^{2+}$ and chloride ions by changing the concentration of either of the ions.

E. Quantitative Estimation

1. Using a mechanical balance/electronic balance.
2. Preparation of standard solution of Oxalic acid.
3. Determination of strength of a given solution of Sodium hydroxide by titrating it against standard solution of Oxalic acid.
4. Preparation of standard solution of Sodium carbonate.
5. Determination of strength of a given solution of hydrochloric acid by titrating it against standard Sodium Carbonate solution.

F. Qualitative Analysis

1. Determination of one anion and one cation in a given salt

Cations: Pb^{2+}, Cu^{2+}, Al^{3+}, Fe^{3+}, Mn^{2+}, Ni^{2+}, Zn^{2+}, Co^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+

Anions: CO_3^{2-}, SO_3^{2-}, NO_3^-, NO_2^-, Cl^-, Br^-, I^-, SO_4^{2-}, PO_4^{3-}, CH_3COO^-

(Note: Insoluble salts excluded)

2. Detection of -Nitrogen, Sulphur, Chlorine in organic compounds.

PROJECTS

Scientific investigations involving laboratory testing and collecting information from other sources.

A few suggested Projects

a) Checking the bacterial contamination in drinking water by testing sulphide ion
b) Study of the methods of purification of water
c) Testing the hardness, presence of Iron, Fluoride, Chloride, etc., depending upon the regional variation in drinking water and study of causes of presence of these ions above permissible limit (if any).

d) Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium carbonate on it
e) Study the acidity of different samples of tea leaves.
f) Determination of the rate of evaporation of different liquids
g) Study the effect of acids and bases on the tensile strength of fibers.
h) Study of acidity of fruit and vegetable juices.

Note: *Any other investigatory project, which involves about 10 periods of work, can be chosen with the approval of the teacher.*

Prescribed Books:

1. Chemistry Part – I, Class-XI, Published by NCERT.
2. Chemistry Part – II, Class-XI, Published by NCERT.

Links for NCERT textbooks:

1. **https://ncert.nic.in/textbook.php?kech1=0-6**
2. **https://ncert.nic.in/textbook.php?kech2=0-3**
3. **https://ncert.nic.in/division/dek/pdf/Manual_01.pdf**

COURSE STRUCTURE
CLASS XII
THEORY

Time: 3 Hours **Total Marks: 70**

S. No.	Title	Marks
1	Solutions	7
2	Electrochemistry	9
3	Chemical Kinetics	7
4	d -and f -Block Elements	7
5	Coordination Compounds	7
6	Haloalkanes and Haloarenes	6
7	Alcohols, Phenols and Ethers	6
8	Aldehydes, Ketones and Carboxylic Acids	8
9	Amines	6
10	Biomolecules	7
	Total	**70**

Unit 1: Solutions

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties - relative lowering of vapor pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hoff factor

Unit 2: Electrochemistry

Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.

Unit 3: Chemical Kinetics

Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order

reactions), concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.

Unit 4: d and f Block Elements

General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$.

Lanthanides - Electronic configuration, oxidation states, chemical reactivity and lanthanide contraction and its consequences.

Actinides - Electronic configuration, oxidation states and comparison with lanthanides

Unit 5: Coordination Compounds

Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).

Unit 6: Haloalkanes and Haloarenes

Haloalkanes: Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions.

Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only).

Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

Unit 7: Alcohols, Phenols and Ethers

Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol.

Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols.

Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses

Unit 8: Aldehydes, Ketones and Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses.

Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.

Unit 9: Amines

Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.

Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

Unit 10: Biomolecules

Carbohydrates - Classification (aldoses and ketoses), monosaccahrides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates.

Proteins -Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea excluding structure.

Vitamins - Classification and functions.

Nucleic Acids: DNA and RNA.

PRACTICAL

Topic	Marks	
	Internal Examiner	External Examiner
Project work	05	-
Practical Record	05	-
Continuous assessment(Unit Test)	05	-
Volumetric analysis	-	05
Salt Analysis	-	05
Content Based Experiment	-	03
Viva voice	-	02
Total	**15**	**15**

PRACTICAL SYLLABUS

Micro-chemical methods are available for several of the practical experiments, wherever possible such techniques should be used.

A. Surface Chemistry

1. Preparation of one lyophilic and one lyophobic sol
   Lyophilic sol - starch, egg albumin and gumLyophobic sol – aluminum hydroxide, ferric hydroxide, arsenous sulphide.
2. Dialysis of sol-prepared in (a) above.
3. Study of the role of emulsifying agents in stabilizing the emulsion of different oils.

B. Chemical Kinetics

1. Effect of concentration and temperature on the rate of reaction between Sodium Thiosulphate and Hydrochloric acid.
2. Study of reaction rates of any one of the following:
   - Reaction of Iodide ion with Hydrogen Peroxide at room temperature using different concentration of Iodide ions.
   - Reaction between Potassium Iodate, (KIO_3) and Sodium Sulphate: (Na_2SO_3) using starch solution as indicator (clock reaction).

C. Thermochemistry

Any one of the following experiments

- Enthalpy of dissolution of Copper Sulphate or Potassium Nitrate.
- Enthalpy of neutralization of strong acid (HCl) and strong base (NaOH).
- Determination of enthalpy change during interaction (Hydrogen bond formation) between Acetone and Chloroform.

D. Electrochemistry

Variation of cell potential in $Zn/Zn^{2+}||\ Cu^{2+}/Cu$ with change in concentration of electrolytes ($CuSO_4$ or $ZnSO_4$) at room temperature.

E. Chromatography

1. Separation of pigments from extracts of leaves and flowers by paper chromatography and determination of Rf values.
2. Separation of constituents present in an inorganic mixture containing two cations only (constituents having large difference in Rf values to be provided).

F. Preparation of Inorganic Compounds

1. Preparation of double salt of Ferrous Ammonium Sulphate or Potash Alum.
2. Preparation of Potassium Ferric Oxalate.

G. Preparation of Organic Compounds

Preparation of any one of the following compounds

1. Acetanilide

2. Di -benzalAcetone
3. p-Nitroacetanilide
4. Aniline yellow or 2 - Naphthol Aniline dye.

H. Tests for the functional groups present in organic compounds

Unsaturation, alcoholic, phenolic, aldehydic, ketonic, carboxylic and amino (Primary) groups.

I. Characteristic tests of carbohydrates, fats and proteins in pure samples and their detection in given foodstuffs.

J. Determination of concentration/ molarity of KMnO4 solution by titrating it against a standard solution of:

1. Oxalic acid,
2. Ferrous Ammonium Sulphate

(Students will be required to prepare standard solutions by weighing themselves).

K. Qualitative analysis

M. Determination of one cation and one anion in a given salt.

Cation : Pb^{2+}, Cu^{2+} As^{3+}, $A\ell^{3+}$, Fe^{3+}, Mn^{2+}, Zn^{2+}, Cu^{2+}, Ni^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+

Anions: $(CO_3)^{2-}$, S^{2-}, $(SO_3)^{2-}$, $(NO_2)^-$, $(SO_4)^{2-}$, $C\ell^-$, Br^-, I^-, PO^{3-}_4, $(C_2O_4)^{2-}$, CH_3COO^-,NO_3^-

(Note: Insoluble salts excluded)

PROJECTS

Scientific investigations involving laboratory testing and collecting information from other sources.

A few suggested Projects

a) Study of the presence of oxalate ions in guava fruit at different stages of ripening.
b) Study of quantity of casein present in different samples of milk.
c) Preparation of soybean milk and its comparison with the natural milk with respect to curd formation, effect of temperature, etc.
d) Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, concentration, time, etc.)
e) Study of digestion of starch by salivary amylase and effect of pH and temperature on it.
f) Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, carrot juice, etc.
g) Extraction of essential oils present in Saunf (aniseed), Ajwain (carom), Illaichi (cardamom).
h) Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chili powder and pepper.

Note: *Any other investigatory project, can be chosen with the approval of the teacher.*

2025-26
COMPUTER SCIENCE(144)
Class XI

Time:3 Hours **Theory One Paper** **Marks:70**

1. Learning Outcomes

Students should be able to:

a) develop basic computational thinking
b) explain and use data types
c) appreciate the notion of algorithms
d) develop a basic understanding of computer systems- architecture and operating system
e) explain cyber ethics, cyber safety, and cybercrime
f) understand the value of technology in societies along with consideration of gender and disability issues.

2. Distribution of Marks

Unit No.	Unit Name	Marks
1	Computer Systems and Organisation	10
2	Computational Thinking and Programming -1	45
3	Society, Law, and Ethics	15
	Total	**70**

3. Unit wise Syllabus

Unit 1: Computer Systems and Organisation

- Basic computer organisation: Introduction to Computer System, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (bit, byte, KB, MB, GB, TB, PB)
- Types of software: System software (Operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler, and interpreter), application software
- Operating System(OS): functions of the operating system, OS user interface
- Boolean logic: NOT, AND, OR, NAND, NOR, XOR, truth tables and De Morgan's laws, Logic circuits
- Number System: Binary, Octal, Decimal and Hexadecimal number system;

conversion between number systems
- Encoding Schemes: ASCII, ISCII, and Unicode (UTF8, UTF32)

Unit 2: Computational Thinking and Programming - I

- Introduction to Problem-solving: Steps for Problem-solving (Analyzing the problem, developing an algorithm, coding, testing, and debugging), representation of algorithms using flowchart and pseudocode, decomposition
- Familiarization with the basics of Python programming: Introduction to Python, Features of Python, executing a simple “hello world" program, execution modes: interactive mode and script mode, Python character set, Python tokens(keyword, identifier, literal, operator, punctuator), variables, concept of l-value and r-value, use of comments
- Knowledge of data types: Number(integer, floating point,complex), boolean, sequence(string, list, tuple), None, Mapping(dictionary), mutable and immutable data types.
- Operators: arithmetic operators, relational operators, logical operators, assignment operators, augmented assignment operators, identity operators (is, is not), membership operators (in not in)
- Expressions, statement, type conversion, and input/output: precedence of operators, expression, evaluation of an expression, type-conversion (explicit and implicit conversion), accepting data as input from the console and displaying output.
- Errors- syntax errors, logical errors, and run-time errors
- Flow of Control: introduction, use of indentation, sequential flow, conditional and iterative flow
- Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number.
- Iterative Statement: for loop, range(), while loop, flowcharts, break and continue statements, nested loops, suggested programs: generating pattern, summation of series, finding the factorial of a positive number, etc.
- Strings: introduction, string operations (concatenation, repetition, membership and slicing), traversing a string using loops, built-in functions/methods–len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(),lstrip(), rstrip(), strip(), replace(), join(), partition(), split()
- Lists: introduction, indexing, list operations (concatenation, repetition, membership and slicing), traversing a list using loops, built-in functions/methods–len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists, suggested programs: finding the maximum, minimum, mean of numeric values stored in a list; linear search on list of numbers and counting the frequency of elements in a list.
- Tuples: introduction, indexing, tuple operations (concatenation, repetition, membership and slicing); built-in functions/methods – len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment, nested tuple; suggested programs: finding the minimum, maximum, mean of values stored in a tuple; linear

search on a tuple of numbers, counting the frequency of elements in a tuple.

- Dictionary: introduction, accessing items in a dictionary using keys, mutability of a dictionary (adding a new term, modifying an existing item), traversing a dictionary, built-in functions/methods – len(), dict(), keys(), values(), items(), get(), update(), del, clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), sorted(); Suggested programs: count the number of times a character appears in a given string using a dictionary, create a dictionary with names of employees, their salary and access them.
- Introduction to Python modules: Importing module using 'import <module>' and using from statement, importing math module (pi, e, sqrt(), ceil(), floor(), pow(), fabs(), sin(), cos(), tan()); random module (random(), randint(), randrange()), statistics module (mean(), median(), mode()).

Unit 3: Society, Law and Ethics

- Digital Footprints
- Digital Society and Netizen: net etiquettes, communication etiquettes, social media etiquettes
- Data Protection: Intellectual property rights (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open source software and licensing (Creative Commons, GPL and Apache)
- Cyber Crime: definition, hacking, eavesdropping, phishing and fraud emails, ransomware, cyber trolls, cyber bullying
- Cyber safety: safely browsing the web, identity protection, confidentiality
- Malware: viruses, trojans, adware
- E-waste management: proper disposal of used electronic gadgets.
- Information Technology Act (IT Act)
- Technology and society: Gender and disability issues while teaching and using computers

4. Practical

5.

S.No.	Unit Name	Marks (Total=30)
1.	**Lab Test (12 marks)**	
	Python program (60% logic + 20% documentation + 20% code quality)	**12**
2.	**Report File + Viva (08 marks)**	
	Report file: Minimum 20 Python programs	**5**
	Viva voce	**3**
3.	Project (that uses most of the concepts that have been learnt)	**5**
6.	Continuous Assessment (Unit Test)	**5**

6.

5. Suggested Practical

List Python Programming

- Input a welcome message and display it.
- Input two numbers and display the larger / smaller number.
- Input three numbers and display the largest / smallest number.
- Generate the following patterns using nested loops:

Pattern-1	Pattern-2	Pattern-3
* ** *** **** *****	12345 1234 123 12 1	A AB ABC ABCD ABCDE

- Write a program to input the value of x and n and print the sum of the following series:

$$1 + + 2 + 3 + 4 + \cdots n$$

$$1 - + 2 - 3 + 4 - \cdots n$$

$$+ x2 + \frac{x3}{2} + \frac{x4}{3} + \frac{\cdots}{4} xn \quad \frac{}{n}$$

$$+ x^2 + \frac{x^3}{2!} + \frac{x^4}{3!} + \frac{\cdots}{4!} x^n \quad \frac{}{n!}$$

- Determine whether a number is a perfect number, an Armstrong number or a palindrome.
- Input a number and check if the number is a prime or composite number.
- Display the terms of a Fibonacci series.
- Compute the greatest common divisor and least common multiple of two integers.
- Count and display the number of vowels, consonants, uppercase, lowercase characters in string.
- Input a string and determine whether it is a palindrome or not; convert the case of characters in a string.
- Find the largest/smallest number in a list/tuple
- Input a list of numbers and swap elements at the even location with the elements at the odd location.
- Input a list/tuple of elements, search for a given element in the list/tuple.
- Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have marks above 75.

6. Suggested Reading Material

- NCERT Textbook for Computer Science (Class XI)
- Support Material on CBSE website

2025-26
COMPUTER SCIENCE(144)
Class XII

Time:3 Hours **Theory One Paper** **Marks:70**

1. Prerequisites

Computer Science- Class XI

2. Learning Outcomes

Student should be able to

a) apply the concept of function.

b) explain and use the concept of file handling.

c) use basic data structure: Stacks

d) explain basics of computer networks.

e) use Database concepts, SQL along with connectivity between Python and SQL.

3. Distribution of Marks:

Unit No.	Unit Name	Marks
1	Computational Thinking and Programming – 2	40
2	Computer Networks	10
3	Database Management	20
	Total	**70**

4. Unit wise Syllabus

Unit 1: Computational Thinking and Programming – 2

- Revision of Python topics covered in Class XI.
- Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
- Exception Handling: Introduction, handling exceptions using try-except-finally blocks
- Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths

- Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file
- Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file
- CSV file: import csv module, open / close csv file, write into a csv file using writer(),writerow(),writerows() and read from a csv file using reader()
- Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.

Unit 2: Computer Networks

- Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
- Data communication terminologies: concept of communication, components of data communication (sender,receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
- Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)
- Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)
- Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)
- Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP
- Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting

Unit 3: Database Management

- Database concepts: introduction to database concepts and its need
- Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)
- Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join
- Interface of python with an SQL database: connecting SQL with Python, performing

insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries

4. Practical

External Examiner	
1. Programming in Python (60% logic+ 20% documentation+ 20 %code quality)	8
2. SQL Commands	4
3. Viva Voce	3
Internal Examiner	
4. Project Work (using concepts learnt in Classes 11 and and 12)	5
5. Report File- ● Minimum 15 Python programs. ● SQL Queries – Minimum 5 sets using one table / two tables. ● Minimum 4 programs based on Python - SQL connectivity	5
6. Continuous Assessment(Unit Test)	5
Total	**30**

6. Suggested Practical

List: Python Programming

- Read a text file line by line and display each word separated by a #.
- Read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file.
- Remove all the lines that contain the character 'a' in a file and write it to another file.
- Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.
- Create a binary file with roll number, name and marks. Input a roll number and update the marks.
- Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).
- Write a Python program to implement a stack using list.
- Create a CSV file by entering user-id and password, read and search the password for given userid.

Database Management

- Create a student table and insert data. Implement the following SQL commands on the student table:
    - o ALTER table to add new attributes / modify data type / drop attribute o UPDATE table to modify data
    - o ORDER By to display data in ascending / descending order o DELETE to remove tuple(s)
    - o GROUP BY and find the min, max, sum, count and average
- Similar exercise may be framed for other cases.
- Integrate SQL with Python by importing suitable module.

7. Suggested Reading Material

- NCERT Textbook for COMPUTER SCIENCE (Class XII)
- Support Materials on the CBSE website.

8. Project

The aim of the class project is to create something that is tangible and useful using Python file handling/ Python-SQL connectivity. This should be done in groups of two to three students and should be started by students at least 6 months before the submission deadline. The aim here is to find a real world problem that is worthwhile to solve.

Students are encouraged to visit local businesses and ask them about the problems that they are facing. For example, if a business is finding it hard to create invoices for filing GST claims, then students can do a project that takes the raw data (list of transactions), groups the transactions by category, accounts for the GST tax rates, and creates invoices in the appropriate format. Students can be extremely creative here. They can use a wide variety of Python libraries to create user friendly applications such as games, software for their school, software for their disabled fellow students, and mobile applications, of course to do some of these projects, some additional learning is required; this should be encouraged. Students should know how to teach themselves.

The students should be sensitized to avoid plagiarism and violations of copyright issues while working on projects. Teachers should take necessary measures for this.

2025-26
DRAWING & PAINTING (120)
CLASS XI (THEORY)

One Paper **Time:3 Hours** **30 Marks**

Unitwise Weightage

Units	Marks
History of Indian Art	
1. Art of Indus Valley	05
2. Buddhist, Jain & Hindu Art	10
3. Temple Sculpture. Broznes and Artistic aspects of Indo- Islamic Architecture	15

Unit 1: Art of Indus Valley

(2500 B.C. to 1500 B.C.)

(1) Introduction

(i) Period and Location.
(ii) Extension: In about 1500 miles

(a) Harappa & Mohenjo-daro (Now in Pakistan)
(b) Ropar, Lothal, Rangpur, Alamgirpur, Kali Bangan, Banawali and Dhaula Veera (in India)

(2) Study of following Sculptures and Terracottas:

(i) Dancing girl
(Mohenjo-daro)
Bronze, 10.5 x 5 x
2.5 cm. Circa 2500
B.C.
(Collection: National Museum, New Delhi).

(ii) Male Torso (Harappa)
Red lime Stone, 9.2 x
5.8 x 3 cms. Circa 2500
B.C.
(Collection: National Museum, New Delhi).

(iii) Mother Goddess (Mohenjo-daro) terracotta, 22 x 8 x 5 cm.
Circa 2500 B.C.

(Collection: National Museum New Delhi).

(3) Study of following Seal:

(i) Bull (Mohenjo-daro)
Stone (Steatite), 2.5 x
2.5 x 1.4 cm. Circa 2500
B.C.
(Collection: National Museum, New Delhi).

(4) Study of following :
Decoration on earthen wares:

(i) Painted earthen-ware (Jar)
Mohenjo-daro (Collection:
National Museum, New Delhi).

Unit 2: Buddhist, Jain and Hindu Art

(3rd century B.C. to 8th century A.D.)

(1) General Introduction to Art, during Mauryan, Shunga, Kushana & Gupta period:

(2) Study of following Sculptures:

(i) Lion Capital from Sarnath (Mauryan period)
Polished sand stone,Circa 3rd Century B.C.
(Collection: Sarnath Musseum, U.P.)

(ii) Chauri Bearer from Didar Ganj (Mauryan period)
Polished sand stone
Circa 3rd Century B.C.
(Collection: Patna Museum, Bihar)

(iii) Bodhisattva head from Taxila
(Gandhara period) Stone, 27.5 x 20 x
15c.m. Circa 2nd Century A.D.
(Collection: National Museum, New Delhi)

(iv) Seated Buddha from Katra Tila Mathura-
(Kushan Period) Red-spotted Sand Stone,
Circa 3rd Century AD. Stone
(v) (Collection: Mathura Museum)

(vi) Seated Buddha from Sarnath
(Gupta period) Stone
Circa 5th century AD
(Collection: Sarnath Museum U.P.)

(vii) Jain Tirathankara
(Gupta period) Stone
Circa 5th Century A.D.
(Collection : State Museum, Lucknow U.P.)

(3) Introduction to Ajanta

Location, period, No. of caves, Chaitya and Vihara, Paintings and Sculptures, subjectmatter and technique etc.

(4) Study of Following

Painting & Sculpture:

(i) Padmapani Bodhisattva (Ajanta Cave No. I) Mural Painting
Circa 5th Century A.D.

(ii) Mara Vijay (Ajanta Cave No. 26) Sculpture in stone.
Circa 5th Century A.D.

Unit 3: Temples Sculpture, Bronzes and Indo-Islamic Architecture

Artistic aspects of Indian Temples
(6th Century A.D. to 13th Century A.D.)

(1) Introduction to Temple Sculpture
(6th Century A.D. to 13th Century A.D.)

(2) Study of following Temple-Sculptures;

(i) Descent of Ganga (Pallava period, Mahabalipuram Tamilnadu), Granite rock Circa 7th Century A.D.

(ii) Ravana shaking Mount Kailash (Rashtrakuta period, Ellora, Maharashtra) Stone 8th Century A.D. ,

(iii) Trimurti (Elephanta, Maharashtra) Stone
Circa 9th Century A.D.

(iv) Lakshmi Narayana (Kandariya Mahadev Temple) (Chandela period, Khajuraho, M.P.)Stone
Circa 10th Century A.D.

(v) Cymbal Player, Sun Temple (Ganga Dynesty, Konark, Orissa) Stone.
Circa 13th Century A.D.

(vi) Mother & Child (Vimal-Shah Temple, Solanki Dynesty, Dilwara, Mount Abu, Rajasthan) White marble.
Circa 13th Century A.D.

(3) Bronzes :

(i) Introduction to Indian Bronzes

(ii) Method of casting (solid and hollow)

(4) Study of following south Indian Bronzes:

(i) Nataraj (Thanjavur Distt., Tamilnadu)
Chola period (12th Century A.D.)
(Collection: National Museum, New Delhi.) I

(ii) Devi (Uma)
Chola Period (11th Century A.D.)
(Collection: National Museum, New Delhi.)

(5) Artistic Aspects of the Indo-Islamic Architecture

(i) Introduction

(6) Study of following architectures:

(i) Qutab Minar, Delhi

(ii) Taj Mahal, Agra

(iii) Gol Gumbaj of Bijapur.

CLASS XI (Practical)

One Paper **Time: 6 Hours** **70 Marks**

Unitwise Weightage

Units	Marks
1. Nature and Object Study	25
2. Painting Composition	25
3. Sessional Work	15
4. Continuous Assessment (Unit Test)	05

Unit 1: Nature and Object Study

Study of two or three natural and geometric forms in pencil with light and shade from a fixed point of view. Natural forms life plants, vegetables, fruits and flowers etc., are to be used.Geometrical forms of objects like cubes, cones, prisms, cylinders and sphere should be used.

(25 Marks)

Unit 2: Painting Composition

(i) Simple exercises of basic design in variation of linear geometric and Rhythmetic shapes in primary and secondary colours to understand designs as organized visual arrangements. (15 Marks)

(ii) Sketches from Life and Nature (10 Marks)

Unit 3 : Sessional Work

(a) Five selected Nature and object study exercises drawings in any media done during the session including minimum of two still life exercise. (10 Marks)

(b) Two selected works of paintings done during the year (05 Marks)

These selected works prepared during the course by the candidates and certified by the school authorities as the work done in the school will be placed before the examiners for assessment.

Unit 4: Continuous Assessment (05 Marks)

Unitwise Weightage

Units	Marks
History of Indian Art	
1. Art of Indus Valley	05
2. Buddhist, Jain & Hindu Art	10
3. Architecture Temple Sculpture. Brozne and Artistic aspects of Indo- Islamic	15

2025–26
ड्राइंग एण्ड पेन्टिंग(120)
(सैद्धान्तिक)
CLASS XII

One Paper **Time- 3 Hours**
Marks : 30

Unit 1: Art of Indus Valley

इकाईवार प्राथमिकता

भारतीय कला का इतिहास	
इकाई	अंक
1. राजस्थानी एवं पहाड़ी शैली के लघु चित्र	10
2. मुगल और दक्षिण शैली के लघु चित्र	10
3. बंगाल स्कूल की पेन्टिग और भारतीय कला मॉडर्न ट्रेन्ड	10
	30

(2500 B.C. to 1500 B.C.)

(1) Introduction

(i) Period and Location.

(ii) Extension: In about 1500 miles

(a) Harappa & Mohenjo-daro (Now in Pakistan)

(b) Ropar, Lothal, Rangpur, Alamgirpur, Kali Bangan, Banawali and Dhaula Veera (in India)

इकाई–1. 10 अंक

(2) Study of following Sculptures and Terracottas:

राजस्थानी और पहाड़ी शैली के लघु चित्र (16वीं शताब्दी ई. से 19वीं शताब्दी ई.)
भारतीय लघु चित्र शैली का परिचय : पाश्चात्य, भारतीय, पाल, राजस्थानी, मुगल, मध्य भारत, दक्षिण और पहाड़ी।

A - राजस्थानी शैली
1. उद्भव और विकास
2. उपशैलियां– मेवाड, बूंदी, जोधपुर, बीकानेर, किशनगढ़ और जयपुर
3. राजस्थानी शैली के मुख्य लक्षण
4. नीचे दिए गए राजस्थानी चित्रों का अध्ययन

शीर्षक	चित्रकार	उपशैलियां
मारू रागीनी	साहिबदीन	मेवाड़
राजा अनिरूद्ध सिंह	हारा उत्कूल राम	बूंदी
छौगन प्लेयर्स	दीनी	जोधपुर
झूले में श्रीकृष्ण	तरूलीन	बीकानेर
राधा (बनी–ठनी)	[illegible]	किशनगढ़
भरत से राम का मिलन	गुमान	जयपुर

(i) Dancing girl (Mohenjo-daro) Bronze, 10.5 x 5 x 2.5 cm. Circa 2500 B.C. (Collection: National Museum, New Delhi).

(ii) Male Torso (Harappa) Red lime Stone, 9.2 x 5.8 x 3 cm. Circa 2500 B.C. (Collection: National Museum, New Delhi).

(iii) Mother Goddess (Mohenjo-daro) terracotta, 22 x 8 x 5 cm. Circa 2500 B.C.

(Collection: National Museum New Delhi).

B . पहाड़ी शैली

1. उद्भव और विकास
2. उपशैली – बसोहली और कांगड़ा
3. पहाड़ी शैली के मुख्य लक्षण
4. नीचे दिए गए पहाड़ी चित्रों का अध्ययन

शीर्षक	उपशैली
कृष्ण और गोपियां	बसोहली
राग मेघ (मेघ राग)	कांगडा

इकाई–2. 10 अंकं

मुगल और दक्षिण शैली के लघु चित्र (16वीं. शताब्दी ई. से 19वी. शताब्दी ई.)
A. मुगल शैली

1. उद्‌भव और विकास
2. मुगल शैली के मुख्य लक्षण
3. नीचे दिए गए मुगल चित्रों का अध्ययन

शीर्षक	चित्रकार	काल
गोवर्धन पर्वत उठाए हुए कृष्ण	मिस्किन	अकबर
सोन नदी पार करते हुए बाबर	जगन्नाथ	अकबर
मडोना का चित्र पकड़े हुए जहाँगीर	अबुल हसन	जहाँगीर
फालकॉन ऑन अ बर्ड रेस्ट	उस्ताद मंसूर	जहाँगीर
कबीर और रैंदास	उस्ताद फकिरुल्लाह खान	शाहजहाँ
दारा शिकोह की शादी	हाजी मदनी	मुगल जनपद (अवध)

B . दक्षिण शैली
1. उद्‌भव और विकास
2. दक्षिण शैली के मुख्य लक्षण
3. दक्षिण शैली के चित्रों का अध्ययन

शीर्षक	उपशैली
नर्तक	हैदराबाद
चाँद बीबी पोलो खेलती हुई (चौगान)	गोल कुण्डा

इकाई–3. **10 अंकं**

बंगाल स्कूल और आधुनिक शैली में भारतीय कला
A (a) भारतीय कला का नया युग – एक परिचय
(b) नीचे दिए गए चित्रों का अध्ययन
1. समुद्र के घमंड को चूर करते राम – राजा रवि वर्मा
2. भारतीय ध्वज का मूल्यांकन (प्रथम 1906, मध्य–1921 और अन्तिम रूप–19470) आकारों तथा रंगों का चुनाव एक अध्ययन।

B. (1) बंगाल चित्र शैली का परिचय
1. बंगाल शैली का उद्‌भाव और विकास
2. बंगाल शैली के मुख्य चित्र
(2) राष्ट्रीय स्वतंत्रता के आन्दोलन के संघर्ष में भारतीय कलाकारों का योगदान।
(3) नीचे दिए गए वंगाल शैली की पेन्टिग का अध्ययन
1. यात्रा का अन्त – अवनिन्द्र नाथ टैगोर
2. पार्थसारथी – नन्दलाल बोस
3. राधिका – एम.ए.आर. चुगताई

C. भारतीय कला में आधुनिक चलन
परिचय
(1). नीचे दिए गए चित्रों का अध्ययन
1. जादूगर – गगनेन्द्र नाथ टैगोर
2. माँ और बच्चा – यामिनी राय
3. वूमैन फेस – रविन्द्र नाथ टैगोर

4. तीन लड़कियाँ – अमृता शेरगिल
(2) नीचे दिए गए मूर्तिकला का अध्ययन
1. ट्रम्पन (मेहनत की जीत) – डी.पी. राय चौधरी
2. संथाल परिवार – रामकिंकर वैज
(3) नीचे दिए गए भारतीय समकालीन कला का अध्ययन

A. चित्रकला
1. मदर टेरेसा – एम.एफ. हुसैन
2. कविता का जन्म – के.के. हैब्बार
3. गॉसिप – एन.एस.बेन्द्रे
4. अनटाइटिल – जी.आर. संतोष
5. डाइगनल – तैयब मेहता

(4) ग्रैफिक प्रिंट्स

1. वर्हलपूल – कृष्णा रेड्डी
2. चिल्ड्रेन – सोमनाथ होर
3. देवी – ज्योति भट्ट
4. आफ वाल्स – अनुपम सूद
5. मैन, वूमैन एण्ड ट्री – के. लक्ष्मण गौण

(5) मूर्तिकला

1. स्टैण्डिग वूमैंन – धनराज भगत
2. क्राइज अन हर्ड – अमरनाथ सहगल
3. गणेश – पी.वी. जानकीराय
4. फिगर – शंखो चौधरी
5. चतुर्मुखी – इक्का यादा गिरी राव

नोट – उपरोक्त उल्लिखित कलाकारों के नाम एवं उनके कलात्मक कार्य केवल सुझाव मात्र हैं न कि पूर्ण । शिक्षक और और विद्यार्थी उन्हें अपने संसाधनों के अनुरूप बढ़ा सकते हैं लेकिन प्रश्न पत्र केवल उपरोक्त सम्बन्धित कलात्मक कार्यों पर ही आधारित होगे ।

प्रायोगिक

पूर्णांकः 70 **समयः 6 घण्टे**

इकाईवार प्राथमिकता एव अक योजना		
इकाई	**.आन्तरिक मूल्यांकनकर्ता**	**.वाह्य मूल्यांकनकर्ता**
1. प्रकृति एवं वस्तु चित्रण		20
2. चित्र संयोजन	05	15
3. सत्रीय कार्य (सेसनल कार्य)	15	–
4. मौखिक	10	–
5. सतत मूल्यांकन (इकाई परीक्षा)	05	–

इकाई 1 – प्रकृति एवं वस्तु चित्रण 20

रंगों द्वारा छाया–प्रकाश दर्शाते हुए

• प्रकृति चित्रण – फल, फूल, पौधे तथा सब्जियाँ

• वस्तु चित्र – ज्यामितीय आकारों (शंकु, प्रिज्म, घन तथा बेलन एवं मिले–जुले रूप) वाली वस्तुएं (स्टिल लाइफ)

इकाई 2 – चित्र संयोजन/दृश्य चित्रांकन 20

रंगों द्वारा चित्रांकंन किया जाना है।।

• मानवाकृतियों को आधार बनाते हुए विभिन्न चित्र संयोजन जैसे– विवाहोत्सव, रसोईघर, शयनकक्ष,खेल के मैदान आदि।

• स्केचिंग–लाइफ (मानवाकृतियाँ) एवं प्रकृति आदि।

इकाई 3 – सत्रीय कार्य

सत्र के दौरान किए गए कार्यों में से

• सत्र के दौरान बनाए गए पांच चयनित प्रकृति एवं वस्तु चित्रण होने चाहिए जिसमें 2 स्टिफ लाईफ चित्रण किसी भी माध्यम में लिए जाएं। 10

• सत्र के दौरान किए दो चयनित पेन्टिग जितने भी चयनित चित्र विद्यार्थियों द्वारा तैयार किए गए। वे ही चित्र परीक्षक के सामने प्रस्तुत किए जाएं जो शिक्षक/शिक्षिकाओं द्वारा प्रमाणित हों।

05

इकाई 4 – मौखिक परीक्षा 10

इकाई 5– सतत मूल्यांकन 05

2025-26

ECONOMICS(112)
CLASS XI

Time: 3 Hours | One Theory Paper | Marks:80

Units		**Marks**
Part A: Satistics for Economics		
1	Introduction	15
2	Collection, Organisation and Presentation of Data	
3	Statistical Tools and Interpretation	25
	Total	**40**
Part B: Indian Economic Development		
4	Development Policies and Experience (1947-90)	12
	Economic Reforms since 1991	
5	Current Challenges facing Indian Economy	20
6	Development experience of India-A comparison with neighbours	08
	Total	**40**
	Grand Total	**80**

Part A: Statistics for Economics

Unit 1: Introduction

What is Economics?

Meaning, scope, functions and importance of statistics in Economics

Unit 2: Collection, Organisation and Presentation of data

Collection of data - sources of data - primary and secondary; how basic data iscollected with concepts of Sampling; methods of collecting data; some importantsources of secondary data: Census of India and National Sample Survey Organisation.

Organisation of Data: Meaning and types of variables; Frequency Distribution.

Presentation of Data: Tabular Presentation and Diagrammatic Presentation of Data:
(i) Geometric forms (bar diagrams and pie diagrams), (ii) Frequency diagrams(histogram, polygon and Ogive) and (iii) Arithmetic line graphs (time series graph).

Unit 3: Statistical Tools and Interpretation

For all the numerical problems and solutions, the appropriate economic interpretation may be attempted. This means, the students need to solve the problems and provide interpretation forthe results derived.

Measures of Central Tendency- Arithmetic mean, Median and Mode

Correlation – meaning and properties, scatter diagram; measures of correlation - Karl Pearson's method (two variables ungrouped data) Spearman's rank correlation (Non-Repeated Ranks and Repeated Ranks).

Introduction to Index Numbers - meaning, types - Wholesale Price Index, Consumer Price Index and index of industrial production, uses of index numbers; Inflation and Index Numbers, Simple Aggregative Method.

Part B:Indian Economic Development

Unit 4: Development Experience (1947-90) and Economic Reforms since 1991:

A brief introduction of the state of Indian economy on the eve of independence.Indian economic system and common goals of Five Year Plans.
Main features, problems and policies of agriculture (institutional aspects and newagricultural strategy), industry (IPR 1956; SSI – role & importance) and foreign trade.

Economic Reforms since 1991:

Features and appraisals of liberalisation, globalisation and privatisation (LPG policy);
Concepts of demonetization and GST

Unit 5: Current challenges facing Indian Economy

Human Capital Formation: How people become resource; Role of human capital ineconomic development; Growth of Education Sector in India

Rural development: Key issues - credit and marketing - role of cooperatives;agricultural diversification; alternative farming - organic farming

Employment: Growth and changes in work force participation rate in formal andinformal sectors; problems and policies

Sustainable Economic Development: Meaning, Effects of Economic Development onResources

and Environment, including global warming

Unit 6: Development Experience of India:

A comparison with neighbours India and

Pakistan

India and China

Issues: economic growth, population, sectoral development and other HumanDevelopment Indicators

Project in Economics

अर्द्धवार्षिक व वार्षिक परीक्षा हेतु प्रोजेक्ट का अंक विभाजन निम्नवत् है–

Topics	Marks
1-Project Work	
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous Assessment (Unit Test)	5
Total	**20**

महत्वपूर्ण निर्देश–

1. प्रत्येक विद्यार्थी प्रोजेक्ट कार्य अनिवार्य रूप से पूरा करना होगा।
2. प्रोजेक्ट में चित्रों तथा ग्राफ के अलावा लगभग 3500 से 4000 शब्द होने चाहिए।
3. प्रोजेक्ट हस्तलिखित, मौलिक एवं स्वनिर्मित होना चाहिए।
4. प्रोजेक्ट निर्माण हेतु विषय अध्यापक द्वारा पूर्ण सहयोग तथा निर्देशन प्रदान किया जायेगा।
5. प्रोजेक्ट के कुछ विषयवार उदाहरण निम्नवत हो सकते हैं–

SuggestiveListof Projects:

Suggestive List of Projects:

Class XI	
• Effect on PPC due to various government policies	• Invisible Hand (Adam Smith)
• Opportunity Cost as an Economic Tool (taking real life situations)	• Effect of Price Change on a Substitute Good (taking prices from real life visiting local market)
• Effect on Equilibrium Prices in Local Market (taking real life situation or recent news)	• Effect of Price Change on a Complementary Good (taking prices from real life visiting local market)
• Solar Energy, a Cost-Effective Comparison with Conventional Energy Sources	• Bumper Production- Boon or Bane for the Farmer
• Any other newspaper article and its evaluation on basis of economic principles	• **Any other topic**

2025-26
ECONOMICS(112)
CLASS XII

Time: 3 Hours **One Theory Paper** **Marks:80**

Units		Marks
PartA	**:Introductory Microeconomics**	
1.	Introduction	04
2.	Consumer's Equilibrium and Demand	14
3.	Producer Behaviour and Supply	14
4.	Forms of Market and Price Determination under perfect competition with simple applications	08
		40
Part B:	**Introductory Macroeconomics**	
5.	National Income and Related Aggregates	10
6.	Money and Banking	06
7.	Determination of Income and Employment	12
8.	Government Budget and the Economy	06
9.	Balance of Payments	06
		40

Part A: Introductory Microeconomics

Unit 1: Introduction

Meaning of microeconomics and macroeconomics; positive and normative economics
What is an economy? Central problems of an economy: what, how and for whom to produce; concepts of Production Possibility Frontier and Opportunity Cost.

Unit 2: Consumer's Equilibrium and Demand

Consumer's equilibrium - meaning of Utility, Marginal Utility, Law of DiminishingMarginal Utility, conditions of consumer's equilibrium using marginal utility analysis.
Indifference curve analysis of consumer's equilibrium-the consumer's budget (budget set and budget line), preferences of the consumer (indifference curve, indifferencemap) and conditions of consumer's equilibrium.
Demand, market demand, determinants of demand, demand schedule, demand curve and its slope, movement along and shifts in the demand curve; price elasticity of demand - factors affecting price elasticity of demand; measurement of price elasticity of demand – percentage-change method and total expenditure method

Unit 3: Producer Behaviour and Supply

Meaning of Production Function – Short-Run and Long-RunTotal Product, Average Product and Marginal Product. Returns to a Factor Cost – Short run costs - Total Cost, Total Fixed Cost, Total Variable Cost; Average Cost; Average Fixed Cost, Average Variable Cost and Marginal Cost - meaning and their relationships.
Revenue – Total Revenue, Average Revenue and Marginal Revenue - meaning and their

relationship.
Producer's Equilibrium - meaning and its conditions in terms of Marginal Revenue- Marginal Cost.
Supply, market supply, determinants of supply, supply schedule, supply curve and its slope, movements along and shifts in supply curve, price elasticity of supply; measurement of price elasticity of supply - percentage-change method.

Unit 4: Perfect Competition - Price Determination and simple applications.

Perfect competition - Features; Determination of market equilibrium and effects ofshifts in demand and supply. (Short Run Only) Simple Applications of Demand and Supply: Price ceiling, Price floor.

Part B: Introductory Macroeconomics

Unit 5: National Income and Related Aggregates

What is Macroeconomics?

Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation. Circular flow of income (two sector model); Methods of calculating National Income - Value Added or Product method, Expenditure method, Income method.Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP ,GDP Deflator, GDP and Welfare

Unit 6: Money and Banking

Money – meaning and functions, supply of money - Currency held by the public and net demand deposits held by commercial banks.
Money creation by the commercial banking system.
Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Unit 7: Determination of Income and Employment

Aggregate demand and its components. Propensity to consume and propensity to save (average and marginal).Short-run equilibrium output; investment multiplier and its mechanism. Meaning of full employment and involuntary unemployment. Problems of excess demand and deficient demand; measures to correct them -changes in government spending, taxes and money supply.

Unit 8: Government Budget and the Economy

Government budget - meaning, objectives and components. Classification of receipts – revenue receipts and capital receipts; Classification of expenditure – revenue expenditure and capital expenditure.Balanced, Surplus and Deficit Budget – measures of government deficit.

Unit 9: Balance of Payments

Balance of payments account - meaning and components;Balance of payments – Surplus and Deficit .Foreign exchange rate - meaning of fixed and flexible rates and managed floating. Determination of exchange rate in a free market, Merits and demerits of flexible andfixed exchange rate. Managed Floating exchange rate system

ECONOMICS - 112
Class XII
Project work

PROJECT WORK **MM-20**

Guidelines for Project Work in Economics

Objectives of the project work are to enable learners to:

- probe deeper into theoretical concepts learnt in classes XI andXII
- analyse and evaluate real world economic scenarios using theoretical constructs and arguments
- demonstrate the learning of economictheory
- follow up aspects of economics in which learners haveinterest
- develop the communication skills to argue logically

Expectationsof the project work are that:

- project should be of 3,500-4,000 words (excluding diagrams & graphs), preferably hand-written
- it will be an independent, self-directed piece of study

Role of the teacher:

The teacher plays a critical role in developing thinking skills of the learners. A teacher should:

- help each learner select the topic based on recently published extracts from the news media, government policies, RBI bulletin, NITI Aayog reports, IMF/World Bank reports etc., after detailed discussions and deliberations of thetopic
- play the role of a facilitator and supervisor to monitor the project work of the learner through periodicdiscussions
- guide the research work in terms of sources for the relevantdata
- educate learner about plagiarism and the importance of quoting the source of the information to ensure authenticity of researchwork
- prepare the learner for the presentation of the projectwork
- arrange a presentation of the projectfile

Expected Checklist:

- Introduction of topic/title
- Identifying the causes, consequences and/or remedies
- Various stakeholders and effect on each of them
- Advantages and disadvantages of situations or issues identified
- Short-term and long-term implications of economic strategies suggested in the course ofresearch
- Validity, reliability, appropriateness and relevance of data used for research work andfor presentation in the project file
- Presentation and writing that is succinct and coherent in project file
- *Citation of the materials referred to, in the file in footnotes, resources section,bibliography etc.*

Mode of presentation/submission of the Project:

At the end of the stipulated term, each learner will present the research work in the Project File to the Internal examiner. **The questions should be asked from the Research Work/ Project File of the learner. The Internal Examiner should ensure that the study submitted by the learner is his/her own original work.** In case of any doubt, authenticity should be checked and verified.

Marking Scheme :

Marks are suggested to be given as –

Topics	Marks
1-Project Work	
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous assessment (Unit Test)	5
Total	**20**

Suggestive List of Projects:

Class XII	
• Micro and Small Scale Industries	• Food Supply Channel in India
• Contemporary Employment situation in India	• Disinvestment policy of the government
• Goods and Services Tax Act and its Impact on GDP	• Health Expenditure (of anystate)
• Human Development Index	• Inclusive GrowthStrategy
• Self-help group	• Trends in Credit availability in India
• Monetary policy committee and its functions	• Role of RBI in Control ofCredit
• Government Budget & its Components	• Trends in budgetary condition ofIndia
• Exchange Rate determination – Methods and Techniques	• Currency War – reasons and repercussions
• Livestock – Backbone of RuralIndia	• Alternate fuel – types and importance
• Sarwa Siksha Abhiyan – Cost Ratio Benefits	• Golden Quadrilateral- Cost ratiobenefit
• Minimum Support Prices	• Relation between Stock Price Index and Economic Health ofNation
• Waste Management in India – Need of the hour	• Minimum Wage Rate – approach and Application
• Digital India- Step towards thefuture	• Rain Water Harvesting – a solution towater crises
• Vertical Farming – an alternate way	• Silk Route- Revival of thepast
• Make in India – The way ahead	• Bumper Production- Boon or Bane forthe farmer
• Rise of Concrete Jungle- Trend Analysis	• Organic Farming – Back to theNature
• Effect of equilibirium prices in local market (Taking real life situation or recent news)	• Opportunity cost as economic tool (taking real life situation)
• Effect of price change on a complementary good (taking price from real life visiting local market)	• Demand and supply of any goods / services /factors.
• Any other newspaper article and its evaluation on basis of economicprinciples	• **Any other topic**

2025-26
Education(124)
Class – XI

Theory Paper

समय– 3 घण्टा पूर्णांक–80

खण्ड (अ) शिक्षा सिद्वान्त–

1. इकाई 1– प्रस्तावना –शिक्षा का अर्थ, प्रचलित, संकुलित, वैज्ञानिक एवं व्यापक अर्थ, शिक्षा का महत्व, आवश्यकता एवं उपयोगिता, शिक्षा का स्वरूप–औपचारिक एवं अनौपचारिक,। **12 अंक**

2. इकाई 2– शिक्षा का उद्देश्य– (क) व्यक्तिगत–सामाजिक (ख) व्यावसायिक वर्तमान परिस्थितियों के सन्दर्भ में भारत में शिक्षा के उद्देश्य। **08 अंक**

3. इकाई 3– शिक्षा के अभिकरण– स्थानीय संस्थाएं, राज्य, घर, विद्यालय, समुदाय। **10 अंक**

4 इकाई 4– शिक्षा प्रणालियाँ– माण्टेसरी किण्डरगार्डन, डाल्टन, प्रोजेक्टएवं बेसिक शिक्षा प्रणाली। **10 अंक**

खण्ड (ब) शिक्षा मनोविज्ञान

5. इकाई 5– शिक्षा मनोविज्ञान– अर्थ, क्षेत्र, महत्व, उपयोगिता। **10 अंक**

6 इकाई 6– बालक का विकास– (क) प्रारम्भिक बाल्यकाल– शारीरिक एवं मानसिक विकास, भाषा , संवेगात्मक एवं सामाजिक विकास। **11 अंक**
(ख) पूर्व किशोरावस्था– शारीरिक, मानसिक, संवेगात्मक एवं सामाजिक विकास।

7 इकाई 7– अधिगम– अर्थ, सीखने की प्रक्रिया, सीखने के नियम, सीखने के सिद्वान्त एवं त्रुटि, सूझ, अधिगम– सम्बद्ध प्रत्यावर्तन एवं अनुकरण का सिद्वान्त। **11 अंक**

8. इकाई 8 – व्यक्तिगत भेद–अर्थ, शारीरिक, मानसिक एवं व्यक्तिगत भेद।प्रतिभाशाली एवं पिछड़े बालक। **08 अंक**

Project Work / Internal Assessment:

Topics	Marks
1-Project Work	
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous Assessment (Unit Test)	5
Total	**20**

2025-26
Education(124)
Class – XII

Theory Paper
समयः 3 घण्टा पूर्णांकः 80

खण्ड 'अ' (शिक्षा के सिद्धान्त)

1- **इकाई– 1 शैक्षिक विचारधारा का विकास** **12 अंक**

(अ) प्राचीन भारतीय शिक्षा–वैदिक शिक्षा, बौद्ध कालीन शिक्षा
(ब) मध्यकालीन भारतीय शिक्षा (मुस्लिम शिक्षा)
(स) आधुनिक भारतीय शिक्षा–ब्रिटिश कालीन शिक्षा स्वातंत्रयोत्तर भारतीय शिक्षा
(द) राष्ट्रीय शिक्षा नीति 1968
(य) नई शिक्षा नीति 1986, पुनरीक्षित 1992

2. इकाई–2 भारतीय शिक्षा शास्त्री और उनका योगदान **08 अंक**

(अ) रवीन्द्र नाथ टैगोर
(ब) महात्मा गाँधी
(स) ऐनी बेसेन्ट
(द) पं0 मदन मोहन मालवीय

3. इकाई–3 पर्यावरण शिक्षा **08 अंक**

(अ) अवधारणा, स्वरूप, आवश्यकता, महत्व
(ब) पर्यावरण प्रदूषण की समस्याएँ एवं उनका निराकरण
(स) पर्यावरण को प्रभावित करने वाली आपदाएं– आग, सूखा, बाढ़, भूकम्प, समुद्री लहरें आदि की जानकारी, प्रभाव तथा बचाव के उपाय।

4. इकाई– 4 शिक्षा की समस्याएँ **12 अंक**

(अ) शैक्षिक प्रसार –समस्याएँ व समाधान (दूरस्थ शिक्षा)

(ब) स्त्री शिक्षा – समस्याएँ व अभिनव प्रयास (एन.पी.ई.जी.ई.एल., कस्तूरबा गाँधी विद्यालय आदि)
(द) शैक्षिक स्तर की समस्या
(य)जनसंख्या शिक्षा
(र) शिक्षा में नवाचार (खेल प्रणाली, सिद्धान्त, शैक्षिक महत्व, गुण–दोष) समेकित शिक्षा।

खण्ड 'ब' (शिक्षा मनोविज्ञान)

5. इकाई–5 प्रेरणा एवं मूल प्रवृत्तियाँ **10 अंक**

(अ) प्रेरणा – अर्थ, शैक्षिक महत्व, रुचि, अवधान पुरस्कार एवं दण्ड
(ब) मूल प्रवृत्तियां – अर्थ, शैक्षिक महत्व, मूल प्रवृत्तियों का शोधन

6. इकाई–6 मानसिक स्वास्थ्य एवं मानसिक स्वास्थ्य विज्ञान **08 अंक**

(अ) अर्थ, मानसिक स्वास्थ्य के तत्व, विशेषताए
(ब) मानसिक अस्वस्थता – अर्थ, कारण, हानिकारक प्रभाव तथा निवारण
(स) अध्यापक का मानसिक स्वास्थ्य
(द) मानसिक स्वास्थ्य विज्ञान– अर्थ, आवश्यकता

7. इकाई–7 परीक्षण एवं निरीक्षण **12 अंक**

(अ) बुद्धि एवं बृद्धि परीक्षण
(ब) उपलब्धि परीक्षण
(स) व्यक्तित्व एवं व्यक्तित्व परीक्षण

8. इकाई–8 निर्देशन **10 अंक**

(अ) अर्थ, महत्व, शैक्षिक निर्देशन, व्यावसायिक निर्देशन
(ब) अपराधी एवं मंदबुद्धि बालकों के व्यवहार की समस्याएँ और उचित मार्गदर्शन

Assessment of Project Work / Internal Assessment

Topics	Marks
1-Project Work	
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous Assessment (Unit Test)	5
Total	**20**

2025-26
ENGLISH(103)
Class XI

Time : 3 Hours

Theory One Paper **Marks : 80**

Section A – 26 Marks

Reading Skills

Reading Comprehension through Unseen Passages (10+8=18 Marks)

1. One unseen passage to assess comprehension, interpretation, analysis, inference and vocabulary. The passage may be factual, descriptive or literary.

2. One unseen **case-based factual** passage with verbal/visual inputs like statistical data, charts etc.to assess comprehension, interpretation, analysis, inference and evaluation.

Note: The combined word limit for both the passages will be 600-750.

Only Multiple Choice Questions will be asked .

3. Note Making and Summarization based on a passage of approximately 200-250 words.

i.	Note Making:		**5 Marks**
	○ Title:	1	
	○ Numbering and indenting:	1	
	○ Key/glossary:	1	
	○ Notes:	2	
ii.	Summary (up to 50 words):		**3 Marks**
	○ Content:	2	
	○ Expression:	1	

Section B – 23 Marks

Grammar and Creative Writing Skills

II. Grammar 7 Marks

4. Questions on Gap filling (Tenses, Clauses)

5. Questions on re-ordering/transformation of sentences (MCQ Type)

III Creative Writing Skills16 Marks

6. Short writing task – Classified Advertisements, up to 50 words. One out of the two given questions to be answered **(3 Marks**: Format : 1 / Content : 1 / Expression : 1)

7. Short writing task –Poster up to 50 words. One out of the two given questions to be answered.(**3 marks:**Format : 1 / Content : 1 / Expression :1)

8. Long Writing task: Speech in 120-150 words based on verbal / visual cues related to contemporary / age-appropriate topic. One out of the two given questions to be answered. **(5 Marks**: Format: 1 / Content: 2 / Expression: 2)

9. Long Writing Task: Debate based on visual/verbal inputs in 120-150 words, thematically related to contemporary, topical issues. One out of the two given questions to be answered. **(5 Marks**: Format: 1 / Content: 2 / Expression: 2)

Section C – 31 Marks

Literature Text Book and Supplementary Reading Text

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long Answer Type Questions to assess comprehension, interpretation, analysis, evaluation and extrapolation beyond the text.

10. One Poetry extract out of two, from the book **Hornbill,** to assess comprehension, interpretation, analysis, inference and appreciation .**(3x1=3 Marks)**

11. One Prose extract out of two, from the book **Hornbill,** to assess comprehension, interpretation, analysis, evaluation and appreciation. **(3x1=3 Marks)**

12. One prose extract out of two, from the book **Snapshots,** to assess comprehension, interpretation, analysis, inference and appreciation. **(4x1=4 Marks)**

13. Two Short answer type questions (one from Prose and one from Poetry, from the book**Hornbill**), out of four, to be answered in 40-50 words. Questions should elicitinferential responses through critical thinking. **(3x2=6 Marks)**

14. One Short answer type question, from the book **Snapshots,** to be answered in 40- 50 words. Questions should elicit inferential responses through critical thinking.One outof two questions to be done.

(3x1=3 Marks)

15. One Long answer type question, from **Prose/Poetry of Hornbill,** to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event, as reference points to assess extrapolation beyond and across the text. Thequestion will elicit analytical and evaluative response from the student. Any one outof two questions to be done. **(1x6=6 Marks)**

16. One Long answer type question, based on the chapters from the book **Snapshots,** to be answered in 120-150 words, to assess global comprehension and extrapolation beyond the text. Questions to provide analytical and evaluativeresponses, using incidents, events, themes, as reference points. Any one out of twoquestions to be done.

(1x6=6Marks)

Internal Assessment **20 Marks**

S. N.	Topic	Marks
1.	Listening Skills	4
2.	Speaking Skills	4
3.	Project Work	
	a) Project Report/Script/Essay etc.	4
	b) Viva based on Project	3
4.	Continuous Assessment (Unit Test)	5
	Total	**20**

Classes XI-XII

Assessment of Listening and Speaking Skills:

i. **Activities:**

- Subject teachers must refer to books prescribed in the syllabus.
- In addition to the above, teachers may plan their own activities and create their own material for assessing the listening and speaking skills.

ii. **Parameters for Assessment:** The listening and speaking skills are to be assessed on the following parameters:

a. Interactive competence (Initiation & turn taking, relevance to the topic)
b. Fluency (cohesion, coherence and speed of delivery)
c. Pronunciation
d. Language (grammar and vocabulary)

Suggestions for Project Work:

The Project can be inter-disciplinary in theme. The ideas/issues highlighted in the chapters/ poems/ drama given the prescribed books can also be developed in the form of a project. Students can also take up any relevant and age-appropriate theme.

Such topics may be taken up that provide students with opportunities for listening and speaking. Some suggestions are as follows:

a) Interview-Based research:
Example:

Students can choose a topic on which to do their research/ interview, e.g. a student can choose the topic : " Evolving food tastes in my neighbourhood" or "Corona pandemic and the fallout on families." Read the available literature.

The student then conducts interviews with a few neighbours on the topic. For an interview, with the help of the teacher, student will frame questions based on the preliminary research/background.

The student will then write an essay/ write up / report etc. up to 1000 words on his/her research and submit it. He / She will then take a viva on the research project. The project can be done in individually or in pairs/ groups

a) Students listen to podcasts/ interviews/radio or TV documentary on a topic and prepare a report countering or agreeing with the speakers. Write an 800 - 1000 words report and submit. Take a viva on the report.

b) Students create their own video/ Audio, after writing a script. Before they decide a format, the following elements can be taken into consideration:

- Theme/topic of the audio / video. Would the child like to pick a current issue or something artistic like theatre?
- What are the elements that need to be part of the script?
- Will the video/audio have an interview with one or more guests?
- Would they prefer to improvise while chatting with guests, or work from a script?
- What would be the duration?
- How would they present the script/report to the teacher, e.g. Can it be in the form of a narrative?

d) Students write**, direct and present a theatrical production, /One act play**

This will be a project which will be done as a team. It will involve planning, preparation and presentation. In short, various language skills will be utilised. There will be researching, discussion, writing the script, auditioning and ultimately producing the play. The project will end with a presentation and subsequently a viva. Teachers will be able to assess the core language skills of the students and help them grow as 21st century critical thinkers.

Project-Portfolio/Project Report

The **Project-Portfolio/Project Report** is a compilation of the work that the students produce during the process of working on their ALS Project.

The Project-Portfolio may include the following:

- Cover page, with title of project, school details/details of students.
- Statement of purpose/objectives/goals
- Certificate of completion under the guidance of the teacher.
- Students Action Plan for the completion of assigned tasks.

- Materials such as scripts for the theatre/role play, questionnaires for interview, written assignments, essays, survey-reports and other material evidence of learning progress and academic accomplishment.

- The 800-1000 words essay/Script/Report.
- Student/group reflections.
- If possible, Photographs that capture the positive learning experiences of the student(s).
- List of resources

The following points must be kept for consideration while assessing the project portfolios:

- Quality of content of the project
- Accuracy of information

- Adherence to the specified timeline
- Content in respect of (spellings, grammar ,punctuation)
- Clarity of thoughts and ideas
- Creativity
- Contributions by group members
- Knowledge and experience gained

Prescribed Books

1. **Hornbill:** English Reader published by National Council of Education Research and Training, New Delhi
   - The Portrait of a Lady (Prose)
   - A Photograph (Poem)
   - "We're Not Afraid to Die… if We Can be Together
   - Discovering Tut: the Saga Continues

• The Laburnum Top (Poem)
The Voice of the Rain (Poem)
• Childhood (Poem) TheAdventure
• Silk Road (Prose) Father to Son

2. **Snapshots:** Supplementary Reader published by National Council of Education Research and Training, New Delhi
• The Summer of the Beautiful White Horse (Prose)
• The Address (Prose)
• Mother's Day (Play)
• Birth (Prose)
• The Tale of Melon City

ENGLISH (103)

CLASS – XII

2025-26

Time: 3 Hours **Theory One Paper** **Marks:80**

Section A – 22 Marks
Reading Skills

I- Reading Comprehension through Unseen Passage (12+10 = 22 Marks)

1. One unseen passage to assess comprehension, interpretation, analysis and inference. Vocabulary assessment will also be assessed via inference. The passage may be factual, descriptive or literary.
2. One unseen **case-based factual** passage with verbal/visual inputs like statistical data, charts etc. to assess comprehension, interpretation, analysis, inference and evaluation.

Note: The combined word limit for both the passages will be 700-750 words.

Multiple Choice Questions / Objective Type Questions and Short Answer type Questions (to be answered in 40-50 words) will be asked.

Section B – 18 Marks
Creative Writing Skills

II. Creative Writing Skills

3. Notice, up to 50 words. One out of the two given questions to be answered.**(4 Marks**: Format :1 / Content : 2 / Accuracy of Spelling and Grammar : 1).
4. Formal/Informal Invitation and Reply, up to 50 words. One out of the two given questions to be answered. **(4 Marks**: Format : 1 / Content : 2 / Accuracy of Spelling and Grammar :1).
5. Letters based on verbal/visual input, to be answered in approximately 120-150 words. Lettertypes include application for a job with bio data or resume. Letters to the editor (giving suggestions or opinion on issues of public interest) . One out of the two given questions to be answered . **(5 Marks**: Format : 1 / Organisation of Ideas: 1/Content : 2 / Accuracy of Spelling and Grammar :1).
6. Article/ Report Writing, descriptive and analytical in nature, based on verbal inputs, to be answered in 120-150 words. One out of the two given questions to be answered . **(5 Marks**: Format : 1 /Organisation of Ideas: 1/Content : 2 / Accuracy of Spelling and Grammar :1).

Section C – 40 Marks

Literature Text Book and Supplementary Reading Text

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long

Answer Type Questions to assess comprehension, interpretation, analysis, evaluation and extrapolation beyond the text.

7. One Poetry extract out of two, from the book **Flamingo,** to assess comprehension, interpretation, analysis, inference and appreciation. **(6x1=6 Marks)**

8. One Prose extract out of two, from the book **Vistas,** to assess comprehension, interpretation,analysis, evaluation and appreciation. **(4x1=4 Marks)**

9. One prose extract out of two from the book **Flamingo,** to assess comprehension, interpretation, analysis, inference and evaluation. **(6x1=6Marks)**

10. Short answer type questions **(from Prose and Poetry from the book Flamingo**), to be answered in 40-50 words each. Questions should elicit inferential responses through critical thinking. Five questions out of the six given, are to be answered. **(5x2=10 Marks)**

11. Short answer type questions, from **Prose (Vistas)**, to be answered in 40- 50 words each. Questions should elicit inferential responses through critical thinking. Any two out of three questions to be done. **(2x2=4 Marks)**

12. One Long answer type question, from **Prose/Poetry (Flamingo)**, to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event as reference points to assess extrapolation beyond and across the text. The question will elicit analytical and evaluative response from the student. Any one out of two questions to be done. **(1x5=5 Marks)**

13. One Long answer type question, based on the chapters from the book **Vistas**, to be answered in 120-150 words, to assess global comprehension and extrapolation beyond the text. Questions to provide analytical and evaluative responses using incidents, events, themes, as reference points. Any one out of two questions to be done. **(1x5=5 Marks)**

Prescribed Books

1. **Flamingo:** English Reader published by National Council of Education Research and Training,New Delhi

(Prose)

- The Last Lesson
- Lost Spring
- Deep Water
- The Rattrap
- Indigo
- Poets and Pancakes
- The Interview
- Going Places

(Poetry)

- My Mother at Sixty-Six
- Keeping Quiet
- A Thing of Beauty
- A Roadside Stand
- Aunt Jennifer's Tigers

2. **Vistas:** Supplementary Reader published by National Council of Education Research and Training, New Delhi

- The Third Level
- The Tiger King
- Journey to the End of the Earth
- The Enemy
- On the Face of It
- Memories of Childhood

The Cutting of My Long Hair
We Too are Human Beings

Question Paper Design
103
2025-26

English XII

Section	Competencies	Total marks
Reading Skills	Conceptual understanding, decoding, Analyzing, inferring, interpreting, appreciating, literary, conventions and vocabulary, summarizing and usingappropriate format/s.	22
Creative Writing Sills	Conceptual Understanding, application of rules, Analysis, Reasoning, appropriacy of style and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity.	18
Literature Text Book and Supplementary Reading Text	Recalling, reasoning, critical thinking, appreciating literary convention, inference, analysis, creativity with fluency.	40
	TOTAL	**80**
Internal Assessment	Assessment of Listening and Speaking Skills • Listening • Speaking	4+4=08
	• Project Work • Viva On Project • Continuous Assessment/Unit Test	**04** **03** **05**
	GRAND TOTAL	**100**

2025-26
GEOGRAPHY (110)
Class XI

Time: 3 Hours **One Theory Paper** **Marks:70**

Book- Fundamentals of Physical Geography

Chapter No.	Chapter name	Weightage
Unit- I Geography as a Discipline		
1	Geography As a Discipline	3
Unit II The Earth		
2	The Origin and Evolution of the Earth	9
3	Interior of the Earth	
4	Distribution of oceans and continents	
Unit- III Landforms		
5	Geomorphic Processes	6
6	Landform and their Evolution	
Unit-IV Climate		
7	Composition and Structure of Atmosphere	8
8	Solar Radiation, Heat balance and Temperature	
9	Atmospheric Circulations and Weather Systems	
10	Water in the Atmosphere	
11	World Climate and Climate Change (To be tested through internal assessments in the form of project and presentation)	
Unit-V Water (Oceans)		
12	Water (Oceans)	4
13	Movements of Ocean Water	

Unit VI Life on the Earth

14	Biodiversity and Conservation (To be tested through _ internal assessments in the form of project and presentation)	
	Map Work	5
Total		**35**

Book-India Physical Environment

Chapter No.	**Chapter Name**	**Weightage**
Unit-I Introduction		
1	India- Location	5
Unit II Physiography		
2	Structure and Physiography	13
3	Drainage System	
Unit III Climate Vegetation and Soil		
4	Climate	12
5	Natural Vegetation	
Unit-IV Natural Hazards and Disasters: Causes Consequences and Management		
6	Natural Hazards and Disasters (To be tested through internal assessment in the form of Projects and presentation)	_
	Map	5
Total		**35**

Book-Geography Practical Part I

Chapter No.	Chapter Name	Weightage
1	Introduction to Maps	3
2	Map Scale	3
3	Latitude Longitude and Time	4
4	Map Projections	3
5	Topographical Maps	4
6	Introduction to Remote Sensing	3
7	Practical file and Viva	5
8	Continuous Assessment (Unit Test)	5
	Total	**30**

COURSE CONTENT – XI

Book- Fundamentals of Physical Geography

Unit 1: Geography as a Discipline	**Chapter 1 Geography as a Discipline** • Introduction to Geography as a discipline • Geography as an integrating discipline: Spatial and Temporal Synthesis • Approaches to study Geography: Systematic and Regional • Branches of Geography: Physical Geography, Human Geography and Bio Geography • Physical Geography and its importance.
Unit 2: The Earth	**Chapter 2 The Origin and Evolution of The Earth** ● Origin and evolution of the earth ● Early theories: Origin of the Earth ● Modern Theories: Origin of the universe ● Formation of Stars and Planets ● Evolution of the Earth: Lithosphere, Atmosphere and Hydrosphere ● Origin of Life **Chapter 3 Interior of the Earth** ● Sources of Information about the Interior of the Earth (Direct and Indirect) ● Earthquakes: Earthquake Waves, Shadow zones, Types, Scales to measure earthquake intensity, effects, frequency of earthquake occurrences ● Structure of the Earth ● Volcanoes and Volcanic landforms

	Chapter 4 Distribution of Oceans and Continents ● Continental Drift Theory, and Evidence in support of Continental Drift and Force for Drift ● Post Drift Studies ● Ocean Floor Configuration ● Distribution of Earthquakes and Volcanoes ● Concept of Seafloor Spreading ● Plate Tectonics: Types of Plate boundaries, Rate and forces for the Plate Movement ● Movement of the Indian Plate
Unit 3: **Landforms**	**Chapter 5 Geomorphic processes** • Geomorphic processes: Exogenic and Endogenic • Endogenic Process: Diastrophism, Volcanism • Exogenic Processes Weathering, landslides. • Soil: Processes and factors of Soil Formation **Chapter 6 Landforms and their Evolution** ● **Running water:** Erosional and Depositional Landforms ● **Wind:** Erosional and Depositional Landforms
Unit 4: **Climate**	**Chapter 7 Composition and Structure of Atmosphere** • Atmosphere- composition and structure; elements of weather and Climate **Chapter 8 Solar Radiation, Heat Balance and Temperature** • Solar radiation: Variability of Insolation. • Processes of Heating and Cooling of Atmosphere • Terrestrial Radiation • Heat budget of the earth • Temperature- Factors controlling temperature; Horizontal distribution of temperature; Inversion of temperature **Chapter 9 Atmospheric Circulation and Weather Systems** ● Atmospheric Pressure: Horizontal and Vertical Variation of Pressure ● Forces affecting velocity and direction of Wind ● General Circulation of the atmosphere: Pressure belts; Winds: Planetary, Seasonal and Local; Air masses and Fronts; Tropical and Extratropical cyclones; Thunderstorms and Tornadoes **Chapter 10 Water in the Atmosphere** • Humidity-Absolute and Relative humidity • Evaporation and condensation- • Different Forms of Condensation: dew, frost, fog, mist and cloud;

	• Precipitation • Types of Rainfall and world distribution of rainfall **Chapter 11 World Climate and Climate Change** **(To be tested through internal assessments in the form of project and presentation)**
Unit 5: Water (Oceans)	**Chapter 12 Water (Oceans)** • Hydrological Cycle • Major and Minor Relief Features of the Ocean Floor • Temperature and Salinity of Ocean Waters: Factors, Horizontal and Vertical distribution of temperature and Salinity **Chapter 13 Movements of Ocean Water** • Movements of ocean water- Waves, Tides and Currents.
Unit 6: Life on the Earth	**Chapter 14 Biodiversity and Conservation** **(To be tested through internal assessments in the form of project and presentation)**
Book- India- Physical Environment	
Unit 1: Introduction	**Chapter 1** India — Location, Size, Latitudinal and Longitudinal extent, Indian Standard time, India and its neighbours
Unit 2: Physiography	**Chapter 2 Structure and Physiography** • Physiographic Divisions: (1) The Northern and North-eastern Mountains (2) The Northern Plain (3) The Peninsular Plateau (4) The Indian Desert (5) The Coastal Plains (6) The Islands. **Chapter 3 Drainage System** • Drainage patterns • Concepts of River basin, Catchment Area, Watershed • Drainage and River systems of India: the Himalayan and the Peninsular • Extent of Usability of River Water- linking of rivers, problems in using river water and water pollution
Unit 3: Climate, Vegetation and Soil	**Chapter 4 Climate** • Weather and climate • Unity and diversity in the Monsoon Climate • Factors determining the climate of India • The Nature and characteristics on Indian Monsoon • The Rhythm of Seasons • Distribution of Rainfall

	● Monsoon and the Economic Life in India ● Global Warming **Chapter 5 Natural Vegetation** ● Natural vegetation - Introduction ● Forest types and distribution ● Conservation of forests ● Wildlife; conservation; biosphere reserves
Unit 4: Hazards and Disasters: **Causes, Consequences and Management**	**Chapter 6 Natural Hazards and Disasters** **(To be tested through internal assessment in the form of Projects)**

Book- Geography Practical Part I

Chapter 1 Introduction to Maps

- Essentials of map making
- History of map making
- Maps -types
- Uses of maps

Chapter 2 Map Scale

- Scales-methods and construction
- Conversion of scale

Chapter 3 Latitude, Longitude and Time

- Drawing of Parallels of latitude and Meridians of longitude
- Longitude and time
- International date line

Chapter 4 Map Projections

- Map projection- typology, construction and properties of projection: Conical with one standard parallel and Mercator's projection. (only two projections)

Chapter 5 Topographical Maps

- Study of topographic maps (1 : 50,000 or 1 : 25,000 Survey of India maps); Conventional Symbols, contour cross section and identification of landforms-slopes, hills, valleys, waterfall, cliffs; distribution of settlements

Chapter 6 Introduction to Remote Sensing

- Satellite imageries, stages in remote sensing data-acquisition, platform and sensors and data products, (photographic and digital)

Map Work

Book- Fundamentals of Physical Geography
(Map items for locating and labelling only on the outline political world map)

<table>
<tr><th>Chapter</th><th>Map item (Map present on official website of Govt. of India should be used)</th></tr>
<tr><td>Chapter 4
Distribution of oceans and continents</td><td>• Political Map of all Continents of the world.
• Major Oceans of the world: Indian Ocean, Pacific Ocean, Atlantic Ocean, Arctic Ocean, Southern Ocean · Major lithospheric plates and Minor lithospheric plates, Ring of fire (Pacific Ocean), Mid-Atlantic Ridge.</td></tr>
<tr><td>Chapter 9
Atmospheric Circulations and Weather Systems</td><td>Major Hot Deserts of the world:
• Mojave Desert- Nevada, US
• Patagonian Desert- Argentina
• Sahara- Africa
• Gobi Desert- Mongolia, Asia
• Thar desert- India
• Great Victoria Desert- Australia</td></tr>
<tr><td>Chapter 12
Water (Oceans)</td><td>• Major Seas
• Black sea
• Baltic sea
• Caspian Sea
• Mediterranean Sea
• North Sea
• Red sea</td></tr>
<tr><td>Chapter 13
Movements of Ocean Water</td><td>Bay of Fundy (Canada)-Famous for the highest tides in the world
Ocean Currents
<table><tr><th>Cold currents</th><th>Warm currents</th></tr><tr><td>• Humboldt c.
• California c.
• Falkland c.
• Canaries c.
• West Australian c.
• Oyashio c.
• Labrador c</td><td>• Alaska c.
• Brazilian c.
• Agulhas c.
• Kuroshio c.
• Gulf stream c.</td></tr></table></td></tr>
<tr><td>Chapter 14
Biodiversity And Conservation</td><td>Ecological hotspots
• Eastern Himalaya, India
• Western ghats, India
• Indonesia, Asia
• Eastern Madagascar, Africa
• Upper Guinean forests, Africa
• Atlantic forest, Brazil
Tropical Andes</td></tr>
</table>

Map Work **Book- India Physical Environment** **(Map items for locating and labelling only on the outline political map of India)**	
Chapter	**Map item (Map present on official website of Govt. of India should be used)**
Chapter 1 **India- Location**	• Latitudinal extent of India • Longitudinal extent of India • Standard Meridian of India • Important latitude passing through India (Tropic of Cancer) • Southern Most Point of mainland of India (Kanya Kumari)
Chapter 2 Structure and Physiography	• Mountains: Karakoram Range, Garo- Khasi- Jaintia hills, Aravalli Range, Vindhyan Range, Satpura Range, Western ghats & Eastern ghats • Peaks: K2, Kanchenjunga, Nandadevi, Nanga Parvat, Namcha Barwa and Anaimudi • Passes: Shipkila, Nathula, Palghat, Bhor ghat and Thal ghat • Plateaus: Malwa, Chhotnagpur, Meghalaya and Deccan Plateau. • Coastal Plains: Saurashtra, Konkan, North and South Kanara, Malabar, Coromandel and Northern Circars • Islands: Andaman & Nicobar Islands and Lakshadweep Islands
Chapter- 3 Drainage System	• Rivers: Brahmaputra, Indus, Satluj, Ganga, Yamuna, Chambal, Damodar, Mahanadi, Krishna, Kaveri,Godavari, Narmada, Tapti and Luni • Lakes: (Identification)Wular, Sambhar, Chilika, Kolleru, Pulicat & Vembanad • Straits, Bays , Gulfs: Palk Strait, Rann of Kachch, Gulf of Kachch, Gulf of Mannar & Gulf of Khambat
Chapter-4 **Climate**	• Area with highest temperature in India • Area with lowest temperature in India • Area with highest rainfall in India • Area with lowest rainfall in India
Chapter-5 **Natural Vegetation**	(Identification on an outline map of India) Tropical evergreen, Tropical deciduous, Tropical thorn, Montane and Littoral/ Swamp forests. Wildlife reserves: (locating and labeling) • National Parks: Corbett, Kaziranga, Ranthambore. Shivpuri, Simlipal • Bird Sanctuaries: Keoladev Ghana and Ranganathitto • Wild life Sanctuaries: Periyar, Rajaji, Mudumalai, Dachigam,

CLASS: XI
Prescribed Books:

1.Fundamentals of Physical Geography, Class XI, Published by NCERT
2. India, Physical Environment, Class XI, Published by NCERT
3. Practical Work in Geography Part I, Class XI, Published by NCERT

Links for NCERT textbooks:

1. **https://ncert.nic.in/textbook.php?kegy2=0-14**
2. **https://ncert.nic.in/textbook.php?kegy1=0-6**
3. **https://ncert.nic.in/textbook.php?kegy3=0-6**

Note:

1. The above textbooks are also available in Hindi medium.
2. Kindly refer to the latest editions of all NCERT Textbooks.

Practical Work

CLASS XIth PRACTICAL

Chapter No.	Chapter Name	Weightage
1	Introduction to Maps	03
2	Map Scale	03
3	Map Projections	03
4	Latitude Longitude and Time	04
4	Topographical Maps	04
5	Introduction to Remote Sensing	03
Viva Voice		02
Practical File		03
Continuous Assessment (Unit Test)		05
Total		**30**

2025-26
GEOGRAPHY (110)
Class XII

Time: 3 Hours **One Theory Paper** **Marks:70**

Book- Fundamental of Human Geography

Chapter No.	Chapter Name	Weightage
Unit I		
1	Human Geography	3
Unit II		
2	The World Population Density Distribution and Growth	8
3	Human Development	
Unit III		
4	Primary Activities	19
5	Secondary Activities	
6	Tertiary and Quaternary Activities	
7	Transport, Communication and Trade	
8	International Trade	
Map Work (Based on identification of features on World Political Map)		**5**
Total		**35**

Book-India People and Economy

Chapter No.	Chapter Name	Weightage
Unit I		
1	Population Distribution Density Growth and Composition	5
Unit II		
2	Human Settlements	3

Unit III		
3	Land Resources and Agriculture	10
4	Water Resources	
5	Mineral And Energy Resources	
6	Planning and Sustainable Development in Indian Context	
Unit IV		
7	Transport and Communication	7
8	International Trade	
Unit V		
9	Geographical Perspective on selected issues and problems	5
Map Work (Based on locating and labelling on a political map of India)		5
Total		**35**

Book- Geography Practical II

Chapter No.	**Chapter Name**	**Weightage**
1	Data-its source and Compilation	12
2	Data Processing	
3	Graphical representation of Data	
4	Spatial Information Technology	5
5	Viva	3
6	Practical Record	5
7	Continuous Assessment (Unit Test)	5
Total		**30**

COURSE CONTENT- XII

Book: Fundamentals of Human Geography	
Unit 1:	**Chapter-1 Human Geography:** Nature and Scope ● Introduction to Human Geography ● Approaches to study Human Geography Regional and Systematic Geography, Dualism ● Nature of Human Geography ● Naturalisation of Humans and Humanisation of Nature ● Schools of thought in Human Geography ● Fields and subfields of Human Geography
Unit 2:	**Chapter- 2 The World Population Distribution, Density and Growth** • Population-distribution and density • Factors influencing the distribution of population • Population Growth • Components of Population change • Demographic Transition • Population Control Measures **Chapter- 3 Human Development** • Human development - concept; selected indicators • Growth and Development • The four pillars of Human Development • Approaches to Human Development • Measuring Human Development- HDI, HPI and GNH • International comparisons
Unit 3:	**Chapter- 4 Primary Activities** Concept and types: ● Hunting and Gathering, Pastoralism; Nomadic Herding, Commercial Livestock Rearing ● Types of agriculture: ❖ Primitive Subsistence ❖ Intensive Subsistence ● Commercial Agriculture ❖ Plantation Agriculture ❖ Extensive Commercial Grain Cultivation ❖ Mixed Farming ❖ Dairy farming ❖ Mediterranean Agriculture ❖ Market Gardening and Horticulture ❖ Cooperative Farming ❖ Collective Farming ● Mining, factors affecting mining ● Methods of Mining

	Chapter- 5 Secondary Activities ● Manufacturing: Characteristics of Modern large-Scale Manufacturing ● Factors influencing industrial Location ● Classification of manufacturing Industries: On the basis of Size, Inputs /raw material, Output /Products and Ownership ● Concept of High tech Industry **Chapter- 6 Tertiary Activities** ● Tertiary activities-concept and types ● Trade and commerce: Retail and Wholesale trading Transport, Factors Affecting Transport; ● Communication ● Services ● People engaged in tertiary activities ● Tourism, Major tourist regions ● Tourist attractions - some examples from selected countries ● Medical Services for Overseas Patients in India ● Quaternary and Quinary activities-concept ● The Digital Divide **Chapter- 7 Transport and Communication** ● Transport ● Modes of Transportation: ● Land transport: Roadways, Highways, Road Density, Border Roads. ● Railways: Trans-continental Railways: Trans-Siberian, Trans Canadian, Australian Trans Continental, ● Water Transport: Important Sea Routes, Shipping Canals, Inland waterways ● Air transport: Inter-Continental air routes ● Pipelines ● Communications: Satellite Communications and Cyber Space- Internet **Chapter- 8 International Trade** ● History of International trade ● Why Does International Trade Exist? ● Basis of International Trade ● Balance of Trade ● Types of International Trade: Bilateral and Multi-lateral trade ● Case for Free Trade ● Concept of Dumping ● World Trade Organisation ● Regional Trade Blocs ● Concerns Related to International Trade ● Gateways of International trade: Ports ● Types of Port

Book: India: People and Economy	
Unit 1:	**Chapter- 1 Population Distribution, Density, Growth and Composition** • Distribution of Population • Density of Population • Growth of population • Four distinct phases of population growth • Regional Variation in Population Growth • Population Composition: Rural – Urban Composition, Linguistic Composition, Religious Composition • Composition of Working Population • Promoting Gender Sensitivity through 'Beti Bachao–Beti Padhao' Social Campaign.
Unit 2:	**Chapter- 2 Human Settlements** • Rural settlements - types and distribution • Urban settlements - types, distribution • Evolution of Towns in India • Urbanisation in India • Functional Classification of Towns • Smart Cities Mission
Unit 3:	**Chapter- 3 Land Resources and Agriculture** • Land resources- general land use • Land use categories • Land-use Changes in India • Common Property Resources • Agricultural Land Use in India • Cropping Seasons in India • Types of Farming • Geographical conditions and distribution of major crops (Wheat, Rice, Tea, Coffee, Cotton, Jute, Sugarcane and Rubber); • Agricultural development in India • Growth of Agricultural Output and Technology • Problems of Indian Agriculture **Chapter- 4 Water Resources** • Water resources- Surface water and Groundwater Resources • Lagoons and Backwaters • Water Demand and Utilisation - irrigation, domestic, industrial and other uses; • Emerging Water Problems: Deterioration of Water Quality • Water Conservation and Management; Prevention of Water Pollution; Rain water harvesting and Watershed management **Chapter- 5 Mineral and Energy Resources** • Mineral Resources: Introduction and Types

	• Major mineral belts of India • Distribution of Ferrous Minerals (Iron ore and Manganese), Non-Ferrous Minerals (Bauxite and Copper); Non-metallic minerals (Mica) • Energy Resources: Conventional sources (Coal, Petroleum and Natural gas) and non-conventional sources (Nuclear, Solar, Wind, Tidal and Wave and Geothermal and Bio energy) • Conservation of Mineral Resources **Chapter - 6 Planning and Sustainable Development in Indian Context** ● Planning- Introduction ● Target Area Planning: Hill Area Development Programme, Drought Prone Area Programme. ● Concept of Sustainable Development ● Case Studies – 1. Integrated Tribal Development Project in Bharmaur* Region, 2. Indira Gandhi Canal (Nahar) Command Area
Unit 4:	**Chapter- 7 Transport and Communication** ● Means of transport: Land (Road transport, Rail transport and Oil and Gas pipelines), Water transport (Inland waterways and Oceanic routes) and Air transport ● Communication Networks- Personal and Mass Communication Systems **Chapter- 8 International Trade** • Changing Pattern of the Composition of India's Exports and Import • Direction of Trade • Sea Ports as Gateways of International Trade • Major Seaports of India along with their hinterlands. • Airports
Unit 5:	**Chapter- 9 Geographical Perspective on Selected Issues and Problems** ● Environmental pollution- Introduction and types ● Urban-waste disposal ● Rural-Urban Migration: Case Study ● Problems of Slums ● Land degradation: Case study
Book- Geography Practical Part II Chapter- 1	
Data – Its Source and Compilation ● What is Data, Sources of data: Primary, Secondary and Unpublished sources. ● Tabulation and Classification of Data ● Grouping of Data ● Frequency Polygon	

Chapter- 2 Data Processing

- Tabulating and processing of data
- Measures of Central Tendency: Mean, Median and Mode
- Comparison of Mean, Median and Mode

Chapter- 3 Graphical Representation of Data

- Representation of data- General rules for drawing diagrams, graphs and maps, construction of line graphs, polygraphs, simple bar diagrams, line and bar diagram, Multiple bar, Compound bar, Pie diagram, Flowchart
- Thematic maps; Construction of Dot Map; Choropleth Map and Isopleth map

Chapter- 4 Spatial Information Technology

Introduction to GIS; Advantages of GIS, Components of GIS, Spatial data formats, Sequence of GIS activities; Spatial data input, Entering attribute data, Data Linkages and matching, Spatial analysis: Overlay Analysis Operation and Buffer Operation

Map Work

Book: Fundamentals of Human Geography

(Map work on identification of features based on units I to III on the outline physical/political map of the World)

Chapter	**Map item (Map present on official website of Govt. of India should be used)**
Chapter 1-Human Geography	Nil
Chapter 2 The World Population Density Distribution and Growth	Nil
Chapter 3 Human Development	Nil
Chapter 4 Primary Activities	Areas of subsistence gathering (Fig 4.2) Major areas of nomadic herding of the world (Fig 4.4) Major areas of commercial livestock rearing (Fig 4.6) Major areas of extensive commercial grain farming (Fig 4.12) Major areas of mixed farming of the World (Fig 4.14)
Chapter 5-Secondary Activities	Nil

Chapter 6 Tertiary and Quaternary Activities	Nil
Chapter 7 Transport Communication and Trade	**Terminal Stations of Transcontinental Railways** Trans-Siberian, Trans Canadian, Trans-Australian Railways **Major Sea Ports** **Europe**: North Cape, London, Hamburg **North America:** Vancouver, San Francisco, New Orleans · **South America**: Rio De Janeiro, Colon, Valparaiso **Africa:** Suez and Cape Town **Asia:** Yokohama, Shanghai, Hong Kong, Aden, Karachi, Kolkata **Australia**: Perth, Sydney, Melbourne **Major Airports:** **Asia**: Tokyo, Beijing, Mumbai, Jeddah, Aden **Africa**: Johannesburg & Nairobi **Europe:** Moscow, London, Paris, Berlin and Rome **North America:** Chicago, New Orleans, Mexico City **South America:** Buenos Aires, Santiago **Australia:** Darwin and Wellington **Inland Waterways** Suez Canal, Panama Canal, Rhine waterways and St. Lawrence Seaways
Chapter 8 International Trade	Nil

Map Work

Book: India People and Economy

(Map work on locating and labelling of features based on outline political/physical map of India.)

Chapter	**Map item (Map present on official website of Govt. of India should be used)**
Chapter 1-Population Distribution Density Growth and Composition	State with highest population density & state with lowest population density (2011)

Chapter 2-Human Settlement	Nil
Chapter 3-Land Resources and Agriculture	Leading producing states of the following crops: (a) Rice (b) Wheat (c) Cotton (d) Jute (e) Sugarcane (f) Tea and (g) Coffee
Chapter 4-Water Resources	Nil
Chapter 5-Mineral And Energy Resources	**Mines:** • **Iron-ore mines**: Mayurbhanj, Bailadila, Ratnagiri, Bellary · • **Manganese mines**: Balaghat, Shimoga • **Copper mines**: Hazaribagh, Singhbhum, Khetari • **Bauxite mines**: Katni, Bilaspur and Koraput • **Coal mines:** Jharia, Bokaro, Raniganj, Neyveli • **Oil Refineries**: Mathura, Jamnager, Barauni
Chapter 6-Planning and Sustainable Development in Indian Context	Nil
Chapter 7-Transport and Communication	Nil
Chapter 8-International Trade	• **Major Sea Ports:** Kandla, Mumbai, Marmagao, Kochi, Mangalore, Tuticorin, Chennai, Vishakhapatnam, Paradwip, Haldia • **International Airports:** Ahmedabad, Mumbai, Bengaluru, Chennai, Kolkata, Guwahati, Delhi, Amritsar, Thiruvananthapuram & Hyderabad.
Chapter 9- Geographical Perspective on selected issues and problems	Nil

1. Fundamentals of Human Geography
2. India- People and Economy
3. Practical work in Geography- Part II

Links for 2025-26 NCERT textbooks:
1. https://ncert.nic.in/textbook.php?legy1=0-8
2. https://ncert.nic.in/textbook.php?legy2=0-9
3. https://ncert.nic.in/textbook.php?legy3=0-

Note:

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2. Kindly refer to the latest editions of all NCERT Textbook

Evaluation Scheme of Geography Practical Work Class XII

S. No.	Topic	Internal Examiner	External Examiner
1	Data-its source and Compilation	-	12 (Written Exam)
2	Data Processing	-	
3	Graphical representation of Data	-	
4	Spatial Information Technology	05(Written Exam)	-
Viva Voice			03
Practical Record Book		05	-
Continuous Assessment (Unit Test)		05	-
Total		**15**	**15**

Guidelines for Internal Assessment/Geography Practical

- A practical file must be prepared by students covering all the topics prescribed in the practical syllabus.
- The file should be completely handwritten with a cover page, index page and acknowledgment.
- All statistical diagrams and maps should be drawn neatly with appropriate headings, scale, index etc. Data to draw statistical diagrams can be taken from the NCERT text book or Census.
- The practical file will be assessed by the internal examiner at the time of practical examinations.
- A written exam of 12 marks will be conducted by external examiner and written exam of 05 marks will be conducted by internal examiner based on the above given practical syllabus on the day of the practical exam.
- Viva will be conducted based on **practical syllabus** only.

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Geology(127)
Class – XI

Theory Paper
समय– 3 घण्टा पूर्णांक– 70

Unit- I भौतिक भू विज्ञान 05

1. परिचय
2. भूगर्भ विज्ञान का क्षेत्र

Unit- II 10

3– पृथ्वी की उत्पत्ति
- लैपलास की परिकल्पना
- जीन्स एवं जैफरी की परिकल्पना
- ए.सी. बैनर्जी की परिकल्पना

4– पृथ्वी की आयु : आधुनिक विधि द्वारा आयु ज्ञात करना
5– पृथ्वी की आन्तरिक संरचना का प्रारम्भिक ज्ञान

Unit- III 15

6– हिमादी– भू–वैज्ञानिक कार्य उत्तराखण्ड के प्रमुख हिमनद तंथा प्रमुख भू–आकृतियां
7– नदी– अवस्थाएं तथा उनके भू–वैज्ञानिक कार्य, उत्तराखण्ड की प्रमुख नदियां।
8– ज्वालामुखी– परिभाषा, कारण एवं प्रकार
9– भूकम्प– परिभाषा, भूकम्प नापने की विधि, कारण, भारत में भूकम्पीय क्षेत्र, उत्तराखण्ड की संक्षिप्त भूकम्पीय स्थिति।
10– वायु– भू–वैज्ञानिक कार्य

Unit- IV 20

11– भ्रंश – परिभाषा, वर्गीकरण तथा पहचान।
12– वलन – परिभाष, वर्गीकरण तथा पहचान।
13– विषम विन्यास – परिभाषा, वर्गीकरण तथा पहचान।
14– परिभाषा– कठोरता, आपेक्षिक घनत्व, चमक, चापझील
संक्षेप में टिप्पणी– नति, स्ट्राइक, पंक विदर सिल तथा डाइक

Unit- V खनिज विज्ञान 10

15– खनिजों की परिभाषा
16– खनिजों के भौतिक गुण

17– खनिजों के रासायनिक गुण

18– खनिजों का वर्णन– (क) बायोटाइट (ख) मस्कोवाइट (ग) टाल्क (घ) क्वार्टज
(च) माइक्रोक्लीन (छ) कैल्साइट (ज) हीरा (झ) मैग्नेटाइट (ट) हेमेटाइट
(ठ) चाल्कोपाइराइट (ड) औलीवीन मोह का कठोरता स्केल

Unit- VI क्रिस्टल विज्ञान 10

1. क्रिस्टल की परिभाषा
2. क्रिस्टल के बाहरी लक्षण : रूप, किनारा, कोण तथा स्थिति।
3. संक्षिप्त टिप्पणी : 1. अन्तः खंडित फलक
   2. सममिति केन्द्र
   3. समानान्तर षटफलक

भूगर्भ विज्ञान प्रयोगात्मक	
समय 3 धण्टे	पूर्णांकः 30 अंक
1– दिए गये खनिज का आपेक्षिक धनत्व ज्ञात करना	08
2– दिए गये खनिजों के भौतिक गुण तथा रासायनिक संधटन ज्ञात करना	08
3– मौखिक	05
4– सत्रीय कार्य	04
5– सतत मूल्यांकन	05

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सैद्धान्तिक

समय– 3 घण्टा पूर्णांक– 70

UNIT - I 05

1. परिचय – एक परिचय भूगर्भ विज्ञान
2. भूगर्भ विज्ञान का क्षेत्र (Scope)

UNIT -II - शैल विज्ञान 20

1. परिचय – शैल विज्ञान क्या है ?
2. आग्नेय शैल – परिभाषा, उदाहरण, गठन एवं संरचनाएं।
3. अवसादी शैल – परिभाषा, उदाहरण, गठन एवं संरचनाएं।
4. कायान्तरी शैल– परिभाषा, उदाहरण, गठन एवं संरचनाएं।
5. शैलों का वर्गीकरण, भौतिक गुण, संरचनाएं, अनिवार्य खनिज गठन तथा उपयोग।
6. मुख्य शैल–
   1. मारबल– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   2. कांग्लोमरेट– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   3. ग्रेनाइट– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   4. बालू पत्थर– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   5. चूना पत्थर– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   6. खड़िया– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   7. डोलेराइट– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   8. पैग्मेटाइट– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।
   9. ब्रेशिया– भौतिक गुण, अनिवार्य खनिज गठन संरचनाएं एवं उपयोग।

UNIT - III - जीवाश्म विज्ञान 10

1. परिचय : जीवाश्म विज्ञान क्या है ?
   जीवाश्म किसे कहते हैं ?

2– गैस्ट्रोपोडा : परिचय, उदाहरण तथा उनका सचित्र वर्णन।

3– लैमीलीब्रेंकिया : परिचय, उदाहरण तथा उनका सचित्र वर्णन।

4. जीवाश्म के उपयोग तथा उनके द्वारा शैलों की आयु ज्ञात करना।

UNIT - IV - स्तरीय विज्ञान 15

1. परिचय – स्तरीय विज्ञान क्या है ?
2. गोण्डवाना शैल समूह – परिचय, वर्गीकरण, आयु तथा उनमें पाए जाने वाले मुख्य खनिज तथा शैल
3. कड़प्पा शैल समूह – ,, ,, ,, ,,
4. आर्कीयन शैल समूह – ,, ,, ,, ,,
5. शिवालिक शैल समूह – ,, ,, ,, ,,

UNIT - V - आर्थिक भूगर्भ विज्ञान 10

1. परिचय
2. अयस्क – परिभाषा, भौतिक गुण, रसायनिक गुण उनके वितरण तथा उपयोग
3. अयस्क :
   - अ– बाक्साइट – भौतिक गुण, रसायनिक गुण उनके वितरण तथा उपयोग
   - ब– चालकोपाइराइट – ,, ,, ,, ,,
   - स– जिप्सम – ,, ,, ,, ,,
   - य– हेमेटाइट – ,, ,, ,, ,,
   - र– मैग्नेटाइट – ,, ,, ,, ,,
4. कोयला – कोयले के प्रकार, भारत में कोयले का वितरण तथा उपयोग।
5. पैट्रोलियम – भारत में वितरण प्राप्ति तथा उपयोग।

UNIT - VI 10

1. उत्तराखण्ड की प्रमुख भू आपदाओं का संक्षिप्त परिचय।
2. भू–स्खलन – उनके प्रमुख प्रकार तथा उत्तराखण्ड में भू–स्खलनों की स्थिति।
3. उत्तराखण्ड में भूकम्पों का संक्षिप्त इतिहास तथा भूकम्प की दृष्टि से प्रदेश के प्रमुख संवेदनशील क्षेत्र।
4. अतिवृष्टि तथा अचानक बाढ़ उत्तराखण्ड के परिपेक्ष में।

भूगर्भ विज्ञान प्रयोगात्मक

समय 3 घण्टे पूर्णांकः 30 अंक

S. N.	Topic	Internal Examiner	External Examiner
1.	Map	2	
2	Model- Cube, Zircon, Tetrahadron	3	
3	Sessional	5	
4	Continuous Assessment/Unit Test	5	
5	To Identify relative density of given Mineral		3
6	Spotting		
	a) 3 Fossils:Murex, Pectin, Area		3
	b) 3 Minerals: Talc, Calcite, Quartz		3
	c) 3 Rocks: Granite, Marble, Sand Stone		3
10	Viva Voice		3
	Total	15	15

2025–26

CLASS XII

Time : 3 Hours

हिन्दी (कृषि वर्ग हेतु)

कोड–102

एक प्रश्नपत्र समय – 3 घंटे	पाठ्य विवरण / अंकनिर्धारण	अधिकतम अंक 80
क	अपठित बोध (गद्यांश बोध)	10 अंक
ख	रचनात्मक लेखन एवं जन–संचार माध्यम	18 अंक
ग	आरोह भाग– 1 आरोह भाग– 2	20 अंक
	पूरक पुस्तक : वितान भाग– 1 वितान भाग– 2	08 अंक
घ	संस्कृत पठित बोध : संस्कृत प्रबोधिनी भाग– 1 संस्कृत प्रबोधिनी भाग– 2	06 अंक
ड़	संस्कृत प्रबोधिनी भाग– 1 व भाग– 2 पर आधारित प्रश्नोत्तर	08 अंक
च , छ	वाक्य रचना एवं व्याकरण व्याकरण	06 अंक 04 अंक
ज	कण्ठस्थ श्लोक लिखकर उसका हिन्दी अनुवाद लिखना	

क. अपठित गद्यांश बोध

गद्यांश बोध पर आधारित बोध, प्रयोग, रचनान्तरण, शीर्षक आदि पर लघुत्तरात्मक प्रश्न **10**

ख. रचनात्मक लेखन एवं जन–संचार माध्यम **18**

- निबन्ध 08
- जनसंचार की विधाओं पर दो प्रश्न
- प्रिंट माध्यम सम्पादकीय
- रिपोर्ट 05
- आलेख 05

(ग)

- **आरोह भाग– 1**

एक काव्यांश पर अर्थ ग्रहण सम्बन्धी तीन प्रश्नों में से दो प्रश्न 1+1 = 2

- **आरोह भाग– 2**

एक काव्यांश पर अर्थ ग्रहण सम्बन्धी तीन प्रश्नों में से दो प्रश्न 1+1 = 2

- **आरोह भाग– 1**

काव्यांश के सौन्दर्यबोध पर एक प्रश्न 2

- **आरोह भाग– 2**
- काव्यांश के सौन्दर्य बोध पर एक प्रश्न 2
- **आरोह भाग– 1**

कविता की विषय वस्तु पर आधारित दो में से एक प्रश्न 2

- **आरोह भाग– 2**

कविता की विषय वस्तु पर आधारित दो में से एक प्रश्न 2

- **आरोह भाग– 1**

एक गद्यांश में से अर्थ ग्रहण सम्बन्धी दो प्रश्न 2

- **आरोह भाग– 2**

एक गद्यांश में से अर्थ ग्रहण सम्बन्धी दो प्रश्न 2

- **आरोह भाग– 1**

पाठों की विषय वस्तु पर आधारित दो में से एक प्रश्न 2

- **आरोह भाग– 2**

पाठों की विषय वस्तु पर आधारित दो में से एक प्रश्न 2

- **पूरक पुस्तक वितान भाग– 1**

विचार/संदेश पर आधारित दो प्रश्नों में से एक प्रश्न 2

- **पूरक पुस्तक वितान भाग– 2**

विचार/संदेश पर आधारित दो प्रश्नों में से एक प्रश्न 2

- **विषय वस्तु पर आधारित दो में से एक निबन्धात्मक प्रश्न**

(वितान–भाग–1 व वितान भाग–2) 4

घ. संस्कृत पठित बोध –

- संस्कृत प्रबोधिनी भाग– 1 के प्रदत्त गद्यांश पर आधारित तीन प्रश्नों में से दो प्रश्न 1+1=2
- संस्कृत प्रबोधिनी भाग– 2 के प्रदत्त गद्यांश पर आधारित तीन प्रश्नों में से दो प्रश्न

1+1=2

- पाठ्य पुस्तक पर आधारित प्रश्नोत्तर–

संस्कृत प्रबोधिनी भाग–1 में से श्लोक पर आधारित दो प्रश्नों में से एक प्रश्न का उत्तर 1

संस्कृत प्रबोधिनी भाग–2 में से श्लोक पर आधारित दो प्रश्नों में से एक प्रश्न का उत्तर 1

ड़. संस्कृत पाठ्य पुस्तक पर आधारित प्रश्नोत्तर–

संस्कृत प्रबोधिनी भाग–1

चार प्रश्नों में से दो प्रश्नों के उत्तर 2+2=4

संस्कृत प्रबोधिनी भाग–2

चार प्रश्नों में से दो प्रश्नों के उत्तर 2+2=4

च. संस्कृत वाक्य रचना–

दियेगयेसुवन्त, तिड़न्त, अव्यय आदि से सम्बन्धित दस पदों में से चार पदों की वाक्य रचना करना। 3

छ. संस्कृत व्याकरण

व्यंजनसन्धि व विसर्गसन्धि, समास, कारक, शब्द रूप, धातु रूप आदि से सम्बन्धित लघुत्तरीय प्रश्न। 3

ज. कोई कण्ठस्थ श्लोक लिखकर उसका हिन्दी अनुवाद लिखना 2+2=4

निर्धारित पुस्तकें–

i.आरोह भाग– 1 ii.आरोह भाग– 2 iii.वितान भाग– 1

iv.वितान भाग– 2 v.संस्कृत प्रबोधिनी– 1 vi.संस्कृत प्रबोधिनी– 2

आन्तरिक मूल्यांकन **पूर्णांक–20**

क0स0	मूल्यांकन बिन्दु	अंक
1.	श्रवण कौशल	4
2.	वाचन कौशल	4
3.	परियोजना कार्य	
	क) विषय वस्तु	3
	ख) भाषा एवं प्रस्तुति	2
	ग) शोध एवं मौलिकता	2
4	सतत मूल्यांकन	5
	योग	**20**

विषय– हिन्दी (कृषि वर्ग)

निर्धारित पाठों की सूची

पुस्तक का नाम– आरोह भाग–1

अध्याय स0	पाठ का नाम
	गद्य खण्ड
1.	प्रेमचन्द्र– नमक का दरोगा
2.	कृष्णा सोबती– मिया नसीरुद्दीन
4.	बालमुकुन्द गुप्त– विदाई संभाषण
5.	शेखर जोशी–गलता लोहा
6.	मन्नू भण्डारी–रजनी
7.	कृश्नचंदर–जामुन का पेड़
8.	जवाहरलाल नेहरू– भारत माता
	काव्य खण्ड
1.	कबीर– हम तौ एक एक करि जाना
2.	मीरा–मेरे तो गिरधर गोपाल, दूसरो न कोई
3.	भवानी प्रसाद मिश्र–घर की याद
5	दुष्यन्त कुमार – गजल
6	अक्कमहादेवी– 1. हे भूख मत मचल 2. हे मेरे जूही के फूल जैसे ईश्वर
7	अवतार सिंह पाश–सबसे खतरनाक
8.	निर्मला पुतुल– आओ मिलकर बचायें

पुस्तक का नाम– वितान भाग–1

अध्याय स0	पाठ का नाम
1.	राजस्थान की रजत बूंद–अनुपम मिश्र
2.	आलो आधॉरि–बेबी हालदार
3.	भारतीय कलाएं
4.	लेखकों के बारे में

पुस्तक का नाम– संस्कृत प्रबोधिनी प्रथमः भागः

पाठानुक्रमः	पाठस्य नाम
	सरस्वती वन्दना
प्रथमः पाठः	भोजनं कुरु
द्वितीयः पाठः	नैतिवचनानि
तृतीयः पाठः	प्रश्नोत्तर–विवादः
चतुर्थ पाठः	प्राणभ्यः संस्कृतिः श्रेष्ठाः
पंचमः पाठः	वणिगवैद्ययोः वार्तालापः
षष्ठः पाठः	उत्तराखण्ड सुषमाः
सप्तमः पाठः	भूकम्प विभिषिका
अष्टमः पाठः	दिव्य धनम्

पुस्तक का नाम– आरोह भाग–2

अध्याय स0	पाठ का नाम
	काव्य खण्ड
1.	हरिवंश राय बच्चन 1. आत्म परिचय 2. एक गीत
2.	आलोक धन्वा– पतंग
3.	कुँवर नारायण 1. कविता के बहाने 2. बात सीधी थी पर
4.	रघुवीर सहाय 1. कैमरे में बन्द अपाहिज
6.	सूर्यकान्त त्रिपाठी 'निराला'– बादल राग
7.	तुलसीदास– 1. कवितावली (उत्तरकाण्ड से) 2. लक्ष्मण–मूर्छा एवं राम का विलाप
8.	फिराक गोरखपुरी– रुबाइयॉ
9.	उमांशंकर जोशी 1. छोटा मेरा खेत 2. बगुलों के पंख
गद्य खंड	
10	महादेवी वर्मा– भक्तिन
11	जैनेन्द्र कुमार– बाजार दर्शन
12	धर्मवीर भारती– काले मेघा पानी दे
14	हजारी प्रसाद द्विवेदी– शिरीष के फूल
15	बाबा साहेब भीमराव अंबेडकर

	1.श्रम विभाजन और जाति प्रथा 2.मेरी कल्पना का आदर्श समाज

पुस्तक का नाम– वितान भाग–2

अध्याय स0	पाठ का नाम
1.	सिल्वर वैडिंग– मनोहर श्याम जोशी
2.	जूझ– आनन्द यादव
3.	अतीत में दबे पांव–ओम थानवी

पुस्तक का नाम– संस्कृत प्रबोधिनी द्वितीयः भागः

पाठानुक्रमः	पाठस्य नाम
	वन्दना
प्रथमः पाठः	नीतिसौरभम्
द्वितीयः पाठः	विद्यालयस्य वार्षिकोत्सवः
तृतीयः पाठः	लक्ष्यैकदृष्टिः
चतुर्थ पाठः	भारतरत्नः गोविन्दबल्लभपन्तः
पंचमः पाठः	वन्यपशवः भारतः इव
षष्ठः पाठः	श्रीकृष्ण दौत्यम्
सप्तमः पाठः	वृक्षेषु चैतन्यं विद्यते
अष्टमः पाठः	उत्तराखण्डे जलप्रलयः

नोट– इस प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रकार के पूछे जायेगे जिनमें से आधे प्रश्न (8 अंक) बहुविकल्पीय प्रकार के होंगे।

2025–26

हिन्दी (101)

सैद्धान्तिक

कक्षा – 12

समय–3 घंटे **पूर्णांक (56+24)=80**

		अंक
(क)	अपठित बोध (गद्यांश बोध)	10
(ख)	रचनात्मक लेखन एवं जन–संचार माध्यम	18
(ग)	आरोह भाग–2	21
	पूरक पुस्तक : वितान भाग–2	07
(घ)	संस्कृत पठित बोध	06
(ड़)	पाठ्यपुस्तक पर आधारित प्रश्नोत्तर	08
(च)	वाक्य रचना	03
(छ)	व्याकरण	03
(ज)	कण्ठस्थ श्लोक लिखकर उसका हिन्दी अनुवाद	04

(क) अपठित बोध :

1. गद्यांश बोध पर आधारित बोध, प्रयोग, रचनांतरण, शीर्षक आदि पर लघुत्तरात्मक प्रश्न **10** अंक

(ख) रचनात्मक लेखन एवं जन–संचार माध्यमः **18** अंक

2. निबंध 08 अंक

3. जनसंचार की विधाओं पर दो प्रश्न

   प्रिंट माध्यम सम्पादकीय 05 अंक
   रिपोर्ट/आलेख 05 अंक

(ग) आरोह भाग–2 **21 अंक**

4. दो काव्यांशों में से किसी एक पर अर्थग्रहण के तीन प्रश्न (2+2+1) 05
5. एक काव्यांश के सौन्दर्य बोध पर एक प्रश्न (भाव अथवा शिल्प) 02
6. कविता की विषय–वस्तु पर आधारित तीन में से दो लघूत्तरात्मक प्रश्न (2+2) 04
7. दो में से एक गद्यांश पर आधारित अर्थग्रहण के तीन प्रश्न (2+2+2) 06
8. पाठों की विषय वस्तु पर .आधारित तीन में से दो बोधात्मक प्रश्न (2+2) 04

पूरक पुस्तक : वितान भाग–2 **07 अंक**

9. विचार/संदेश पर आधारित चार में से तीन लघुत्तरात्मक प्रश्न (1+1+1) 03
10. विषय वस्तु पर आधारित दो में से एक निबंधात्मक प्रश्न 04

(घ) संस्कृत पठित बोध **06 अंक**

(I) संस्कृत पाठ्यपुस्तक के प्रदत्त गद्यांश पर आधारित चार लघुत्तरीय प्रश्नों में से तीन प्रश्नों के उत्तर (1+1+1) 03

(II) पाठ्यपुस्तक के प्रदत्त श्लोक के आधार पर आधारित चार लघुत्तरीय प्रश्नों में से तीन प्रश्नों के उत्तर (1+1+1) 03

(ड़) संस्कृत पाठ्य–पुस्तक पर आधारित प्रश्नोत्तर **08 अंक**

पाठ्य–पुस्तकों के पाठों पर आधारित छः लघुत्तरीय प्रश्नों में से चार प्रश्नों के संस्कृत में पूर्ण वाक्यों में उत्तर (2+2+2+2) 08

(च) संस्कृत वाक्य रचना **03 अंक**

दिये गये सुबन्त, तिङन्त, अव्यय आदि से सम्बन्धित आठ पदों में से तीन पदों को लेकर तीन वाक्यों की रचना करना (1+1+1) 03

(छ) संस्कृत व्याकरण **03 अंक**

समास, कारक, शब्द रूप धातु रूप आदि से सम्बन्धित लघुत्तरीय प्रश्न (1+1+1) 03

विसर्ग सन्धि – विसर्जनीयस्य सः ससजुषोसः अतोरोरप्लुतादप्लुते

(ज) श्लोक **04 अंक**

कोई कण्ठस्थ श्लोक लिखकर उसका हिन्दी अनुवाद करना (2+2) 04

निर्धारित पुस्तकें :

1. आरोह भाग – 2
2. वितान भाग – 2
3. अभिव्यक्ति और माध्यम
4. संस्कृत पाठ्य पुस्तक – प्रबोधिनी भाग – 2

आन्तरिक मूल्यांकन पूर्णांक–20

क0स0	मूल्यांकन बिन्दु	अंक
1.	वाचन	4
2.	श्रवण	4
3.	परियोजना कार्य	
	क) विषय वस्तु	3
	ख) भाषा एवं प्रस्तुति	2
	ग)शोध एवं मौलिकता	2
4	सतत मूल्यांकन (इकाई परीक्षा)	5
	योग	**20**

वार्तालाप की दक्षताएँ:

वार्तालाप की दक्षताओं का मूल्यांकन निरंतरता के आधार पर परीक्षा के समय होगा।

श्रवण (सुनना) टिप्पणी का मूल्यांकन :

परीक्षक किसी प्रासंगिक विषय पर एक अनुच्छेद का स्पष्ट वाचन करेगा। अनुच्छेद, तथ्यात्मक या सुझावात्मक हो सकता है। अनुच्छेद लगभग 250 शब्दों का होना चाहिए। परीक्षक/अध्यापक को सुनते–सुनते परीक्षार्थी अलग कागज पर दिये हुए श्रवण–बोध के अभ्यासों को हल कर सकेंगे।

वाचन (बोलना) का मूल्यांकन :

1. चित्रों के क्रम पर आधारित वर्णन : इस भाग में अपेक्षा की जायेगी कि विवरणात्मक भाषा का प्रयोग करें।
2. किसी चित्र का वर्णन : चित्र लोगों या स्थानों के हो सकते हैं।
3. किसी निर्धारित विषय पर बोलना, जिससे विद्यार्थी/परीक्षार्थी अपने व्यक्तिगत अनुभव का प्रत्यास्मरण कर सके।
4. कोई कहानी सुनना या किसी घटना का वर्णन करना।

टिप्पणी:

परीक्षण से पूर्व परीक्षार्थी को कुछ तैयारी के लिए समय दिया जाए।

- विवरणात्मक भाषा में वर्तमान काल में प्रयोग आवश्यक है।
- निर्धारित विषय परीक्षार्थी के अनुभव–जगत के हों जैसे–
  कोई चुटकुला या हास्य प्रसंग सुनाना।
  हाल में पढ़ी पुस्तक या देखे सिनेमा की कहानी सुनाना।
  जब परीक्षार्थी बोलना आरम्भ कर दे ंतो परीक्षक कम से कम हस्तक्षेप करें।

कौशलों के अंतरण का मूल्यांकन

(इस बात का निश्चय करना कि क्या विद्यार्थी में श्रवण और वाचन की निम्नलिखित योग्यताएँ हैं।)

श्रवण (सुनना)	वाचन (बोलना)
विद्यार्थी में –	**विद्यार्थी में –**
1. परिचित संदर्भों में प्रयुक्त शब्दों और पदों को समझने की सामान्य योग्यता है किन्तु वह सुसंबद्ध आशय को नहीं समझ पाता।	1. केवल अलग–अलग शब्दों और पदो के प्रयोग की योग्यता प्रदर्शित करता है किन्तु एक सुसंबद्ध स्तर पर नहीं बोल सकता।
2. छोटे सम्बद्ध कथनों को परिचित संदर्भों में समझने की योग्यता है।	2. परिचित संदर्भों को केवल छोटे संबद्ध कथनों का सीमित शुद्धता से प्रयोग करता है।
3. परिचित या अपरिचित दोनों संदर्भों में कथित सूचना को स्पष्ट समझने की योग्यता है।	3. अपेक्षाकृत दीर्घ भाषण में अधिक जटिल कथनों के प्रयोग की योग्यता प्रदर्शित करता है, अभी भी कुछ अशुद्धियां करता है जिससे प्रेषण में रूकावट आती है।
4. दीर्घ कथनों की श्रृखला को पर्याप्त शुद्धता से समझने और निष्कर्ष निकाल सकने की योग्यता है।	4. अपरिचित स्थितियों में विचारों को तार्किक ढंग से संगठित कर धारा प्रवाह रूप में प्रस्तुत करता है जिनसे प्रेषण में रूकावट नहीं आती।
5. जटिल कथनों के विचार–बिन्दुओं को समझने की योग्यता प्रदर्शित करने की क्षमता है, वह उद्देश्य के अनुकूल सुनने की कुशलता प्रदर्शित करता ळें	5. उद्देश्य और श्रोत के लिए उपयुक्त शैली को अपना सकता है, केवल मामूली गलतियाँ करता है।

परियोजना कार्य

परियोजना शब्द 'योजना' में परि उपसर्ग लगने से बना है।

परि का अर्थ है पूर्णतः अर्थातः ऐसी योजना जो अपने आप में पूर्ण हों परियोजना कहलाती है। किसी विशेष लक्ष्य की प्राप्ति हेतु जो योजना बनाई और कार्यान्वित की जाती है उसे परियोजना कहते हैं। यह किसी समस्या के निदान या किसी विषय के तथ्यों को प्रकाशित करने के लिए तैयार की गई एक पूर्ण विचार योजना होती है।

राष्ट्रीय पाठ्यचर्या की रूपरेखा, राष्ट्रीय शिक्षा नीति 2020 द्वारा अनुभवात्मक अधिगम, आनंदपूर्ण अधिगम की बात कही गई है। उच्चतर माध्यमिक स्तर पर शिक्षार्थियों के लिए हिंदी का अध्ययन एक सृजनात्मक,, साहित्यिक, सांस्कृतिक और विभिन्न प्रयुक्तियों की भाषा के रूप में प्रयोग करने और करवाने के लिए परियोजना कार्य अत्यंत महत्वपूर्ण व लाभदायक सिद्ध होता है।

परियोजना का महत्त्व

- व्यक्तिगत स्तर पर खोज, कार्यवाही और ग्यारहवीं बारहवीं कक्षा के दौरान अर्जित ज्ञान, ओर कौशल। विचारों आदि पर चिंतन का उपयोग।
- सैद्धांतिक निर्माणों और तर्कों का उपयोग करके वास्तविक दुनिया की परिदृश्यों का विश्लेषण और मूल्यांकन
- एक स्वतंत्र और विस्तारित कार्य का निर्माण करने के लिए महत्वपूर्ण, और रचनात्मक चिंतन कौशल और क्षमताओं के अनुप्रयोग का प्रदर्शन

- उन विषयों पर कार्य करने का अवसर जिनमे शिक्षार्थियों की रुचि है।
- नए ज्ञान की ओर अग्रसर
- खोजी प्रवृत्ति में वृद्धि

- भाषा ज्ञान समृद्ध एवं व्यावहारिक
- समस्या समाधान की क्षमता का विकास

परियोजना कार्य निर्धारित करते समय ध्यान देने योग्य बाते

- परियोजना कार्य शिक्षार्थियों में योग्यता आधारित क्षमता को ध्यान में रखकर दिए जाएं जिससे विषय के साथ जुड़ते हुए उसके व्यावहारिक पक्ष को समझ सके। वर्तमान समय में उसकी प्रासंगिकता पर भी ध्यान दिया जाए।
- सत्र के प्रारंभ में ही शिक्षार्थियों को विषय चुनने का अवसर मिले ताकि उसे शोध तैयारी और लेखन के लिए पर्याप्त समय मिल सके
- अध्यापिका / अध्यापक द्वारा कक्षा में परियोजना कार्य को लेकर विस्तार पूर्वक चर्चा की जाए जिससे शिक्षार्थी, उसके अर्थ महत्त्व व प्रक्रिया को भली भांति समझने में सक्षम हो सकें
- हिंदी भाषा और साहित्य से जुड़ें विविध विषयों, विधाओं, साहित्यकारों, समकालीन लेखन ,भाषा के तकनीकी पक्ष, प्रभाव अनुप्रयोग ,साहित्य के सामाजिक संदर्भो एवं जीवन मूल्य संबंधी प्रभावों आदि पर परियोजना कार्य दिए जाने चाहिए।

शिक्षार्थी को उसकी रुचि के अनुसार विषय का चयन करनी की छूट दी जानी चाहिए तथा अध्यापक /अध्यापिका को मार्गदर्शक के रूप में उसकी सहायता करनी चाहिए
परियोजना कार्य करते समय निम्नलिखित आधार को अपनाया जा सकता है

1. प्रमाणपत्र
2. आभार ज्ञापन
3. विषय सूची
4. उद्देश्य
5. समस्या का वर्णन
6. परिकल्पना
7. प्रक्रिया
8. प्रस्तुतीकरण
9. अध्याय का परिणाम
10. अध्ययन की सीमाएं
11. स्रोत
12. अध्यापक की टिप्पणी

- परियोजना कार्य में शोध के दौरान सम्मिलित किए गए चित्रों और संदर्भो के विषय में उचित जानकारी दी जानी चाहिए उनकी स्रोत को अवश्य अंकित करना चाहिए।
- चित्रो रेखाचित्र, विज्ञापन, ग्राफ, विषय से संबंधित आँकड़े, समाचार की कतरनें एकत्रित की जानी चाहिए।
- प्रमाणस्वरूप सम्मिलित किए गए आंकड़े,, चित्र,विज्ञापन आदि के स्रोत अंकित करने के साथ साथ समाचार पत्र पत्रिकाओं के नाम एवं दिनांक भी लिखना चाहिए।
- साहित्यक कोश, संदर्भ ग्रंथ शब्दकोश। आदि की सहायता लेनी चाहिए।
- परियोजना कार्यालय शिक्षार्थियों के लिए अनेक सम्भावनाएं हैं। उनके व्यक्तिगत विचार तथा उनकी कल्पना की विस्तृत संसार को आवाज़ सम्मिलित कियाजाए।

परियोजना कार्य के कुछ विषय सुझावात्मक रूप में दिए जा रहे हैं

- हिंदी कविता में प्रकृति चित्रण
- विभिन्न कवियों की कविताओं का तुलनात्मक अध्ययन
- भारतीय ग्रामीण का जीवन
- समकालीन विषय 'जी–20 और भारत'
- आदि

कक्षा –12 विषय– हिन्दी

पुस्तक का नाम– आरोह भाग–2

अध्याय स0	पाठ का नाम
	काव्य खण्ड
1.	हरिवंश राय बच्चन 1. आत्म परिचय 2. एक गीत
2.	आलोक धन्वा– पतंग
3.	कुँवर नारायण 1. कविता के बहाने 2. बात सीधी थी पर
4.	रघुवीर सहाय 1. कैमरे में बन्द अपाहिज
6.	सूर्यकान्त त्रिपाठी 'निराला'– बादल राग
7.	तुलसीदास– 1. कवितावली (उत्तरकाण्ड से) 2. लक्ष्मण–मूर्छा एवं राम का विलाप
8.	फिराक गोरखपुरी– रुबाइयॉ
9.	उमांशंकर जोशी 1. छोटा मेरा खेत 2. बगुलों के पंख
गद्य खंड	
10	महादेवी वर्मा– भक्तिन
11	जैनेन्द्र कुमार– बाजार दर्शन
12	धर्मवीर भारती– काले मेघा पानी दे
14	हजारी प्रसाद द्विवेदी– शिरीष के फूल
15	बाबा साहेब भीमराव अंबेडकर 1.श्रम विभाजन और जाति प्रथा 2.मेरी कल्पना का आदर्श समाज

कक्षा –12 विषय– हिन्दी

पुस्तक का नाम– वितान भाग–2

अध्याय स0	पाठ का नाम
1.	सिल्वर वैडिंग– मनोहर श्याम जोशी
2.	जूझ– आनन्द यादव
3.	अतीत में दबे पांव–ओम थानवी

कक्षा –12 विषय– हिन्दी

पुस्तक का नाम– संस्कृत प्रबोधिनी द्वितीयः भागः

पाठानुक्रमः	पाठस्य नाम
	वन्दना
प्रथमः पाठः	नीतिसौरभम्
द्वितीयः पाठः	विद्यालयस्य वार्षिकोत्सवः
तृतीयः पाठः	लक्ष्यैकदृष्टिः
चतुर्थ पाठः	भारतरत्नः गोविन्दबल्लभपन्तः
पंचमः पाठः	वन्यपशवः भारतः इव
षष्ठः पाठः	श्रीकृष्ण दौत्यम्
सप्तमः पाठः	वृक्षेषु चैतन्यं विद्यते
अष्टमः पाठः	उत्तराखण्डे जलप्रलयः

नोट– हिन्दी भाषा के प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रकार के पूछे जायेगे जिनमें से आधे प्रश्न (8 अंक) बहुविकल्पीय प्रकार के होंगे।

2025–26

हिन्दी (101)

सैद्धान्तिक

कक्षा – 11

समय – 3 घंटे **पूर्णांक (56+24)=80**

(क) अपठित बोध (गद्यांश बोध)	08
(ख) रचनात्मक लेखन (कामकाजी हिन्दी और रचनात्मक लेखन)	17
(ग) पाठ्य–पुस्तक : आरोह भाग–1	22
पूरक पुस्तक : वितान भाग–1	09
(घ) संस्कृत पठित बोध	12
(ड़) संस्कृत पाठ्य–पुस्तक पर आधारित प्रश्नोत्तर	08
(च) संस्कृत वाक्य रचना /व्याकरण	04

(क)– अपठित बोध : **08 अंक**

1. गद्यांश बोधः (गद्यांश पर आधारित बोध, प्रयोग, रचनांतरण, शीर्षक आदि पर लघुत्तरात्मक प्रश्न 08

(ख)– रचनात्मक लेखन : (कामकाजी हिंदी और रचनात्मक लेखन) **17 अंक**

रचनात्मक लेखन पर दो प्रश्न

2. निबंध 08
3. कार्यालयी पत्र 04

निर्धारित पुस्तक 'अभिव्यक्ति और माध्यम' के आधार पर जनसंचार की विधाओं पर दो प्रश्न

4. प्रिंट माध्यम (समाचार और सम्पादकीय)
   - रिपोर्ट/आलेख 05

(ग) – आरोह (काव्य–भाग–14 अंक, गद्य–भाग–08 अंक) **22 अंक**

(काव्य भाग)

5.	दो काव्यांशों में से किसी एक पर अर्थग्रहण के तीन प्रश्न	(2+2+2)	06
6.	एक काव्यांश के सौदर्यबोध पर दो प्रश्न	(2+2)	04
7.	कविता की विषय वस्तु पर आधारित दो लघुत्तरात्मक प्रश्न	(2+2)	04
	(गद्य–भाग)		
8.	दो में से एक गद्यांश पर आधारति अर्थग्रहण सम्बन्धित दो प्रश्न	(2+2)	04
9.	पाठों की विषय वस्तु पर आधारित चार में से दो बोधात्मक प्रश्न	(2+2)	04

वितान भाग : 1 **09 अंक**

10. पाठों की विषय वस्तु पर आधारति पाँच में से तीन लघुत्तरात्मक प्रश्न (3+3+3) 09

खण्ड घ. – संस्कृत पठित बोध **12 अंक**

1. संस्कृत पाठ्यपुस्तक के प्रदत्त गद्यांश पर आधारित पाँच लघूत्तरीय प्रश्नों में से तीन प्रश्नों के उत्तर (2+2+2) 06

पाठ्यपुस्तक के प्रदत्त श्लोक पर आधारित चार लघुत्तरीय प्रश्नों में से तीन प्रश्नों के उत्तर (2+2+2) 06

खण्ड ड .– संस्कृत पाठ्य–पुस्तक पर आधारित प्रश्नोत्तर **08 अंक**

पाठ्यपुस्तकों के पाठों पर आधारित आठ लघुत्तरीय प्रश्नों में से चार प्रश्नों के

संस्कृत में पूर्ण वाक्यों में उत्तर (2+2+2+2) 08

खण्ड च– संस्कृत वाक्य रचना /व्याकरण **04 अंक**

सुबन्त तिड.न्त अव्यय आदि से सम्बन्धित छः पदों में से दो पदों को लेकर

संस्कृत में दो वाक्यों की रचना करना। 2

हल (व्यंजन) सन्धि– स्तोःश्चुनाश्चुः ष्टुनाष्टुः, मोइनुस्वारः 2

नोट– प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रश्नों के रूप में होंगे ।

आन्तरिक मूल्यांकन पूर्णांक–20

क्र0स0	मूल्यांकन बिन्दु	टंक
1.	श्रवण कौशल	4
2.	वाचन कौशल	4
3.	परियोजना कार्य	
	क) विषय वस्तु	3
	ख) भाषा एवं प्रस्तुति	2
	ग) शोध एवं मौलिकता	2
4	सतत मूल्यांकन (इकाई परीक्षा)	5
	योग	**20**

निर्धारित पुस्तकें :

1. आरोह भाग – 1
2. वितान भाग – 1
3. अभिव्यक्ति और माध्यम

वार्तालाप की दक्षताएँ:

वार्तालाप की दक्षताओं का मूल्यांकन निरंतरता के आधार पर परीक्षा के समय होगा।

श्रवण (सुनना) टिप्पणी का मूल्यांकन :

परीक्षक किसी प्रासंगिक विषय पर एक अनुच्छेद का स्पष्ट वाचन करेगा। अनुच्छेद, तथ्यात्मक या सुझावात्मक हो सकता है। अनुच्छेद लगभग 250 शब्दों का होना चाहिए। परीक्षक/अध्यापक को सुनते–सुनते परीक्षार्थी अलग कागज पर दिये हुए श्रवण–बोध के अभ्यासों को हल कर सकेंगे।

वाचन (बोलना) का मूल्यांकन :

1. चित्रों के क्रम पर आधारित वर्णन : इस भाग में अपेक्षा की जायेगी कि विवरणात्मक भाषा का प्रयोग करें।
2. किसी चित्र का वर्णन : चित्र लोगों या स्थानों के हो सकते हैं।
3. किसी निर्धारित विषय पर बोलना, जिससे विद्यार्थी/परीक्षार्थी अपने व्यक्तिगत अनुभव का प्रत्यास्मरण कर सके।

4. कोई कहानी सुनना या किसी घटना का वर्णन करना।

टिप्पणी:

परीक्षण से पूर्व परीक्षार्थी को कुछ तैयारी के लिए समय दिया जाए।

- विवरणात्मक भाषा में वर्तमान काल में प्रयोग आवश्यक है।
- निर्धारित विषय परीक्षार्थी के अनुभव–जगत के हों जैसे–
  कोई चुटकुला या हास्य प्रसंग सुनाना।
  हाल में पढ़ी पुस्तक या देखे सिनेमा की कहानी सुनाना।
  जब परीक्षार्थी बोलना आरम्भ कर दे ंतो परीक्षक कम से कम हस्तक्षेप करें।

कौशलों के अंतरण का मूल्यांकन

(इस बात का निश्चय करना कि क्या विद्यार्थी में श्रवण और वाचन की निम्नलिखित योग्यताएँ हैं।)

श्रवण (सुनना)	वाचन (बोलना)
विद्यार्थी में –	**विद्यार्थी में –**
1. परिचित संदर्भों में प्रयुक्त शब्दों और पदों को समझने की सामान्य योग्यता है किन्तु वह सुसंबद्ध आशय को नहीं समझ पाता।	1. केवल अलग–अलग शब्दों और पदो ंके प्रयोग की योग्यता प्रदर्शित करता है किन्तु एक सुसंबद्ध स्तर पर नहीं बोल सकता।
2. छोटे सम्बद्ध कथनों को परिचित संदर्भों में समझने की योग्यता है।	2. परिचित संदर्भों को केवल छोटे संबद्ध कथनों का सीमित शुद्धता से प्रयोग करता है।
3. परिचित या अपरिचित दोनों संदर्भों में कथित सूचना को स्पष्ट समझने की योग्यता है।	3. अपेक्षाकृत दीर्घ भाषण में अधिक जटिल कथनों के प्रयोग की योग्यता प्रदर्शित करता है, अभी भी कुछ अशुद्धियां करता है जिससे प्रेषण में रूकावट आती है।
4. दीर्घ कथनों की श्रृखला को पर्याप्त शुद्धता से समझने और निष्कर्ष निकाल सकने की योग्यता है।	4. अपरिचित स्थितियों में विचारों को तार्किक ढंग से संगठित कर धारा प्रवाह रूप में प्रस्तुत करता है जिनसे प्रेषण में रूकावट नहीं आती।
5. जटिल कथनों के विचार–बिन्दुओं को समझने की योग्यता प्रदर्शित करने की क्षमता है, वह उद्देश्य के अनुकूल सुनने की कुशलता प्रदर्शित करता है।	5. उद्देश्य और श्रोत के लिए उपयुक्त शैली को अपना सकता है, केवल मामूली गलतियाँ करता है।

परियोजना कार्य

परियोजना शब्द 'योजना' में परि उपसर्ग लगने से बना है।

परि का अर्थ है पूर्णतः अर्थातः ऐसी योजना जो अपने आप में पूर्ण हों परियोजना कहलाती है। किसी विशेष लक्ष्य की प्राप्ति हेतु जो योजना बनाई और कार्यान्वित की जाती है उसे परियोजना कहते हैं। यह किसी समस्या के निदान या किसी विषय के तथ्यों को प्रकाशित करने के लिए तैयार की गई एक पूर्ण विचार योजना होती है।

राष्ट्रीय पाठ्यचर्या की रूपरेखा, राष्ट्रीय शिक्षा नीति 2020 द्वारा अनुभवात्मक अधिगम, आनंदपूर्ण अधिगम की बात कही गई है। उच्चतर माध्यमिक स्तर पर शिक्षार्थियों के लिए हिंदी का अध्ययन एक सृजनात्मक,, साहित्यिक, सांस्कृतिक और विभिन्न प्रयुक्तियों की भाषा के रूप में प्रयोग करने और करवाने के लिए परियोजना कार्य अत्यंत महत्वपूर्ण व लाभदायक सिद्ध होता है।

परियोजना का महत्त्व

- व्यक्तिगत स्तर पर खोज, कार्यवाही और ग्यारहवीं बारहवीं कक्षा के दौरान अर्जित ज्ञान, ओर कौशल। विचारों आदि पर चिंतन का उपयोग।
- सैद्धांतिक निर्माणों और तर्कों का उपयोग करके वास्तविक दुनिया की परिदृश्यों का विश्लेषण और मूल्यांकन
- एक स्वतंत्र और विस्तारित कार्य का निर्माण करने के लिए महत्वपूर्ण, और रचनात्मक चिंतन कौशल और क्षमताओं के अनुप्रयोग का प्रदर्शन
- उन विषयों पर कार्य करने का अवसर जिनमे शिक्षार्थियों की रुचि है।
- नए ज्ञान की ओर अग्रसर
- खोजी प्रवृत्ति में वृद्धि
- भाषा ज्ञान समृद्ध एवं व्यावहारिक
- समस्या समाधान की क्षमता का विकास

परियोजना कार्य निर्धारित करते समय ध्यान देने योग्य बाते

- परियोजना कार्य शिक्षार्थियों में योग्यता आधारित क्षमता को ध्यान में रखकर दिए जाएं जिससे विषय के साथ जुड़ते हुए उसके व्यावहारिक पक्ष को समझ सके। वर्तमान समय में उसकी प्रासंगिकता पर भी ध्यान दिया जाए।
- सत्र के प्रारंभ में ही शिक्षार्थियों को विषय चुनने का अवसर मिले ताकि उसे शोध तैयारी और लेखन के लिए पर्याप्त समय मिल सके
- अध्यापिका / अध्यापक द्वारा कक्षा में परियोजना कार्य को लेकर विस्तार पूर्वक चर्चा की जाए जिससे शिक्षार्थी, उसके अर्थ महत्त्व व प्रक्रिया को भली भांति समझने में सक्षम हो सकें

- हिंदी भाषा और साहित्य से जुड़ें विविध विषयों, विधाओं, साहित्यकारों, समकालीन लेखन ,भाषा के तकनीकी पक्ष, प्रभाव अनुप्रयोग ,साहित्य के सामाजिक संदर्भों एवं जीवन मूल्य संबंधी प्रभावों आदि पर परियोजना कार्य दिए जाने चाहिए।

शिक्षार्थी को उसकी रुचि के अनुसार विषय का चयन करनी की छूट दी जानी चाहिए तथा अध्यापक /अध्यापिका को मार्गदर्शक के रूप में उसकी सहायता करनी चाहिए

परियोजना कार्य करते समय निम्नलिखित आधार को अपनाया जा सकता है

1. प्रमाणपत्र
2. आभार ज्ञापन
3. विषय सूची
4. उद्देश्य
5. समस्या का वर्णन
6. परिकल्पना
7. प्रक्रिया
8. प्रस्तुतीकरण
9. अध्याय का परिणाम
10. अध्ययन की सीमाएं
11. स्त्रोत
12. अध्यापक की टिप्पणी

- परियोजना कार्य में शोध के दौरान सम्मिलित किए गए चित्रों और संदर्भों के विषय में उचित जानकारी दी जानी चाहिए उनकी स्रोत को अवश्य अंकित करना चाहिए।
- चित्रो रेखाचित्र, विज्ञापन, ग्राफ, विषय से संबंधित आँकड़े, समाचार की कतरनें एकत्रित की जानी चाहिए।
- प्रमाणस्वरूप सम्मिलित किए गए आंकड़े,, चित्र,विज्ञापन आदि के स्रोत अंकित करने के साथ साथ समाचार पत्र पत्रिकाओं के नाम एवं दिनांक भी लिखना चाहिए।
- साहित्यक कोश, संदर्भ ग्रंथ शब्दकोश। आदि की सहायता लेनी चाहिए।
- परियोजना कार्यालय शिक्षार्थियों के लिए अनेक सम्भावनाएं हैं। उनके व्यक्तिगत विचार तथा उनकी कल्पना की विस्तृत संसार को आवाज़ सम्मिलित कियाजाए।

परियोजना कार्य के कुछ विषय सुझावात्मक रूप में दिए जा रहे हैं

- हिंदी कविता में प्रकृति चित्रण (पाठ उषा बगुलों के पंख कविता)
- विभिन्न कवियों की कविताओं का तुलनात्मक अध्ययन
- समकालीन विषय 'जी–20 और भारत'
- आदि

विषय– हिन्दी

पुस्तक का नाम– आरोह भाग–1

अध्याय स0	पाठ का नाम
	गद्य खण्ड
1.	प्रेमचन्द्र– नमक का दरोगा
2.	कृष्णा सोबती– मिया नसीरुद्दीन
4.	बालमुकुन्द गुप्त– विदाई संभाषण
5.	शेखर जोशी–गलता लोहा
6.	मन्नू भण्डारी–रजनी
7.	कृश्नचंदर–जामुन का पेड़
8.	जवाहरलाल नेहरू– भारत माता
	काव्य खण्ड
1.	कबीर– हम तौ एक एक करि जाना
2.	मीरा–मेरे तो गिरधर गोपाल, दूसरो न कोई
3.	भवानी प्रसाद मिश्र–घर की याद
5	दुष्यन्त कुमार – गजल
6	अक्कमहादेवी– 1. हे भूख मत मचल 2. हे मेरे जूही के फूल जैसे ईश्वर
7	अवतार सिंह पाश–सबसे खतरनाक
8.	निर्मला पुतुल– आओ मिलकर बचायें

कक्षा –11 विषय– हिन्दी

पुस्तक का नाम– वितान भाग–1

अध्याय स0	पाठ का नाम
1.	राजस्थान की रजत बूंद–अनुपम मिश्र
2.	आलो आधॉरि–बेबी हालदार
3.	भारतीय कलाएं
4.	लेखकों के बारे में

नोट– हिन्दी भाषा के प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रकार के पूछे जायेगे जिनमें से आधे प्रश्न (8 अंक) बहुविकल्पीय प्रकार के होंगे।

2025-26
HINDUSTANI MUSIC – VOCAL(114)
Class XI

Assessment Design

S.No	Component	Marks
A	Theory	30
B	Practical	70

Curriculum & Examination Structure

(A) Theory-One Paper **Max. Marks 30**

Time: 03 hours

1. Questions to be set with internal choice covering the entire syllabus

Sr. No.	Units	Marks
	Unit 1	
1.1	Brief study of the following: Nada, Shruti, Swar, Saptak, Thaat, Jati, Laya, Tala	06
1.2	Brief study of the following: Margi- Desi Sangeet, Raga,	
	Unit 2	
2.1	Brief History of the following Dhrupad, Khayal andTarana	06
	Unit 3	
3.1	Brief study of Musical Elements in Natya Shastra	06
3.2	Life sketch and contribution of Tansen, V.N. Bhatkhande and V.D.Paluskar	
	Unit 4	
4.1	Description of prescribed Talas along with Tala Notation with Thah, Dugun and Chaugun Teentala Ektala Chautala	06
4.2	Knowledge of the Structure of Tanpura	
	Unit 5	
5.1	Critical study of Prescribed Ragas. Recognizing Ragas from phrases of Swaras and elaborating them.	06
5.2	Writing in natation the compositions of prescribed Ragas Bihag Bhimpalasi Bhairavi	

(B) Practical **Max. Marks 70**

(i)Topics

1.	One Vilambit Khayal with simple elaborations and few tanas in any one of the prescribed Ragas.
2.	One Drut Khayal with simple elaboration and few tanas in the following Ragas: Bihag, Bhairavi and Bhimpalasi.
3.	One Dhrupad with Dugun in any one of theprescribed Ragas.
4.	One Devotional Song.
5.	Ability to recognize the prescribed Ragas from the phrases of Swaras rendered by the Examiner.
6.	Recitation of the Thekas of Teentala, Chautala and Ektala with Dugun and Chaugun, keeping Tala with hand beats.

(ii) Distribution of Marks

1. Examiners are requested to ask the questions directly related to the syllabus.
2. Marks should be awarded in accordance with the marking scheme.

S. No.	Value Points	Marks
1.	Choice Raga (Vilambit & Drut Khyal) any one of the following: Bihag Bhimpalasi Bhairavi	15
2.	Examiner's Choice of Ragas	12
3.	1 Dhrupad with Dugun in any one of the prescribed Ragas	14
4.	Devotional Song.	06
5.	Ability to recognize the prescribed ragas from the phrases of swaras rendered by the examiner	05
6.	Recitation of Thekas of prescribed Talas with Thah, Dugun, Chaugun: Teentala Ektala Chautala	04+04=08
7.	Practical File: Analyse the style of any present day artis of classical vocal music. Description and notation of all compositions in prescribed Ragas. Description and Tala Notation with layakaris of all prescribed.	05
8	Continuous Assessment(Unit Test)	05

* Teachers will refer to the distribution of marks while examining the candidate for practical examination

2025-26
HINDUSTANI MUSIC – VOCAL(114)
Class XII

Assessment Design

S.No	Component	Marks
A	Theory	30
B	Practical	70

Curriculum & Examination Structure

(A) Theory: One paper **Max. Marks 30**

Time: 03 hours

1. Questions to be set with internal choice covering the entire syllabus

S.No.	Units	Marks
	Unit 1	
1.1	Brief study of the following: - Alankar, Kan, Meend, Khatka, Murki, Gamak.	06
1.2	Brief study of the following Gram, Murchhana, Alap, Tana.	
	Unit 2	
		06
2.1	Historical development of Time Theory of Ragas	
	Unit 3	
3.1	Detail study of Sangeet Ratnakar the following: Sangeet Parijat	06
3.2	Life sketch and Contribution of Faiyaz Khan, Bade Ghulam Ali Khan, Krishna Krishna Rao, Shankar Pandit	
	Unit 4	
4.1	Description of Prescribed Talas along with Tala Notation with Thah, Dugun, Tigun and Chaugun Jhaptala, Rupak, Dhamar	06
4.2	Tuning of Tanpura	
	Unit 5	
5.1	Critical study of Prescribed Ragas along with recognizing the Ragas from phrases of Swaras and elaborating them.	06
5.2	Writing in Notation the Compositions of Prescribed Ragas: Bhairav, Bageshri, Malkauns	

(B) Practical **Max. Marks 70**

(i)Topics

1.	One Vilambit Khayal with simple elaborations and few Tanas in any two of the prescribed Ragas.
2.	One Drut Khayal with simple elaborations and few tanas in the following Ragas-Bhairav, Bageshri and Malkauns.
3.	One Tarana and one Dhamar with dugun and chaugun in any one of the prescribed Ragas.
4.	Ability to recognize the Ragas from the Phrases of Swaras rendered by the examiner.
5.	Recitation of the Thekas of Jhaptala, Rupak, and Dhamar with Dugun and Chaugun, keeping tala with handbeats.
6.	Tuning of Tanpura.

(ii) Distribution of Marks

Time: 25-30 Minutes for each candidate

1. Internal and external examiners are requested to ask the questions directly related to the syllabus.

S.No.	Value Points	Marks
1.	Choice Raga (Vilambit and Drut Khayal) with simple elaborations in prescribed Ragas (anyone): Bhairav Bageshri Malkauns	10+5=15
2.	Examiner's Choice of Ragas	5
3.	One Tarana and one Dhamar with Dugun and Chaugun	5+5=10
4.	Viva	5
	Total For External Examiner	**35**
5.	Identification of Ragas	08
6.	Reciting the Thekas of Prescribed Talas with hand beats with Thah and Dugun and Chaugun: Jhaptala Rupak Dhamar	6+6=12
7.	Tuning of Tanpura and questions regarding it	5
8.	Practical file	5
9.	Continuous Asseseement(Unit Test)	5
	Total For External Examiner	**35**

2025-26
HINDUSTANI MUSIC – MELODIC INSTRUMENTS (115)
Class XI

Assessment Design

S.No	Component	Marks
A	Theory	30
B	Practical	70

Curriculum & Examination Structure

(A) Theory: One Paper **Marks 30**

Time: 03 hours

1. Questions to be set with internal choice covering the entire syllabus

S.No	Units	Marks
	Unit 1	06
1.1	Brief study of the following Nada, Shruti, Swara, Saptak ,Thaat, jati, Laya, Tala.	
1.2	Brief study of the following Margi-Desi Sangeet, Raga, Gat.	
	Unit 2	06
2.1	Brief History of the following Dhrupad, Mastikhani and Razakhni Gat	
	Unit 3	06
3.1	Brief study of Musical Elements in Natya Shastra	
3.2	Life sketch and Contibution of Tansen, V.N.Bhatkhande and V.D Paluskar	
	Unit 4	06
4.1	Description of Prescribed Talas along with Tala Notation- in Thah, Dugun and Chaugan prescribed Talas: i. Teentala ii. Ektala iii. Chautala	
4.2	Knowledge of the Structure of the Instrument Opted for.	
	Unit 5	06
5.1	Critical study of Prescribed Ragas along with Recognizing Ragas from phrases of Swaras and elaborating them. Excluding Rag Jaunpuri.	
5.2	Writing in Notation the Compositions of Prescribed Ragas: i. Bihag ii. Bhim Palasi iii. Bhairavi	

(B) Practical **Max. Marks 70**

(i)Topics

1.	One Razakhani Gat with Alap, tala- badha Tanaand Jhala in the following ragas Bihag, Bhimpalasi, Bhairavi.
2.	One Masit khani Gat with tanas in any one of the prescribed ragas
3.	Ability to do Aalap, Jod, Jhala in any one of the prescribed raga.
4.	Knowledge of structure of instrument opted for.
5.	Ability to recognize prescribed ragas from the passages of swaras sung or played by the examiner.
6.	Recitation of Thekas of Teentala, Chautala and Ektala with Dugun and Chaugun keeping tala with and beats.

(ii) Distribution of Marks

Time: 15-20 Minutes for each candidate

1. Examiners are requested to ask questions directly related to the syllabus.
2. Marks should be awarded in accordance with the marking scheme.

S.No.	Value Points	Marks
1.	Parts and tuning of Instrument and questions regarding Instrument	05
2.	Alap, Jor, Jhala with Meend in any one choice Raga from the Prescribed Ragas: i. Bihag ii. Bhimpalasi iii. Bhairavi	10
3.	Choice Raga (MasitKhani Gat and Razakhani Gat	18
4.	Razakhani Gats with Todas and Jhala of Examiner's choice	12
5.	Identifying the Ragas	04+04=08
6.	Reciting the Thekas of Prescribed Talas with hand beats in Thah, Digun, Chaugun, Teental, Chautala,Ektala	04+04=08
7.	Practical file	04
8.	Continuous Assessment(Unit Test)	05
	Total	70

Teachers will refer to the distribution of Marks while examining the candidate for Practical Examination.

2025-26
HINDUSTANI MUSIC – MELODIC INSTRUMENTS (115)
Class XII

Assessment Design

S.No	Component	Marks
A	Theory	30
B	Practical	70

Curriculum & Examination Structure

(A) Theory:One Paper **Max. Marks 30**

Time: 03 hours

1. Questions to be set with internal choice covering the entire syllabus.

No.	Units	Marks
	Unit 1	06
1.1	Brief study of the following Gram, Murchhana,Alankar, Alap, Tana.	
1.2	Brief study of the following Gamak, Meend, Kan, krintan, Zamzama, Ghaseet, Sut.	
	Unit 2	06
2.1	Historical development of Time Theory of Ragas	
	Unit 3	06
3.1	Detail study of the following	
	Sangeet	
	Ratnakar	
	Sangeet Parijat	
3.2	Life sketch and Contribution of Inayat Khan, Mushtaq Ali Khan, Alauddin Khan.	
	Unit 4	06
4.1	Description of Prescribed Talas along with Tala Notation with Thah, Dugun, Tigun and Chaugun prescribed Talas: Jhaptala, Rupak	
4.2	Tuning of the Instrument opted for.	
	Unit 5	06
5.1	Critical study of Prescribed Ragas along with Recognizing Ragas phrases of Swaras and elaborating them	
5.2	Writing in Notation the Compositions of Prescribed Ragas : Bhairav, Bageshri, Malkauns	

(B) Practical **Max. Marks 70**

(i)Topics

1.	One Razakhani Gat in prescribed Ragas Bhairav Bageshri, Malkauns with simple elaborations, Todas and Jhala.
2.	One Masitkhani Gat in prescribed Ragas with simple elaborations and a few Todas.
3.	Alaap, Jor, Jhala in any one of the prescribed ragas with Ability to produce meend of minimum two swaras
4.	One composition in Ektala or in Jhaptala in any one of the prescribed Ragas
5.	Ability to recite the kas of Jhaptal, Rupak with Dugun, keeping tala with hand beats.
6.	Ability to recognize the swaras of the prescribed Ragas sung or played by the examiner
7.	Tuning of instrument opted for.

(ii) Distribution of Marks

Time: 15-20 Minutes for each candidate

1. External Examiners are requested to ask questions directly related to the syllabus.
2. Marks should be awarded in accordance with the marking scheme.

S.No.	Value Points	Marks
1.	Tuning of Instrument and questions regarding instrument	04
2.	Aalap, Jor, Jhala with Meend in one choice Raga from prescribed Ragas: i. Bhairav ii. Bageshri iii. Malkauns	8+4=12
3.	One Choice Raga (Masitkhani Gat and Razakhani) from prescribed Ragas	14
4.	Viva	05
	Total For External Examiner	**35**
5.	Razakhani Gat with Toda and Jhala of Examiner's choice	05
6.	One composition in Ektala or in Jhaptala.	05
7.	Identifying the prescribed Ragas.	4+4=08
8.	Reciting the Thekas of prescribed Talas with hand beats in Thah, Dugun and Chaugun: i. Jhaptala ii. Rupak	4+4=08
9.	Practical File	04
10.	Continuous Assessment(Unit Test)	05
	Total For Internal Examiner	**35**

External and Internal Examiner will refer to the distribution of Marks while examining the candidate for Practical Examination.

2025-26

HINDUSTANI MUSIC – PERCUSSION INSTRUMENTS (116)
Class XI

Assessment Design

S.No	Component	Marks
A	Theory	30
B	Practical	70

Curriculum & Examination Structure

(A) Theory: One Paper **Max. Marks 30**

Time: 03 hours

1. Questions to be set with internal choice covering the entire syllabus unit wise
2. Candidate has to attempt at least one question from each unit.

Distribution of Marks

S. No	Units	Marks
	Unit 1	
1.1	Description of the Talas prescribed for Class XI.	06
1.2	Description of the following: Kala ,Laya Sangeet	
	Unit 2	06
2.1	Brief knowledge of Natyashastra with special reference to Awanaddha Vadya.	
	Unit 3	06
3.1	Short life sketch of Kudau Singh, Nana Panse,	
	Unit 4	06
4.1	Brief knowledge on Banaras Gharana	
4.2	Salient feature of Kudau Singh Gharana of Pakhawaj	
	Unit 5	06
5.1	Ability to write in notation of the prescribed Talas and compositions in Thah (Barabar), Dugun. Chaugunlaya.	
5.2	Ability to do Tala Notation of compositions in prescribed Talas. Prescribed Talas: Teentala or Adi TalaJhaptala or Sultala.	

(B) Practical **Max. Marks 70**

(i) Topics

1.	Knowledge of Playing Thekas of Teentala or Aditala, Jhaptala or Sultala, Ektala or Chautala.
2.	Ability to play one Kayada / Rela two Chakradar Tukras or Parans, two Sadharan Tukras or Paranin Jhaptala or Sultala
3.	Ability to play two advance Kayadas, one Rela, two Chakardar Tukras or Parans, in Teentala/Aditala
4.	Knowledge of playing Bedam Tihai in prescribed Talas
5.	Accompaniment of Vocal or Instrumental Music with Ektala or Chautala in different layas.
6.	Solo performance of 10-15 minutes in Teental/Aditala.

(ii) Distribution of Marks

Time: 20-25 Minutes for each candidate

1. Examiners are requested to ask questions directly related to the syllabus.
2. Marks should be awarded in accordance with the marking scheme.

S. No.	Value Points	Marks
1.	Solo Performance with Peshkar, Uthan, Kayda, Rela, Tukra, Chakradar Paran in Teentala or Aditala	10
2.	Talas of examiner's choice from the prescribed syllabus Teentala/Aditala/ Jhaptala/Sultala	10
3.	Ability to perform Kayada or Rela, Chakradar Tukra/Paran, Stuti Paran/ Farmaishi Chakradar in Jhaptala or Sultala	09
4.	Adalaya Kayada / Rela with Palta in Teentala / Aditala	09
5.	Damadar and Bedamdar Tihai in prescribed Talas	09
6.	Accompaniment of Eklata of Chautala in different layas	09
7.	Reciting of Tala and Composition with hand boats in different layas.	09
8.	Internal Assessment(Unit Test)	05

* Teachers will refer to the distribution of marks while examining the candidate for practical examination.

2025-26

HINDUSTANI MUSIC – PERCUSSION INSTRUMENTS (116)

Class XII

Assessment Design

S.No	Component	Marks
A	Theory	30
B	Practical	70

Curriculum & Examination Structure

(A) Theory: **Max. Marks 30**

Time: 03 hours

1. Questions to be set with internal choice covering the entire syllabus unit wise
2. Candidate has to attempt at least one question from each unit.

Distribution of Marks

S.No	Units	Marks
	Unit 1	06
1.1	Short notes of the following Uthan.	
1.2	Comparative study of the following: Chautala-Ektala Jhaptala-Sultala	
	Unit 2	06
2.1	Layakari and its varieties	
2.2	Brief description of Gharanas of Tabla or Pakhawaj	
	Unit 3	06
3.1	History of Tabla	
	Unit 4	06
4.1	Biographies of Pandit Kishan Maharaj, and Ustad Zakir Hussain	
4.2	Salient features of style and biography of Raja Chatrapati Singh, Guru Purushotam Das.	
	Unit 5	06
5.1	Writing notation of the prescribed Talas and compositions	
5.2	Recognition of Talas from given portion of the Thekas and compositions. Prescribe Talas: Teentala or Adi tala, Rupak or Tevra	

(B) Practical **Max. Marks 70**

(i) Topics

1.	Ability to Play Theka of Rupak on Tabla or Pakhawaj with simple elaborations.
2.	Three Kaydas, One Rela, One Sadharan Tukra or Paran, One Chakradar Tukra or Paran, One Farmaishi Chakradar in prescribed Talas
3.	(a) Ability to play One Advance Kayada/ Rela with Two Paltas and Tihai, One simple Tukra, One Sadharan Chakradar Tukras or Paran, Two Damdar Tihais and OneParan in Rupak or Tevra Tala
4.	Recitation of the prescribed Talas and composition with Thah, Dugun and Chaugun Laya keeping Tala with hand beats.
5.	A few simple laggis in Dadra on Pakhawaj
6.	Knowledge of tuning of instrument opted for
7.	Solo performance of any one Tala of choice from theprescribed syllabus for 10-15 minutes
8.	Ability to accompaniment with Folk songs
9.	Ability to accompaniment with classical music – vocal

(ii) Distribution of Marks

Time: 20-25 Minutes for each candidate

1. Examiners are requested to ask questions directly related to the syllabus.
2. Marks should be awarded in accordance with the marking scheme.

S. No.	Value Points	Marks
1.	Tuning of Instrument and questions regarding instrument.	06
2.	Ability to perform choice Raga performance with Peshkar, Uthan, Kayda, Rela, Tukra, Chakradar, Paran and Gat in any prescribed Talas: Teentala /Aditala Rupak / Tevra	12
3.	Tala of Examiner's choice from the prescribe syllabus	12
4.	Viva	05
	Total(External Examiner)	**35**
5.	Accompaniment of Ektala/ chautal in Vilambit & Drut Laya	12
6.	Reciting of Tala and composition with hand beats in different layas	12
7.	Practical file	06
8.	Continuous Assessment(Unit Test)	05
	Total (Internal Examiner)	**35**

2025-26
HISTORY (110)
Class XI

Time: 3 Hours **One Theory Paper** **Marks:80**

Section Title	Theme	Theme Name	Marks
Reading of World History		Introduction of World History	
I EARLY SOCIETIES		Introduction Timeline I (6 MYA TO 1 BCE)	
	1	Writing and City Life	10
II EMPIRES		Introduction Timeline II (C. 100 BCE TO 1300 CE)	
	2	An Empire Across Three Continents	10
	3	Nomadic Empires	10
III CHANGING TRADITIONS		Introduction Timeline III (C. 1300 TO 1700)	
	4	The Three orders	10
	5	Changing Cultural Traditions	10
IV TOWARDS MODERNISATION		Introduction Timeline IV (C. 1700 TO 2000)	
	6	Displacing Indigenous Peoples	10
	7	Paths to Modernisation	15
	Map	Map work of the related Themes	05
		Theory Total	**80**
		Project work	20
		TOTAL	**100**

Note-The Maps available in the official website of Govt., of India may be used

COURSE CONTENT
CLASS XI

Section	Theme	Learning outcome with specific competencies
I EARLY SOCIETIES	**Timeline I** **(6 MYA TO 1 BCE)**	❖ Understanding the concept of chronology
	Theme 1 Writing and City Life Focus: Iraq, 3rd Millennium BCE a. Growth of towns b. Nature of early urban Societies c. Historians 'Debate on uses of writing.	❖ Elucidate the interwoven social and cultural aspects of civilization in order to understand the connection between city life and culture of contemporary civilizations through their writings. ❖ Analyse the outcomes of a sustained tradition of writing. ❖ Explain the connection between the growth of human civilisation and the tradition of writing.
	Timeline II **(C.100 BCE TO 1300 CE)**	❖ Understanding the periods in order of time.
II EMPIRES	**Theme 2** **An Empire across Three Continents**	❖ Explain and relate the dynamics of the Roman Empire in order to understand their polity, economy, society and culture. ❖ Analyse the implications of Roman's contacts with the subcontinent empires and discuss about slavery. ❖ Examine the domains of cultural transformation in that period & the impact of slavery.
	Theme 3 **NOMADIC EMPIRES**	❖ Identify the living patterns of nomadic pastoralist society. ❖ Trace the rise and growth of Genghis Khan in order to understand him as an oceanic ruler. ❖ Analyse socio-political and economic changes during the period of the descendants of Genghis khan ❖ Distinguish between the Mongolian people's perspective and the world's opinion about Genghis Khan
III CHANGING TRADITIONS	**Timeline III** **(C. 1300 TO 1700)** **Theme 4** **The Three Orders**	❖ Explain the myriad aspects of feudalism with reference to first, second, third and fourth order of the society. ❖ Relate between ancient slavery and serfdom. ❖ Assess the 14th century crisis and rise of the nation states.

	Theme 5 **Changing Cultural Traditions**	❖ Analyse the causes, events, and effects of the Renaissance, Reformation, Scientific Revolution, and Age of Exploration. ❖ Relate the different facets of Italian cities to Understand the characteristics of Renaissance, Humanism and Realism. ❖ Compare and contrast the condition of women in the Renaissance period. ❖ Recognise major influences on the architectural, artistic, and literary developments to understand the facades of Renaissance. ❖ Critically analyse the impact on later reforms. ❖ Evaluate the Roman Catholic Church's response to the Protestant Reformation.
IV **TOWARDS MODERNISATION**	**Timeline IV** **(C. 1700 to 2000)**	❖ Remember and understand the time frame.
	Theme 6 **Displacing** **Indigenous People**	❖ Evaluate the process of displacements of the native people which led to the development of America and Australia to understand their condition. ❖ Analyse the realms of settlement of Europeans in Australia and America. ❖ Compare and contrast the lives and roles of indigenous people in these continents ❖ Analyse the domains of Japanese nationalism prior and after the Second World War.
	Theme 7 **Paths to Modernization** (NOTE- Keeping in view the importance of the themes i.e. Japan, china and Korea; it is advised that all must be taught in the schools.	❖ Summarise the nationalist upsurge in China from Dr Sun Yat Sen to Mao Zedong to understand the era of Communism. ❖ Analyse the Chinese path to modernization under Deng Xioping and Zhou enlai in order to Understand the transformation from rigid communism to liberal socialism. ❖ Deduce the histories of China and Japan from the phase of imperialism to modernization. ❖ Analyse the domains of Japanese nationalism prior and after the Second World War.

CLASS XI

PROJECT WORK

PROJECT WORK

OBJECTIVES

Project work will help students:

- To develop skill to gather data from a variety of sources, investigate diverse viewpoints and arrive at logical deductions.
- To develop skill to comprehend, analyse, interpret, evaluate historical evidence, and understand the limitation of historical evidence.
- To develop 21st century managerial skills of co-ordination, self-direction, and time management.
- To learn to work on diverse cultures, races, religions, and lifestyles.
- To learn through constructivism-a theory based on observation and scientific study.
- To inculcate a spirit of inquiry and research.
- To communicate data in the most appropriate form using a variety of techniques.
- To provide greater opportunity for interaction and exploration.
- To understand contemporary issues in context to our past.
- To develop a global perspective and an international outlook.
- To grow into caring, sensitive individuals capable of making informed, intelligent, and independent choices.
- To develop lasting interest in history discipline.

- **GUIDELINES TO TEACHERS**

- The teachers must ensure that the project work assigned to the students individually/ In-groups and discussed at different stages right from assigning topic, draft review to finalization.
- Students should be facilitated in terms of providing relevant materials, suggesting websites, obtaining of required permission for archives, historical sites, etc.
- The teachers must ensure that the students submit original work.
- Project report should be Handwritten only. (Eco-friendly materials can be used by students)

- **The following steps are suggested:**

- Teacher should design and prepare a list of 15-20 projects and should give an option to a student to choose a project as per his/her interest.
- The project must be done individually / In-groups.
- The topic should be assigned after discussion with the students in the class to avoid repetition and should then be discussed at every stage of submission of the draft/final project work.
- The teacher should play the role of a facilitator and should closely supervise the process of project completion, and should guide the children by providing necessary inputs, resources etc. to enrich the subject content.
- The Project Work needs to enhance cognitive, affective, and psychomotor domains in the learners. It will include self-assessment and peer assessment, and progress of the child in project-based and inquiry-based learning. Art integrated Activities, experiments, models, quizzes, role plays, group work, portfolios, etc., along with teacher assessment. (NEP-2020)
- The Project work can culminate in the form of Power Point Presentation/Exhibition/Skit/albums/files/song and dance or culture show /story telling/debate/panel discussion, paper presentation and whichever is suitable to visually impaired candidates.
- Students can use primary sources available in city archives, Primary sources can also include newspaper cuttings, photographs, film footage and recorded written/speeches. Secondary sources may also be used after proper authentication.
- Evaluation will be done by Internal examiner .

SUGGESTIVE TOPICS FOR PROJECTS - CLASS XI

1. Facets of the Industrialization in sixteenth- eighteenth centuries.

2. Crusades: causes; rationale; events; outcomes; Holy Alliance
3. Ancient History in depth: Mesopotamia
4. Greek Philosophy and City States
5. Contributions of Roman Civilization
6. The spirit of Renaissance: Manifestation in art; Literature; Sculpture; Influence on Trading Community; Social Fabric; Philosophy; Political Values; Rational Thinking; Existentialism
7. Aspects of Development -South American States /Central American States
8. Different schools of thoughts- Realism: Humanism: Romanticism
9. Piecing together the past of Genghis Khan
10. Myriad Realms of Slavery in ancient, medieval, and modern world
11. History of Aborigines – America /Australia
12. Facets of Modernization – China /Japan/Korea

(Projects are an imperative component in enhancing students learning with the related themes. In the research project, students can go beyond the textbook and explore the world of knowledge. They can conceptualise under the embedded themes. Forms of rubrics are a significant aspect and to be discussed in the classroom itself for clear understanding of concept and for assessment.)

2025-26
HISTORY (110)
Class XII

Time: 3 Hours **One Theory Paper** **Marks:80**

S.No.	Part	Marks
1	Themes in Indian History Part—I	25
2	Themes in Indian History Part—II	25
3	Themes in Indian History Part—III	25
4	Map	05
	Total	80

Note-The Maps available in the website of Survey of India may be used.(https://surveyofindia.gov.in/)

Themes in Indian History Part-I		**25 Marks**
Sr No.	**Theme Title**	**Marks**
1	Bricks, Beads and Bones The Harappa Civilisation	25
2	Kings, Farmers and Towns Early States and Economies (*c*.600 BCE 600 CE)	
3	Kingship, Caste and class Early Societies (c. 600 BCE600 CE)	
4	Thinkers, Beliefs and Buildings Cultural Developments (c. 600 BCE 600 CE)	
Themes in Indian History Part-II		**25 marks**
5	Through the eyes of Travellers Perceptions of Society (c. tenth to seventeenth centuries)	
6	Bhakti-Sufi Traditions Changes in Religious Beliefs and Devotional Texts (c. eighth to eighteenth centuries)	25
7	An Imperial Capital – Vijayanagar (c. fourteenth to sixteenth centuries)	
8	Peasants, zamindars and the States Agrarian Society and the Mughal Empire (c. sixteenth-seventeenth centuries)	

	Themes in Indian History	Part-III	25 marks
09	Colonialism and The Countryside Exploring Official Archives		25
10	Rebels and Raj 1857 Revolt and its Representations		
11	Mahatma Gandhi and the National Movement Civil Disobedience and Beyond		
12	Framing of the Constitution The Beginning of a New Era		
	Including Map work of the related Themes		05
	Theory Total		80
	Project Work		20
	TOTAL		**100**

Note-The Maps available in the official website of Govt., of India may be used

CLASS XII
COURSE CONTENT

Theme No. and Title	Learning outcome with specific competencies
Themes in Indian History Part – I	
1 **BRICKS, BEADS AND BONES The Harappan Civilisation**	❖ Investigate, explore and interpret the early urban centres and social institutions. ❖ State and deduce the multi-lateral aspects of Harappan civilisation to understand the first civilization of the world. ❖ Investigate and interpret historical and contemporary sources and viewpoints of ASI and historians on Harappa.
2 **KINGS, FARMERS AND TOWNS Early States and Economies (c.600 BCE 600 CE)**	❖ Critically evaluate and interpret major trends in the political and economic history of the subcontinent. ❖ Decode inscriptional evidence. ❖ Analyse inscriptional evidences and the ways in which these have shaped the understanding of political and economic processes.

3 **KINSHIP, CASTE AND CLASS** **Early Societies** **(c. 600 BCE 600 CE)**	❖ Examine, analyse the issues of social history. ❖ Analyse social norms in order to understand the perspectives of society given in the scriptures of ancient India. ❖ Examine the varied dimensions explored by historians in order to understand dynamic approach of Mahabharata.
4 **THINKERS, BELIEFS AND BUILDINGS** **Cultural Developments** **(c. 600 BCE 600 CE)**	❖ Infer and compare the major religious developments in early India. ❖ Elucidate the rich religious sculpture and infer the stories hidden in it. ❖ Create a picture album of the Buddhist Sculpture.
Themes in Indian History Part—II	
5 **THROUGH THE EYES OF TRAVELLERS** **Perceptions of Society** **(c. tenth to seventeenth centuries)**	❖ Understand salient features of social histories described by the travellers and apply the learning in real life. ❖ Elucidating the accounts of foreign travellers in order to understand the social political and economic life during the tenure of different rulers in the medieval period.
6 **BHAKTI –SUFI TRADITIONS** **Changes in Religious** **Beliefs and Devotional Texts** **(c. eighth to eighteenth centuries)**	❖ Understand the religious developments. ❖ Summarise the philosophies of different Bhakti and Sufi saints to understand the religious developments during medieval period. ❖ Comprehend the religious movement in order to establish unity, peace harmony and brotherhood in society.
7 **AN IMPERIAL CAPITAL: VIJAYANAGARA** **(c. fourteenth to sixteenth centuries)**	❖ Students will be able to Classify the distinctive architectural contributions of the Vijayanagar empire to comprehend the richness of mingled cultures of deccan India. ❖ Analyse accounts of foreign traveller's on Vijayanagar in order to interpret political, social and cultural life of the city. ❖ Assess and appreciate the city planning, water management system, administration of the rulers.

8 **PEASANTS, ZAMINDARS AND THE STATE** **Agrarian Society and the Mughal Empire (c. sixteenth seventeenth centuries)**	❖ Comprehend the facets of agrarian developments in order to understand the relationship between the state and the agriculture during Mughal period. ❖ Compare and contrast the agrarian changes occurred during sixteenth and seventeenth centuries. ❖ Make a table and bring out the differences in the agrarian sector.
Themes in Indian History	**Part—III**
9 **COLONIALISM AND THE COUNTRYSIDE** **Exploring Official Archives**	❖ Evaluate the revenue systems introduced by the British to understand the economic aspects of colonization in India. ❖ Analyse the colonial official records& reports to understand the divergent interest of British and Indians. ❖ Find solution to be taken to protect the peasants and artisans in this century.
10 **REBELS AND THE RAJ** **1857 Revolt and its Representations**	❖ Examine the events of 1857. ❖ Correlate the Planning and coordination of the rebels of 1857 to infer its domains and nature. ❖ Examine the momentum of the revolt to understand its spread. ❖ Analyse how revolt created vision of unity amongst Indians. ❖ Interpret visual images to understand the emotions portrayed by the nationalist and British.
11 **MAHATMA GANDHI AND THE NATIONALIST MOVEMENT** **Civil Disobedience and Beyond**	❖ Understand the nationalist movement in chronological order. ❖ Correlate the significant elements of the nationalist movement and the nature of ideas, individuals, and institutions under the Gandhian leadership. ❖ Debate on the significant contributions of Gandhi to understand his mass appeal for nationalism. ❖ Explore the ways of interpreting historical source such as newspapers, biographies and autobiographies diaries, letters
12 **FRAMING THE CONSTITUTION** **The Beginning of a New Era**	❖ Highlight the role of Constituent Assembly to understand functionaries in framing the constitution of India. ❖ Analyse how debates and discussions around important issues in the Constituent Assembly shaped our Constitution

Note: This is not an exhaustive list. For reflective teaching- learning process, explicit Learning Objectives and Outcomes can be added by teachers during the course-delivery for student's real learning.

S. No	Page No.	Part – I Maps
1	2	**Mature Harappan sites:** Harappa, Banawali, Kalibangan, Balakot, Rakhigarhi, Dholavira, Nageshwar, Lothal, Mohenjodaro, Chanhudaro, Kot Diji.
2	3	**Mahajanapada and cities:** Vajji, Magadha, Kosala, Kuru, Panchala, Gandhara, Avanti, Rajgir, Ujjain, Taxila, Varanasi.
3	33	**Distribution of Ashokan inscriptions:** • Pillar inscriptions – Sanchi, Topra, Meerut Pillar and Kaushambi. • Kingdom of Cholas, Cheras and Pandyas.
4	43	**Important kingdoms and towns:** • Kushanas, Shakas, Satavahanas, Vakatakas,Guptas • Cities/towns: Mathura, Kanauj, Puhar, Braghukachchha, Shravasti, Rajgir, Vaishali, Varanasi,Vidisha
5	95	**Major Buddhist Sites:** Nagarjunakonda, Sanchi, Amaravati, Lumbini, Bharhut, Bodh Gaya, Ajanta
S. No	**Page No.**	**Part II - Maps**
6	174	Bidar, Golconda, Bijapur, Vijayanagar, Chandragiri, Kanchipuram, Mysore, Thanjavur, Kolar, Tirunelveli
7	214	**Territories under Babur, Akbar and Aurangzeb:** • Delhi, Agra, Panipat, Amber, Ajmer, Lahore, Goa.
S. No	**Page No.**	**Part III - Maps**
8	287	**Territories/cities under British Control in1857**: Punjab, Sindh, Bombay, Madras Berar, Bengal, Bihar, Orissa, Surat, Calcutta, Patna, Allahabad
9	260	**Main centres of the Revolt of 1857**: Delhi, Meerut, Jhansi, Lucknow, Kanpur, Azamgarh, Calcutta, Benaras, Gwalior, Jabalpur, Agra, Awadh
10		**Important centres of the National Movement**: Champaran, Kheda, Ahmedabad, Benaras, Amritsar, Chauri Chaura, Lahore, Bardoli, Dandi, Bombay (Quit India Resolution), Karachi

Note-The Maps available in the official website of Govt., of India may be used.

A FEW SUGGESTIVE TOPICS FOR CLASS XII PROJECTS

1. The Indus Valley Civilization-Archaeological Excavations and New Perspectives
2. The History and Legacy of Mauryan Empire
3. “Mahabharat”- The Great Epic of India
4. The History and Culture of the Vedic period
5. Buddha Charita
6. A Comprehensive History of Jainism

Bhakti Movement- Multiple Interpretations and Commentaries.

7. The Mystical Dimensions of Sufism
8. Global Legacy of Gandhian Ideas
9. The Architectural Culture of the Vijayanagar Empire
10. Life of Women in the Mughal Rural Society
11. Comparative Analysis of the Land Revenue Systems Introduced by the Britishers in India
12. The Revolt of 1857- Causes; Planning & Coordination; Leadership, Vision of Unity
13. The Philosophy of Guru Nanak Dev
14. The Vision of Kabir
15. An Insight into the Indian Constitution
16. Comparative Study of Stupas and Pillar Edicts
17. Comparative Study of Mughal and Vijayanagar Architecture

(Projects are an imperative component in enhancing students learning with the related themes. In the research project, students can go beyond the textbook and explore the world of knowledge. They can conceptualise under the embedded themes. Forms of rubrics are a significant aspect and to be discussed in the classroom itself for clear understanding of concept & for assessment.

1. **Steps involved in the conduct of the project:** Students may work upon the following lines as suggested**:**
    1. Choose a Title/Topic
    2. Need of the Study, Objective of the Study
    3. Hypothesis
    4. Content -Timeline, Maps, Mind maps, Pictures, etc. (Organization of Material/Data Present Material/Data)
    5. Analysing the Material/Data for Conclusion
    6. Draw the Relevant Conclusion
    7. Bibliography

Expected Checklist for the Project Work:

8. Introduction of topic/ title
9. Identifying the causes, events, consequences and/or remedies
10. Various stakeholders and effect on each of them
11. Advantages and disadvantages of situations or issues identified
12. Short-term and long-term implications of strategies suggested during research
13. Validity, reliability, appropriateness, and relevance of data used for research work and for presentation in the project file
14. Presentation and writing that is succinct and coherent in project file
15. Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

Assessment of Project Work:

PROJECT WORK: 20 Marks

The teacher will assess the the project work in the following manner

S.N.	Topics	Marks
PROJECT WORK		
1.	Relevance of the topic	3
2.	Knowledge content /Research Work	3
3	Presentation Technique	3
4	Viva based on project	6
CONTINUOUS ASSESSMENT		
5	Continuous Assessment (Unit Test)	5
	Total	**20**

2025-26
HOME SCIENCE (113)
CLASS XI

Time: 3 Hours Theory One Paper Marks :70

No.	Units	Marks
1.	Introduction to Home Science	02
2.	Understanding oneself: Adolescence	20
3.	Understanding Family, Community and Society	15
4.	Childhood	15
5.	Adulthood	18
	Total	**70**
	Practical	**30**
	Grand Total	**100**

UNIT I: INTRODUCTION TO HOME SCIENCE

- What is Home Science
- Areas of Home Science
- Home Science is important for both boys and girls
- Career options of Home Science

UNIT II: UNDERSTANDING ONESELF: ADOLESCENCE

Unit II focus on the stage of adolescence – the stage of life to which you belong at present. This unit deals with understanding your own self in terms of your personal and social identity, your nutritional and health requirements, management of basic resources of time and space, fabrics around you, and your communication skills. The last chapter of the unit situates the adolescent in the context of the family and larger society, thereby linking it to the next unit that deals with the individual in relation to her/his family, school, community and society.

CHAPTER: UNDERSTANDING THE SELF

- What is Self?
    - Personal dimension
    - Social dimension
    - Self- concept
    - Self esteem
- What is Identity?
    - Personal identity
    - Social identity
- Self during Infancy: characteristics
- Self during early childhood: characteristics
- Self during middle childhood: characteristics
- Self during adolescence: characteristics
    - Identity development
    - Identity crisis

- Real vs Ideal self

- Influences on identity
    - Developing a sense of self and identity
    - Influences on formation of identity
        - Biological and physical changes
        - Socio-cultural context
        - Emotional changes
        - Cognitive changes

CHAPTER: FOOD, NUTRITION, HEALTH AND FITNESS

- Introduction
- Definition of
    - Food
    - Nutrition
    - Nutrients
- Balanced diet
    - Definition
    - RDA
- Health and Fitness
- Using Basic food Groups for planning Balanced Diets
    - Food guide pyramid.
- Vegetarian food Guide
- Dietary patterns in Adolescence
    - Irregular meals and skipping meals
    - Snacking
    - Fast foods
    - Dieting
- Modifying diet related behaviour
    - Diet journal
    - Exercise
    - Substance use and abuse
    - Healthy eating habits
    - Snacks
    - Drinking water
- Factors influencing eating behaviour
- Eating disorders at adolescence

- Key terms and their meaning

CHAPTER: MANAGEMENT OF RESOURCES

- Introduction
- Classification of resources
    - Human /non-human resources
    - Individual / shared resources
    - Natural / community resources
- Human and non-human resources
    - Human resources
        - Knowledge
        - Motivation/ interest
        - Skills/ strength/ aptitude
        - Time
        - Energy
    - Non-human resources
        - Money
        - Material resources
- Individual and shared resources
    - Individual resources
    - shared resources
- Natural and community resources
    - Natural resources
    - community resources
- Characteristics of resources
    - Utility
    - Accessibility
    - Interchangeability
    - Manageable
- Managing Resources
    - Management process
    - Planning
    - Steps in planning
    - Organising
    - Implementing
    - Controlling
    - Evaluation

CHAPTER: FABRIC AROUND US

- Definition of yarns, fibres, textile products, finishing.
- Introduction to fibre properties
- Classification of textile fibres
  - Filament/staple fibres
  - Natural/Manufactured (manmade) fibres
- Types of Natural Fibres
  - Cellulosic fibres
  - Protein fibres
  - Mineral fibres
  - Natural rubber
- Types of Manufactured Fibres
  - Regenerated cellulosic fibres
  - Modified cellulosic fibres
  - Protein fibres
  - Non-cellulosic fibres
  - Mineral fibres
- Some Important fibres and their properties
  - Cotton
  - Linen
  - Wool
  - Silk
  - Rayon
  - Nylon
  - Polyester
  - Acrylic
  - Elastomeric fibres
- Yarns
- Yarn processing
  - Cleaning
  - Making into a sliver
  - Attenuating, drawing out and twisting
- Yarn terminology
  - Yarn number
  - Yarn twist
  - Yarn and thread
- Fabric production
- Weaving

- Knitting
- Braiding
- Nets
- Laces

- Textile Finishing
  - Finishing with colour
  - Printing

CHAPTER-MEDIA COMMUNICATION TECHNOLOGY

- Communication and Communication Technology
  - What is Communication
  - Classification of communication
  - How does communication takes place
- What is media
  - Media classification and functions
- What is communication technology
  - Classification of communication technologies
  - Modern communication technologies

UNIT III: UNDERSTANDING FAMILY, COMMUNITY AND SOCIETY

The chapters in Unit II were all addressed to you for the understanding of self and of the factors that influence your decision making. Let us now move on to understanding the family, the community and the society that you are a part of.In the first section- the focus will be on relationships and interactions with significant others, i.e. those important to you in these contexts. The second section- will discuss concerns and needs, such as those of health, work, resources, education and textile tradition in the adolescent"s diverse social contexts.

CHAPTER: CONCERNS AND NEEDS IN DIVERSE CONTEXTS

A. NUTRITION, HEALTH AND HYGIENE

- Health and its Dimensions
  - Social health
  - Mental health
  - Physical health
- Health care Indicators of Health
- Nutrition and Health
- Importance of nutrients
- Factors affecting nutritional well being
  - Food and nutrient security
  - Care for the vulnerable
  - Good health for all

- Safe environment

- Nutritional Problems and their consequences
    - Malnutrition
    - Under nutrition
    - Over nutrition
- Hygiene and Sanitation
    - Personal Hygiene
    - Environmental Hygiene
    - Food Hygiene
    - Water safety-Qualities of potable water, methods of water purification(Boiling, chlorine, storage and electric filter ,RO)

B. RESOURCES AVAILABILITY AND MANAGEMENT

- Time Management
    - Definition of time plan
    - How good is your time management (Activity)?
    - Steps in making time plan
    - Tips for effective time management
    - Tools in time management---Peak load period, Work curve, Rest /break periods, Work simplification
- Space Management
    - Space and the home
    - Principles of space planning

UNIT IV: CHILDHOOD

The theme of this unit is „Childhood". You may wonder why did the book address the adolescent years first and childhood later. Well, it is because if you as an adolescent understand issues about yourself first, it would be easierto grasp the issues that are concerned with the stage of childhood, and later with adulthood. In this unit you will be studying about children"s growth and development, critical concerns about their health and nutrition, education and clothing. As we would like children with disabilities to be an inclusive part of our society, the chapters provide us important information on their needs and ways to meet them.

CHAPTER: SURVIVAL GROWTH AND DEVELOPMENT

- The meaning of survival
- Growth and development
- Areas of development
    - Physical development
    - Motor development
    - Cognitive development
    - Sensory development
    - Language development

- Social development
- Emotional development

- Good Nutrition
- Stages in development
    - Neonate
        - Reflexes
        - Sensory capabilities
- Development across stages from infancy to adolescence
    - Physical and motor development
    - Language development
    - Socio -emotional development
    - Cognitive development
        - Mental processes involved in thinking
        - Stages of cognitive development
            - ❖ Sensory motor stage
            - ❖ Pre-operational stage
            - ❖ Concrete operational stage
            - ❖ Formal operational stage

CHAPTER: NUTRITION, HEALTH AND WELL-BEING

- Introduction
- Nutrition, Health and Well-being during infancy (birth – 12 months)
    - Dietary requirements of infants
    - Breast feeding
        - Benefits of breast feeding
    - Feeding the low birth weight infants
    - Complementary foods
    - Guidelines for complementary feeding
    - Immunization
    - Common health and nutrition problems in infants and young children
- Nutrition, Health and well-being of preschool children (1-6 years)
    - Nutritional needs of preschool children
    - Guidelines for healthy eating for preschoolers
    - Planning balanced meals for preschool children
    - Some examples of low-cost snacks
    - Feeding children with specific needs
    - Immunization
- Nutrition, Health and well-being of school-age children (7-12 years)
    - Nutritional requirements of school children
    - Planning diets for school-age children
    - Factors that influence diet intake of preschool-age and school-

age children
- Healthy habits
- Health and nutrition issues of school age children

CHAPTER: OUR APPAREL

- Clothing functions and the selection of clothes
  - Modesty
  - Protection
  - Status and prestige
  - Adornment
- Factors affecting selection of clothing in India
  - Age
  - Climate and season
  - Occasion
  - Fashion
  - Income
- Understanding children‟s basic clothing needs
  - Comfort
  - Safety
  - Self help
  - Appearance
  - Allowance for growth
  - Easy care
  - Fabrics
- Clothing requirements at different childhood stages
  - Infancy (birth to six months)
  - Creeping age (6 months to one year)
  - Toddlerhood (1-2 years)
  - Preschool age (2-6 years)
  - Elementary school years (5-11 years)
  - Adolescents (11-19 years)
  - Clothes for children with special needs

UNIT V: ADULTHOOD

With the advent of adulthood, the adolescent passes through the portal of what may be termed as the "real world". One enters the world of higher education, work and marriage, and gets involved in establishing one‟s own family. Hence responsibilities of the individual increases manifold. In this unit you will learn about the major factors that play a role in determining the quality of adult life, these being health and wellness, financial planning and management, maintenance of fabrics and apparel that one uses personally as well as in the home, and appreciation of different perspectives in communication. The unit concludes with the chapter on individual responsibilities and rights, not only for one‟s own self, but also in relation to the family and larger society.

CHAPTER: HEALTH AND WELLNESS

- Importance of health and fitness
- Healthy & Unhealthy diet
- BMI
- Do‟s and Don‟ts for health promoting diets
- Fitness
- Importance of exercise and physical activities in adulthood
- Wellness
- Qualities of a person who is rated high on wellness
- Dimensions of wellness
  - Social aspect
  - Physical aspect
  - Intellectual aspect
  - Occupational aspect
  - Emotional aspect
  - Spiritual aspect
  - Environmental aspect
  - Financial aspect
- Stress and coping with stress
- Simple techniques to cope with stress
  - Relaxation
  - Talking with friends/family
  - Reading
  - Spirituality
  - Music
  - Hobby
  - Yoga

CHAPTER: FINANCIAL MANAGEMENT AND PLANNING

- Financial management

- Financial planning
- Management
- Money and its importance
- Family Income
    - Money income
    - Real income: Direct and Indirect income
    - Psychic income
- Income management
- Budget
- Steps in making budget
- Advantages of planning family budgets
- Control in money management
    - Checking to see how well the plan is progressing
        - Mental and mechanical check
        - Records and accounts
    - Adjusting wherever necessary
    - Evaluation
- Savings
- Investment
- Principles underlying sound investments
    - Safety to the principle amount
    - Reasonable rate of interest
    - Liquidity
    - Recognition of effect of world conditions
    - Easy accessibility and convenience
    - Investing in needed commodities
    - Tax efficiency
    - After investment service
    - Time period
    - Capacity
- Savings and investment avenues
    - Post office
    - Banks

- Unit Trust of India
- NSC
- Mutual funds
- Provident funds
- Chit fund
- Life insurance and medical insurance
- Pension scheme
- Gold, house, land
- Others (new schemes)

- Credit
- Need of credit
- 4C"s of credit: character, capacity, capital means, collateral,

CHAPTER: CARE AND MAINTENANCE OF FABRICS

- Mending
- Laundering
  - Stain removal
    - Vegetable stains
    - Animal stains
    - Oil stains
    - Mineral stains
    - Dye bleeding
  - Techniques of stain removal
    - Scraping
    - Dipping
    - Sponging
    - Drop method
  - Reagent for stain removal
  - Common stains and method of removing
- Removal of dirt: the cleaning process
  - Soaps and detergents
  - Methods of washing: friction, kneading & squeezing, suction, washing by machine
- Finishing
  - Blues and optical brighteners
  - Starches and stiffening agents
- Ironing
- Dry cleaning

- Storage of textile products
- Factors affecting fabric care
    - Yarn structure
    - Fabric construction
    - Colour and finishes
- Care label

NOTE:

- **Wherever required latest data/figures to be used.**
- **Latest RDA's to be used.**

PRACTICALS FOR CLASS XI

1. Understanding oneself with reference to:
   a) Physical development in terms of age, height, weight, hip and chest circumference.
   b) Sexual maturity (Age at menarche, Development of breasts: girls). Growth of beard, change in voice: boys)
2. Observe developmental norms: (Physical, Motor, Language and social - emotional) birth to three years.

3. List and discuss 4-5 areas of agreement and disagreement with
   a) Mother
   b) Father
   c) Siblings/ Friends
   d) Teacher

4. a) Record own diet for a day
   b) Evaluate qualitatively for adequacy
5. Preparation of different healthy snacks for an adolescent suitable in her/his context.
6. a) Record one day"s activities relating to time use and work
   b) Prepare a time plan for yourself

7. Plan a budget for a given situation/purpose.

8. a) Record the fabrics and apparel used in a day
   b) Categorize them according to functionality

9. Relationship of fibre properties to their usage:
   a) Thermal property and flammability
   b) Moisture absorbency and comfort

10. (a) Analyze label of any one garment with respect to: Clarity, fiber content,size andcare instructions.
    (b) Prepare one care label of any garment.
    (c) Analyze two different fabric samples for color fastness.

Scheme for practical examination **30 Marks**

1. Observe developmental norms: (Physical, Motor, Language and social emotional) birth to three years. 5 marks

OR

List and discuss 4-5 areas of agreement and disagreement with

a) Mother
b) Father
c) Siblings/ Friends
d) Teacher

2. Preparation of healthy snacks for an adolescent. 5 marks
3. Plan a budget for a given situation/purpose. 3 marks
4. Prepare a time plan for yourself. 3 marks
5. Relationship of fibre properties to their usage: 4 marks
   a) Thermal property and flammability
   b) Moisture absorbency and comfort

OR

Prepare one care label of any garment.

6. File 3 marks
7. Viva 2 marks
8. Continuous Assessment (Unit Test) 5 marks

Prescribed textbook: Human Ecology and Family Sciences (For class XI): Part I and Part II

2025-26
Home Science(113)
Class XII

Time-3 Hours Theory One Paper Marks: 70

No.	Units	Marks
1	Work, Livelihood and Career	05
2	Nutrition, Food Science and Technology	23
3	Human Development and Family Studies	10
4	Fabric and Apparel	17
5	Resource Management	10
6	Communication and Extension	05
	THEORY	**70**
	PRACTICAL	**30**
	GRAND TOTAL	**100**

UNIT I WORK, LIVELIHOOD AND CAREER
Chapter: WORK, LIVELIHOOD AND CAREER

- Introduction
  - Work and meaningful work
  - Work, careers and livelihood
- Traditional occupation in India
  - Agriculture
  - Handicrafts
  - Indian cuisine
  - Visual arts
- Work ,Age and Gender
  - Gender issues in relation to work
  - Issues and concerns related to women and work
    - ✓ KGBV
    - ✓ Beti bachao ,Beti Padhao Yojana
- Attitudes and approaches to work and life skills for livelihood
  - Attitudes and approaches to work
  - Life skills for livelihood
  - Essential soft skills at workplace
- Ergonomics
  - Definition and need for ergonomics
  - Benefits of Ergonomics
- Entrepreneurship
  - Definition and characteristics

UNIT II: NUTRITION, FOOD SCIENCE AND TECHNOLOGYChapter: CLINICAL NUTRITION AND DIETETICS

- Introduction
  - Significance

- Nutrition
- Clinical Nutrition
  - Basic concepts
  - Diet therapy
  - Types of diets: Regular Diet and Modified diets
    - Changes in consistency
    - Feeding routes
    - Prevention of chronic diseases
  - Preparing for career
  - Scope

Chapter: PUBLIC NUTRITION AND HEALTH

- Introduction
- Significance
- Basic concept
  - Public health nutrition
  - Nutritional Problems of India
    - Protein energy malnutrition
    - Micronutrient deficiencies
- Iron deficiency anemia
- Vitamin A deficiency
- Iodine deficiency disorders
- Strategies/Intervention to tackle Nutritional problems
- Diet or food based strategies
- Nutrient based strategies
- Nutrition programmes operating in India
- ICDS
- Nutrient Deficiency Control Programmes
- Food Supplementation Programmes
- Food Security Programme
- Health Care
- Scope

Chapter: FOOD PROCESSING AND TECHNOLOGY

- Introduction
- Significance
- Basic Concepts
  - Food Science
  - Food Processing
  - Food Technology
  - Food Manufacturing
- Development of food processing and technology
- Importance of Food processing and Preservation
- Classification of food on the basis of extent and type of processing
- Preparing for a career
- Scope

Chapter: FOOD QUALITY AND FOOD SAFETY

- Introduction
- Significance
- Basic Concepts
  - Food safety (Toxicity & Hazard)
  - Hazards (Physical, chemical and biological)
  - Food infection
  - Food poisoning
  - Food quality
- Food standards regulation in India-FSSA (2006)
- International Organization and agreements in the area of Food Standards, Quality, Research and Trade
  - Codex Alimentarius Commission
  - International Organization for Standardisation
  - World Trade Organization
- Food Safety Management Systems
  - Good manufacturing practices (GMP)
  - Good handling practices (GHP)
  - Hazard Analysis Critical Control Points (HACCP)
- Scope

UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES

Chapter: Early Childhood Care and Education

- Significance
- Basic concepts
- Preparing for a career
- Scope

Chapter: Management of support services, Institutions and programmes for children, youth and elderly

- Significance

- Basic concepts
- Why are children vulnerable?
- Institutions, programmes and initiatives for children
  - ICDS
  - SOS Children‟s Village
  - Children‟s Homes run by the Government
  - Adoption
- Why are Youth vulnerable?
- Youth programmes in India
- Why are the elderly vulnerable?
- Some programmes for the elderly
- Preparing for a career
- Scope

UNIT IV FABRIC AND APPAREL

Chapter: Design for Fabric and Apparel

- Introduction
- Basic concepts (Design: Structural & Applied)
- Elements of design
  - Colour
  - Texture
  - Line
  - Shapes or form
- Principles of Design
  - Proportion
  - Balance
  - Emphasis
  - Rhythm
  - Harmony
- Preparing for career
- Scope

Chapter: Fashion Design and Merchandising

- Introduction
- Significance
- Basic Concepts
  - Fashion terminology –Fashion ,fads, style, classic
- Fashion Development
  - France-The centre of fashion
  - Fashion Evolution
- Fashion Merchandising
- Fashion Retail Organization
- Preparing For a career
- Scope

Chapter: Care and maintenance of fabrics in Institution

- Introduction
- Basic concepts
    - Washing equipment
    - Drying equipment
    - Ironing/pressing equipment
- Institutions
- Preparing for a career
- Scope

UNIT V RESOURCE MANAGEMENT

Chapter: Hospitality Management

- Introduction
- Significance
- Basic concepts
- Departments involved in hospitality management of an organization
- Scope

Chapter: Consumer Education and Protection

- Introduction
- Significance of consumer education and protection
- Basic concepts
    - Consumer product
    - Consumer behaviour
    - Consumer forum
    - Consumer footfalls
    - Consumer problems
    - Consumer rights
    - Standardized marks (ISI, Wool Mark, Hall Mark, Silk Mark)
    - Protection Councils
    - Consumer Responsibilities
- Scope

UNIT VI COMMUNICATION AND EXTENSION

Chapter: Development communication and Journalism

- Introduction
- Significance
- Basic concepts
    - Development
    - Development journalism
    - Development Communication
- Methods of communication
    - Campaign
    - Radio and television
    - Print media
    - Information and communication technologies
- Knowledge and skills required for a career in this field

- Scope and career avenues in development communication

PRACTICALS FOR CLASS XII

UNIT I NUTRITION, FOOD SCIENCE AND TECHNOLOGY

1. Modification of normal diet to soft diet for elderly person.
2. Development and preparation of supplementary foods for nutrition programme.
3. Planning a menu for a school canteen or mid-day meal in school for a week.
4. Design, prepare and evaluate a processed food product.
5. Qualitative test for food adulteration in: pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafoetida.

UNIT II HUMAN DEVELOPMENT AND FAMILY STUDIES

1. Preparation and use of any one teaching aid to communicate socially relevant messages for children/ adolescents /adults in the community.

OR

Preparation of any one toy for children (age appropriate) using locally available and indigenous material

UNIT III FABRIC AND APPAREL

1. Preparation of any one article using applied textile design techniques; tie and dye/ batik/block printing
2. Remove different types of stains from white cotton cloth -Ball pen, curry, grease, ink, lipstick, tea and coffee.

UNIT IV RESOURCE MANAGEMENT

1. Evaluate any one advertisement for any job position.
2. Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following-

a) Consumer Protection Act (CPA)
b) Consumer responsibilities
c) Consumer organization
d) Consumer Problem

PROJECT

ANY ONE OF THE FOLLOWING PROJECT MAY BE UNDERTAKEN AND EVALUATED-

1. Study of an integrated community based, nutrition/health programme being implemented in own area, with reference to-

a) Programme objectives
b) Focal Group/Beneficiaries
c) Modalities of implementation

2. Visit to the neighboring areas and interview two adolescents and two adults regarding their perception of persons with special needs.
3. Profile any two person (child/adult) with special needs to find out their diet,

clothing, activities, physical and psychological needs.

4. Planning any five messages for nutrition, health and life skills using different modes of communication for different focal groups.

5. Market survey any five processed foods with their packaging and label information.

SCHEME FOR PRACTICAL EXAMINATION **30 Marks**

1. Project (3 marks)
2. Modification of any one family meal for elderly person. Preparing any one of the modified dish. (3 marks)

OR

Development and preparation of any one supplementary food for pre-schooler (2-6 years) nutrition programme.

OR

Planning a menu for school canteen and preparing any one nutritious dish.

3. Identify adulterant using chemical test in any one of the following- pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafetida. (2 marks)

4. Prepare a sample using applied textile design techniques tie and dye/batik/block printing. (3 marks)
5. Remove any one of the stain from white cotton cloth -Ball pen, curry, grease, ink, lipstick, tea, coffee. (2 marks)
6. Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following- (5 marks)

a) Consumer Protection Act (CPA)
b) Consumer responsibilities
c) Consumer organization
d) Consumer Problems

7. File (5 marks)
8. Viva (2 marks)
9. Continuous Assessment (Unit Test) (5 marks)

Practical Evaluation Scheme

Time: 3 Hours **30 Marks**

S. No	Item	Marks
External Examiner		
1.	Project	3
2.	Modification of any one family meal for elderly person. Preparing any one of themodified dish. OR Development and preparation of any one supplementary food for pre-schooler (2-6 years) nutrition programme. OR Planning a menu for school canteen and preparing any one nutritious dish.	3
3.	Identify adulterant using chemical test in any one of the following- pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafetida.	2
4.	Prepare a sample using applied textile design techniques tie and dye/batik/blockprinting.	3
5.	Remove any one of the stain from white cotton cloth -Ball pen, curry, grease, ink,lipstick, tea, coffee.	2
6.	Viva	2
Internal Examiner		
7.	Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following- a) Consumer Protection Act (CPA) b) Consumer responsibilities c) Consumer organization d) Consumer Problems	5
8.	File	5
9.	Continuous Assessment (Unit Test)	5

2025–26

तर्कशास्त्र (125)

कक्षा–11

सैद्धान्तिक

पूर्णांक– 80 **समय– 3 धण्टा**

इकाई–1–तर्कशास्त्र की परिभाषा, तर्क का निगमन रूप, विचार के नियम, पद प्रकरण, वाच्य धर्म, प्रकरण पदों के निरोध में
आये हुये दोष, प्रकरण। 40 अंक

इकाई–2–तर्कशास्त्र का क्षेत्र एवं मूल्य, आगमन और उनके प्रकार, आगमन की संकल्पनायें, प्रकृति की एकरूपता।

20 अंक

इकाई–3–भारतीय तर्कशास्त्र में अनुमान का स्वरूप एवं प्रकार, भारतीय तर्कशास्त्र के कारण का स्वरूप, भारतीय तर्कशास्त्र
में अन्वय एवं व्यक्ति परक विधि।
प्राकृतिक आपदायें––(यथा आग, भूकम्प, बाढ़, सूखा एवं तूफान आदि) के स्वरूप एवं निराकरण के तार्किक निराकरण। 20 अंक

Internal Assessment:

Topic	**Marks**
1-Project Work	
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous assessment (Unit Test)	5
Total	**20**

2025–26

तर्कशास्त्र (125)

कक्षा–12

सैद्धान्तिक

पूर्णांक– 80 समय– 3 धण्टा

1– तर्कशास्त्र एवं उसका वर्गीकरण	08
2– उक्तियों का तार्किक स्वरूप, अन्तरानुमान की प्रकृति एवं स्वरूप	08
3– न्याय वाक्य : आकार	08
4– मिश्र न्याय वाक्य	08
5– न्याय वाक्यों के नियमों के उल्लंधन से उत्पन्न दोष	08
6– प्राक्कलपना	08
7– व्यवस्था के नियमों का सत्यापन	08
8– वर्गीकरण	08
9– आगमनात्मक युक्यिों के विश्लेषण एवं आगमनात्मक पद्धतियों के प्रयोग	08
10– प्रायोगिक	08

Internal Assessment:

Topics	Marks
1-Project Work	
a) Relevance of the topic	3
b) Knowledge content /Research Work	3
c) Presentation Technique	3
d) Viva based on project	6
2- Continuous assessment (Unit Test)	5
Total	**20**

2025-26

Mathematics(128)

CLASS XI

Time:3 Hours **Theory One Paper** **Marks: 80**

No.	Units	Marks
I.	Sets and Functions	23
II.	Algebra	25
III.	Coordinate Geometry	12
IV.	Calculus	08
V.	Statistics and Probability	12
	Total	**80**
	Internal Assessment	**20**

*No chapter/unit-wise weightage. Care to be taken to cover all the chapters.

Unit-I: Sets and Functions

1. Sets

Sets and their representations, Empty set, Finite and Infinite sets, Equal sets, Subsets, Subsets of a set of real numbers especially intervals (with notations). Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Complement of a set. Properties of Complement.

2. Relations & Functions

Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of reals with itself (up to R x R x R). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions.

3. Trigonometric Functions

Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the identity $sin^2x + cos^2x = 1$, for all x. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $sin\,(x \pm y)$ and $cos\,(x \pm y)$ in terms of $sinx,\ siny, cosx$ & $cosy$ and their simple applications. Deducing identities like the following:

$y)$ in terms of $sinx,\ siny, cosx$ & $cosy$ and their simple applications. Deducing identities like the following:

$$\tan(x \pm y) = \frac{\tan x \pm \tan y}{1 \mp \tan x \tan y}, \cot(x \pm y) = \frac{\cot x \mp \cot y}{\cot y \pm \cot x}$$

$$\sin\alpha \pm \sin\beta = 2\sin\tfrac{1}{2}(\alpha \pm \beta)\cos\tfrac{1}{2}(\alpha \mp \beta)$$

$$\cos\alpha + \cos\beta = 2\cos\tfrac{1}{2}(\alpha + \beta)\cos\tfrac{1}{2}(\alpha - \beta)$$

$$\cos\alpha - \cos\beta = -2\sin\tfrac{1}{2}(\alpha + \beta)\sin\tfrac{1}{2}(\alpha - \beta)$$

Identities related to $\sin 2x, \cos 2x, \tan 2x, \sin 3x, \cos 3x$ and $\tan 3x$.

Unit-II: Algebra

1. Complex Numbers and Quadratic Equations

Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane.

2. Linear Inequalities

Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.

3. Permutations and Combinations

Fundamental principle of counting. Factorial *n.* (n!) Permutations and combinations, derivation of Formulae for ${}^{n}P_{r}$, ${}^{n}C_{r}$ and their connections, simple applications.

4. Binomial Theorem

Historical perspective, statement and proof of the binomial theorem for positive integral indices.

Pascal's triangle, simple applications.

5. Sequence and Series

Sequence and Series. Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of *n* terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M

Unit-III: Coordinate Geometry

1. Straight Lines

Brief recall of two-dimensional geometry from earlier classes. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point - slope form, slope-intercept form, two-point form, intercept form. Distance of a point from a line.

2. Conic Sections

Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.

3. Introduction to Three-dimensional Geometry

Coordinate axes and coordinate planes in three dimensions. Coordinates of a point.

Distance between two points.

Unit-IV: Calculus

1. Limits and Derivatives

Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative relate it to

scope of tangent of the curve, derivative of sum, difference, product and quotient of functions of polynomial and trigonometric functions.

Unit-V Statistics and Probability

1. Statistics

Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data.

2. Probability

Events; occurrence of events, ‘not’, ‘and’ and ‘or’ events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of ‘not’, ‘and’ and ‘or’ events.

1. *No chapter wise weightage. Care to be taken to cover all the chapters*
2. *Suitable internal variations may be made for generating various templates keeping the*

   overall weightage to different form of questions and typology of questions same.

CLASS – XI (2025-26)

The following topics are included as additional topics in the syllabus but will not be assessed. These topics can be integrated with existing chapters as they align well.

S.No.	Content
	Unit-I: Sets and Functions
1.	**Sets**
	Practical problems on Union and Intersection of two sets.
2.	**Relations and Functions**
	Composition of Functions
3.	**Trigonometric Functions**
	General solution of trigonometric equations of the type $\sin y = \sin a, \cos y = \cos a$ and $\tan y = \tan a$.
	Unit-II: Algebra
1.	**Principle of Mathematical Induction**
	Process of the proof by induction, motivating the application of the method by looking at natural numbers as the least inductive subset of real numbers. The principle of mathematical induction and simple applications.
2.	**(Complex Numbers and) Quadratic Equations**
	Polar representation of complex numbers. Statement of Fundamental Theorem of Algebra, solution of quadratic equations (with real coefficients) in the complex number system.
3.	**Linear Inequalities**
	Graphical solution of linear inequalities in two variables. Graphical method of finding a solution of system of linear inequalities in two variables.
4.	**Binomial Theorem**
	General and middle term in binomial expansion.
5.	**Sequence and Series**

	Formulae for the following special sums $\sum_{k=1}^{n} k, \sum_{k=1}^{n} k^2, \sum_{k=1}^{n} k^3$
Unit-III: Coordinate Geometry	
1.	**Straight Lines**
	Normal form. General equation of a line.
2.	**Introduction to Three-dimensional Geometry**
	Section formula.
Unit-IV: Calculus	
1.	**Limits and Derivatives**
	Derivatives of composite functions (Chain rule).
Unit-V Statistics and Probability	
1.	**Probability**
	Random experiments; outcomes, sample space (set representation).

Internal Assessment **Class X** **Marks:20**

S. No.	Topic	Marks
1	Activities Performed Throughout the Year (10 Activities)	05
2	Record of Activities	05
3	Activity performed during year- end test	03
4	Viva based on activities	02
5	Continuous Assessment(Unit Tests)	05
	Total	**20**

Note: For activities NCERT Lab Manual may be referred.

2025-26

Mathematics(128)

CLASS XII

Time: 3 Hours **Theory One Paper** **Marks: 80**

No.	Units	Marks
I.	Relations and Functions	08
II.	Algebra	10
III.	Calculus	35
IV.	Vectors and Three - Dimensional Geometry	14
V.	Linear Programming	05
VI.	Probability	08
	Total	**80**
	Internal Assessment	**20**

Unit-I: Relations and Functions

1. Relations and Functions

Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions.

2. Inverse Trigonometric Functions

Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions.

Unit-II: Algebra

1. Matrices

Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operations on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non- commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

2. Determinants

Determinant of a square matrix (up to 3 x 3 matrices), minors, co-factors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

Unit-III: Calculus

1. Continuity and Differentiability

Continuity and differentiability, chain rule, derivative of composite functions, derivatives of inverse trigonometric functions like $\sin^{-1}$, $\cos^{-1}$ and $\tan^{-1}$, derivative of implicit functions. Concept of exponential and logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives.

2. Applications of Derivatives

Applications of derivatives: rate of change of quantities, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real- life situations).

3. Integrals

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them

$$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c}, \int \frac{dx}{\sqrt{ax^2 + bx + c}}, \int \frac{px + q}{ax^2 + bx + c} dx,$$

$$\int \frac{px + q}{\sqrt{ax^2 + bx + c}} dx, \int \sqrt{a^2 \pm x^2}\, dx, \int \sqrt{x^2 - a^2}\, dx, \int \sqrt{ax^2 + bx + c}\, dx$$

Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.

4. Application of the Integrals

Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses (in standard form only)

5. Differential Equations

Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type

$\frac{dy}{dx} + py = q$, where p and q are functions of x or constants.

$\frac{dx}{dy} + px = q$, where p and q are functions of y or constants.

Unit-IV: Vectors and Three-dimensional Geometry

1. Vectors

Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.

2. Three-dimensional Geometry

Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.

Unit-V: Linear Programming Problem

1. Linear Programming

Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).

Unit-VI: Probability

1. Probability

Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes' theorem.

Internal Assessment **Class XII**
Marks:20

S. No.	Topic	Marks
1	Activities Performed Throughout the Year (10 Activities)	05
2	Record of Activities	05
3	Activity performed during year- end test	03
4	Viva based on activities	02
5	Continuous Assessment(Unit Tests)	05
	Total	**20**

Note: For activities NCERT Lab Manual may be referred.

Conduct of Unit Tests:

Unit Test is a Pen and Paper assessment which is to be conducted by the respective subject teacher. The format of periodic test must have questions items with a balance mix, such as, MCQ, very short answer (VSA), short answer (SA) and long answer (LA) to effectively assess the knowledge, understanding, application, skills, analysis, evaluation and synthesis. Depending on the nature of subject, the subject teacher will have the liberty of incorporating any other types of questions too. The modalities of the PT are as follows:

a) **Mode:** The Unit test is to be taken in the form of pen-paper test.

b) **Schedule:** In the entire Academic Year, Four Periodic Tests (two before half yearly examinations and two after half yearly examinations) for class 11th and three Unit Tests (two before half yearly examinations and one after half yearly examinations) for class 12th, to be conducted as per departmental schedule.

c) **Average of Marks**: Once schools complete the conduct of all the three Unit tests for **class 12th**, they identify best one test and weightage of this test is covertted into 5 marks.. The best one will be taken into consideration and it shall be taken as the final marks for UT.

After the completion of two tests before the half-yearly examination **for Class 11**, the best test among them will be identified, and its weightage will be converted into 5 marks. This will be considered as the final marks for the Unit Test in the half-yearly examination.

Similarly, after the completion of two tests following the half-yearly examination, the best test among them will be identified, and its weightage will be converted into 5 marks. This will be considered as the final marks for the Unit Test in the annual examination.

d) The school will ensure simple documentation to keep a record of performance.

Assessment of Activity Work:

Throughout the year any 10 activities shall be performed by the student from the activities given in the NCERT Laboratory Manual for the respective class (XI or XII) which is available on the link: http://www.ncert.nic.in/exemplar/labmanuals.html a record of the same may be kept by the student. An year end test on the activity may be conducted

Prescribed Books:

1) Mathematics Textbook for Class XI, NCERT Publications
2) Mathematics Part I - Textbook for Class XII, NCERT Publication
3) Mathematics Part II - Textbook for Class XII, NCERT Publication
4) Mathematics Exemplar Problem for Class XI, Published by NCERT
5) Mathematics Exemplar Problem for Class XII, Published by NCERT
6) Mathematics Lab Manual class XI, published by NCERT
7) Mathematics Lab Manual class XII, published by NCERT

2025-26
Class – XI
Military Science(126)

Time: 3 Hours Marks:70

PART- I

Unit- 1 सैन्य विज्ञान–परिचय 05

1. सैन्य विज्ञान : परिचय, परिभाषा, क्षेत्र तथा महत्व
2. सैन्य विज्ञान का अन्य विषयों से सम्बन्ध
   (अ) राजनीतिशास्त्र (ब) भूगोल (स) इतिहास (द) अर्थशास्त्र (व) मनोविज्ञान

PART- II

Unit- 2 राष्ट्रीय सुरक्षा 05

3. राष्ट्रीय सुरक्षा : परिभाषा तथा क्षेत्र
4. राष्ट्रीय सुरक्षा के तत्व
5. भारत की सुरक्षा में भौगोलिक तत्व

Unit- 3 भारत तथा उसके पड़ोसी 10

6. भारत–पाक सम्बन्ध
7. भारत–चीन सम्बन्ध
8. भारत–नेपाल सम्बन्ध
9. भारत–बांग्लादेश सम्बन्ध
10. भारत–श्रीलंका सम्बन्ध

PART- III

Unit- 4 सैन्य मनोविज्ञान 05

11– मनोबल
12– अनुशासन
13– नेतृत्व
14– दल–भावना
15– मानव प्रबन्ध

Unit- 5 नागरिक सुरक्षा 05

16– नागरिक सुरक्षा : परिभाषा, क्षेत्र, महत्व
17– नागरिक सुरक्षा के उपाय
18– नागरिक सुरक्षा संगठन

PART- IV

Unit- 6 वैदिककालीन तथा महाकाव्य कालीन सैन्य संगठन 05

19– वैदिककालीन सैन्य पद्धति

20– महाकाव्यकालीन सैन्य पद्धति

Unit- 7 10

21–झेलम का युद्ध (326 ई.पू.)

22– मौर्यकालीन सैन्य पद्धति

23– कौटिल्य का युद्ध दर्शन

Unit- 8 हिन्दूकालीन सैन्य पद्धति 05

24– गुप्त साम्राज्य की सैन्य पद्धति

25– हर्षकालीन सैन्य पद्धति

Unit- 9 मुगलकालीन सैन्य पद्धति 10

26– पानीपत का प्रथम संग्राम (1526 ई.)

Unit- 10 राजपूत सैन्य पद्धति 10

27– हल्दीघाटी का युद्ध (1576 ई.)

Practical :30 Marks

S. N.	Topic	Internal Examiner
1.	रिकार्ड फाइल	4
2	मानचित्र अध्ययन	2
3	मानचित्र के प्रकार	3
4	सांकेतिक चिन्ह	5
5	मापक प्रदर्शित करने की विधियां	6
6	मौखिक परीक्षा	5
7	सतत मूल्यांकन (इकाई परीक्षा)	5
	योग	**30**

2025-26
Military Science (126)
Class – XII

Time: 3 Hours **Marks: 70**

UNIT 1 स्थल सेना (पैदल सेना) 05

1. स्थल सेना के अंग, स्थल सेना का संगठन (युद्धकालीन, शान्तिकालीन), प्रशिक्षण से स्थान
2. पैदल सेना की विशेषतायें
3. भारतीय पैदल सेना के कार्य एवं क्षमता

UNIT 2 तोपखाना 05

4. परिचय तथा महत्व
5. विशेषतायें तथा परिसीमाएँ
6. तोपखाने के कार्य तथा प्रयोग
7. विभिन्न प्रकार के तोपखाने

UNIT 3 कवचयुक्त सेनाएँ 05

8. टैंकों का विकास
9. विशेषतायें तथा परिसीमायें
10. कार्य तथा प्रयोग
11. भारतीय सेना के प्रमुख टैंक

UNIT 4 प्रतिरक्षा की द्वितीय पंक्ति 05

12. नेशनल कैडेट कोर (N.C.C.)
13. सीमा सुरक्षा बल (B.S.F.)
14. भारतीय तिब्बत सीमा पुलिस बल (I.T.B.P)
15. केन्द्रीय आरक्षित पुलिस बल (C.R.P.F.)
16. प्रादेशिक सेना (Territoriol Army)
17. सहायक सेनांग (प्रशासनिक) इंजीनियरिंग सिग्नल कोर, मेडिकल कोर

UNIT 5 वायुसेना 05

18. भारतीय वायुसेना का विकास एवं इतिहास
19. भारतीय वायुसेना की क्षमता एवं विशेषतायें
20. भारतीय सुरक्षा में वायुसेना की भूमिका
21. भारत के प्रमुख युद्धक विमान
22. वायुसेना के प्रशिक्षण संस्थान

UNIT 6 भारतीय नौसेना 05

23. भारतीय नौसेना का विकास एवं इतिहास
24. भारतीय नौसेना की क्षमता एवं विशेषताऐं
25. भारतीय सुरक्षा में नौसेना की भूमिका
26. भारत के प्रमुख युद्ध पोत

UNIT 7 मराठा सैन्य पद्धति 05

27. शिवाजी की छापामार युद्धकला के संदर्भ में

UNIT 8 सिक्ख सैन्य पद्धति 08

28. सोमराव का संग्राम (10 फरवरी 1846)

UNIT 9 ब्रिटिश सैन्य पद्धति 08

29. प्लासी की लड़ाई (1757 ई0)

UNIT 10 भारत का प्रथम स्वतंत्रता संग्राम (1857 ई0) 05

30. आर्थिक राजनैतिक व धार्मिक कारण
31. असफलता के कारण व शिक्षाऐं

UNIT 11 युद्ध के सिद्धान्त 04

32. युद्ध के सिद्धान्त तथा कार्यवाही

UNIT 12 स्वतंत्र भारत के युद्ध 10

33. प्रथम भारत–पाक युद्ध (1947–48)
34. भारत–चीन युद्ध (1962 ई.)
35. भारत–पाक युद्ध (1965 ई.)
36. भारत–पाक युद्ध (1971 ई.)
37. कारगिल युद्ध (1999 ई.)

Practical : 30 Marks

S. N.	Topic	Internal Examiner	External Examiner
1.	रिकार्ड फाइल	5	–
2	दिशायें ज्ञात करने की विधियां	3	–
3	सैन्य अधिकारियों के पदचिन्ह	2	–
4	सतत मूल्यांकन (इकाई परीक्षा)	5	–
5	ग्रिड पद्धति	–	2
6	दिक्मान परिभाषा एवं प्रकार	–	3
7	दिक्मान का परस्पर परिवर्तन	–	3
8	सर्विस प्रोटेक्टर	–	3
9	मौखिक	–	4
	योग	**15**	**15**

2025-26
PHYSICS (129)
Class XI

Time: 3 Hours **Theory One Paper** **Max Marks: 70**

UNIT	CHAPTERS	MARKS
Unit–I	**Physical World and Measurement**	**23**
	Chapter–1: Units and Measurements	
Unit-II	**Kinematics**	
	Chapter–2: Motion in a Straight Line	
	Chapter–3: Motion in a Plane	
Unit–III	**Laws of Motion**	
	Chapter–4: Laws of Motion	
Unit–IV	**Work, Energy and Power**	**17**
	Chapter–5: Work, Energy and Power	
Unit–V	**Motion of System of Particles and Rigid Body**	
	Chapter–6: System of Particles and Rotational Motion	
Unit-VI	**Gravitation**	
	Chapter–7: Gravitation	
Unit–VII	**Properties of Bulk Matter**	**20**
	Chapter–8: Mechanical Properties of Solids	
	Chapter–9: Mechanical Properties of Fluids	
	Chapter–10: Thermal Properties of Matter	
Unit–VIII	**Thermodynamics**	
	Chapter–11: Thermodynamics	
Unit–IX	**Behaviour of Perfect Gases and Kinetic Theory of Gases**	
	Chapter–12: Kinetic Theory	
Unit–X	**Oscillations and Waves**	**10**
	Chapter–13: Oscillations	
	Chapter–14: Waves	
Total		**70**

Unit I: Physical World and Measurements

Chapter–1: Units and Measurements

Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures, Determining the uncertainty in result**.** Dimensions of physical quantities, dimensional analysis and its applications.

Unit II: Kinematics

Chapter–2: Motion in a Straight Line

Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion, uniform and non- uniform motion, average speed and average velocity and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical and calculus treatment).

Chapter–3: Motion in a Plane

Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors.

Motion in a plane, cases of uniform velocity and uniform acceleration- projectile motion, uniform circular motion.

Unit III: Laws of Motion

Chapter–4: Laws of Motion

Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion.

Law of conservation of linear momentum and its applications.

Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication.

Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road).

Unit IV: Work, Energy and Power

Chapter– 5: Work, Energy and Power

Work done by a constant force and a variable force; kinetic energy, work- energy theorem, power.

Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

Unit V: Motion of System of Particles and Rigid Body

Chapter–6: System of Particles and Rotational Motion

Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications.

Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions.

Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).

Unit VI: Gravitation

Chapter – 7: Gravitation

Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth.

Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite, energy of an orbiting satellite.

Unit VII: Properties of Bulk Matter

Chapter–8: Mechanical Properties of Solids

Elasticity, Stress-strain relationship, Hooke's law, Young’s modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy. Application of elastic behavior of materials (qualitative idea only).

Chapter–9: Mechanical Properties of Fluids

Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure.

Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications (Torricelli's law and Dynamic lift).

Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.

Chapter–10: Thermal Properties of Matter

Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity.

Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law.

Unit VIII: Thermodynamics

Chapter–11: Thermodynamics

Thermal equilibrium and definition of temperature, zeroth law of thermodynamics, heat, work and internal energy. First law of thermodynamics, Second law of thermodynamics: Thermodynamic state variable and equation of state. Change of condition of gaseous state - isothermal, adiabatic, reversible, irreversible, and cyclic processes.

Unit IX: Behavior of Perfect Gases and Kinetic Theory of Gases

Chapter–12: Kinetic Theory

Equation of state of a perfect gas, work done in compressing a gas.

Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.

Unit X: Oscillations and Waves

Chapter–13: Oscillations

Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications.

Simple harmonic motion (S.H.M), uniform circular motion and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period.

Chapter–14: Waves

Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.

PRACTICALS

The record, to be submitted by the students, at the time of their annual examination, has to include:

- Record of at least 8 Experiments [with 4 from each section], to be performed by the students.
- Record of at least 6 Activities [with 3 each from section A and section B], to be performed by the students.
- Report of the project carried out by the students.

EVALUATION SCHEME

Time :3 hours **Max. Marks: 30**

Topic	**Marks**
Two experiments one from each section	5+5
Practical record (experiment and activities)	4
One activity from any section	3
Investigatory Project	3
Viva on experiments, activities and project	5
Continuous Assessment (Unit Test)	5
Total	**30**

SECTION–A

Experiments

1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.
2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.
3. To determine volume of an irregular lamina using screw gauge.

4. To determine radius of curvature of a given spherical surface by a spherometer.
5. To determine the mass of two different objects using a beam balance.
6. To find the weight of a given body using parallelogram law of vectors.
7. Using a simple pendulum, plot its graph and use it to find the effective length of second's pendulum.
8. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.
9. To study the relationship between force of limiting friction and normal reaction and to find the co- efficient of friction between a block and a horizontal surface.
10. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination θ by plotting graph between force and Sinθ.

Activities

1. To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.
2. To determine mass of a given body using a metre scale by principle of moments.
3. To plot a graph for a given set of data, with proper choice of scales and error bars.
4. To measure the force of limiting friction for rolling of a roller on a horizontal plane.
5. To study the variation in range of a projectile with angle of projection.
6. To study the conservation of energy of a ball rolling down on an inclined plane (using a double inclined plane).
7. To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.

SECTION–B

Experiments

1. To determine Young's modulus of elasticity of the material of a given wire.
2. To find the force constant of a helical spring by plotting a graph between load and extension.
3. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and 1/V.
4. To determine the surface tension of water by capillary rise method.
5. To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.
6. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
7. To determine specific heat capacity of a given solid by method of mixtures.
8. To study the relation between frequency and length of a given wire under constant tension using sonometer.
9. To study the relation between the length of a given wire and tension for constant frequency using sonometer.
10. To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.

Activities

1. To observe change of state and plot a cooling curve for molten wax.
2. To observe and explain the effect of heating on a bi-metallic strip.
3. To note the change in level of liquid in a container on heating and interpret the observations.
4. To study the effect of detergent on surface tension of water by observing capillary rise.
5. To study the factors affecting the rate of loss of heat of a liquid.
6. To study the effect of load on depression of a suitably clamped metre scale loaded at (i) its end (ii) in the middle.
7. To observe the decrease in pressure with increase in velocity of a fluid.

Prescribed Books:

1. Physics Part-I, Textbook for Class XI, Published by NCERT
2. Physics Part-II, Textbook for Class XI, Published by NCERT
3. Laboratory Manual of Physics, Class XI Published by NCERT
4. The list of other related books and manuals brought out by NCERT (consider multimedia also).

2025-26
CLASSXII

PHYSICS (129)

Time: 3 Hours **Theory One Paper** **Marks: 70**

UNIT	CHAPTERS	MARKS
Unit–I	**Electrostatics**	
	Chapter–1: Electric Charges and Fields	
	Chapter–2: Electrostatic Potential and Capacitance	**16**
Unit-II	**Current Electricity**	
	Chapter–3: Current Electricity	
Unit-III	**Magnetic Effects of Current and Magnetism**	
	Chapter–4: Moving Charges and Magnetism	
	Chapter–5: Magnetism and Matter	**17**
Unit-IV	**Electromagnetic Induction and Alternating Currents**	
	Chapter–6: Electromagnetic Induction	
	Chapter–7: Alternating Current	
Unit–V	**Electromagnetic Waves**	
	Chapter–8: Electromagnetic Waves	
Unit–VI	**Optics**	**18**
	Chapter–9: Ray Optics and Optical Instruments	
	Chapter–10: Wave Optics	
Unit–VII	**Dual Nature of Radiation and Matter**	
	Chapter–11: Dual Nature of Radiation and Matter	
Unit–VIII	**Atoms and Nuclei**	**12**
	Chapter–12: Atoms	
	Chapter–13: Nuclei	
Unit–IX	**Electronic Devices**	
	Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits	**7**
Total		**70**

Unit I: Electrostatics

Chapter–1: Electric Charges and Fields

Electric charges, Conservation of charge, Coulomb's law-force between two- point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field.

Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).

Chapter–2: Electrostatic Potential and Capacitance

Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field.

Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only).

Unit II: Current Electricity

Chapter–3: Current Electricity

Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge.

Unit III: Magnetic Effects of Current and Magnetism

Chapter–4: Moving Charges and Magnetism

Concept of magnetic field, Oersted's experiment.

Biot - Savart law and its application to current carrying circular loop.

Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields.

Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter.

Chapter–5: Magnetism and Matter

Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines.

Magnetic properties of materials- Para-, dia- and ferro – magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.

Unit IV: Electromagnetic Induction and Alternating Currents

Chapter–6: Electromagnetic Induction

Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.

Chapter–7: Alternating Current

Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current. AC generator, Transformer.

Unit V: Electromagnetic waves

Chapter–8: Electromagnetic Waves

Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only).

Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

Unit VI: Optics

Chapter–9: Ray Optics and Optical Instruments

Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism.

Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Chapter–10: Wave Optics

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only).

Unit VII: Dual Nature of Radiation and Matter

Chapter–11: Dual Nature of Radiation and Matter

Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light.
Experimental study of photoelectric effect
Matter waves-wave nature of particles, de-Broglie relation.

Unit VIII: Atoms and Nuclei

Chapter–12: Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only).

Chapter–13: Nuclei

Composition and size of nucleus, nuclear force

Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Unit IX: Electronic Devices

Chapter–14: Semiconductor Electronics: Materials, Devices and Simple Circuits

Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction

Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode -diode as a rectifier.

PRACTICALS

The record to be submitted by the students at the time of their annual examination has to include:

- Record of at least 8 Experiments [with 4 from each section], to be performed by the students.
- Record of at least 6 Activities [with 3 each from section A and section B], to be performed by the students.

The Report of the project carried out by the students.

Practical Evaluation Scheme

Max. Marks: 30

Time 3 hours

External Examiner	
Two experiments one from each section	4+4 Marks
One activity from any section	4 Marks
Viva on experiments & activities	3 Marks
Internal Examiner	
Practical record (experiments & activities)	5 Marks
Record of demonstration experiments & Viva based on these experiments	5 Marks
Continuous Assessment(Unit Test)	5 Marks
Total	**30 Marks**

SECTION-A

Experiments

1. To determine resistivity of two / three wires by plotting a graph for potential difference versus current.
2. To find resistance of a given wire / standard resistor using metre bridge.
3. To verify the laws of combination (series) of resistances using a metre bridge.

OR

To verify the laws of combination (parallel) of resistances using a metre bridge.

4. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.

5. To convert the given galvanometer (of known resistance and figure of merit) into a voltmeter of desired range and to verify the same.

OR

To convert the given galvanometer (of known resistance and figure of merit) into an ammeter of desired range and to verify the same.

6. To find the frequency of AC mains with a sonometer.

Activities

1. To measure the resistance and impedance of an inductor with or without iron core.

2. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.

3. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.

4. To assemble the components of a given electrical circuit.

5. To study the variation in potential drop with length of a wire for a steady current.

6. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

SECTION-B

Experiments

1. To find the value of *v* for different values of *u* in case of a concave mirror and to find the focal length.

2. To find the focal length of a convex mirror, using a convex lens.

3. To find the focal length of a convex lens by plotting graphs between *u* and *v* or between *1/u* and *1/v*.

4. To find the focal length of a concave lens, using a convex lens.

5. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.

6. To determine refractive index of a glass slab using a travelling microscope.

7. To find the refractive index of a liquid using convex lens and plane mirror.

8. To find the refractive index of a liquid using a concave mirror and a plane mirror.

9. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.

Activities

1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.

2. Use of multimeter to see the unidirectional flow of current in case of a diode and an LED and check whether a given electronic component (e.g., diode) is in working order.
3. To study effect of intensity of light (by varying distance of the source) on an LDR.

4. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.

5. To observe diffraction of light due to a thin slit.

6. To study the nature and size of the image formed by a (i) convex lens, or (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).

7. To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses.

Suggested Investigatory Projects

1. To study various factors on which the internal resistance/EMF of a cell depends.

2. To study the variations in current flowing in a circuit containing an LDR because of a variation in

   (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).

   (b) the distance of an incandescent lamp (of fixed power) used to 'illuminate' the LDR.

3. To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.

4. To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.

5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.

6. To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.

7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.

8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

Prescribed Books:

1. Physics, Class XI, Part -I and II, Published by NCERT.

2. Physics, Class XII, Part -I and II, Published by NCERT.

3. Laboratory Manual of Physics for class XII Published by NCERT.

4. The list of other related books and manuals brought out by NCERT (consider multimedia also).

2025-26
Political Science(121)
CLASS XI

Time : 3 Hours **Theory One Paper** **Marks:80**

Chapter No.	Chapter Name	Marks
	PART A **INDIAN CONSTITUTION AT WORK**	
1	Constitution: Why and How?	8
2	Rights in the Indian Constitution	
3	Election and Representation	6
4	Executive	12
5	Legislature	
6	Judiciary	
7	Federalism	6
8	Local Governments	4
9	Constitution as a Living Document	4
10	The Philosophy of the Constitution	
	Marks allotted to Indian Constitution at Work	**40**
	PART B **POLITICAL THEORY**	
1	Political Theory: An Introduction	4
2	Freedom	12
3	Equality	
4	Social Justice	6
5	Rights	4
6	Citizenship	8
7	Nationalism	
8	Secularism	6
	Marks allotted for Political Theory	**40**
	Total	**80**

CLASS XI

COURSE CONTENT

Chapter No. and Name	Learning Outcomes with Specific Competencies
1- Constitution: Why and How? a) Why do we need a Constitution? • Constitution allows coordination and Assurance • Specification of decision-making powers • Limitations on the powers of government • Aspirations and goals of a society • Fundamental identity of a people b) The authority of a Constitution • Mode of promulgation • The substantive provisions of constitution • Balanced institutional Design c) How was the Indian Constitution made? • Composition of the Constituent Assembly • Procedures • Inheritance of the nationalist movement • Institutional arrangements d) Provisions adapted from Constitutions of different countries	**Students will be able to:** • Appreciate the need fora Constitution. • Understand the historical processes and the circumstances in which the Indian Constitution was drafted. • Critically evaluate how constitutions, govern the distribution of power in society. • Analyse the ways in which the provisions of the Constitution have worked in real political life.
2- Rights in the Indian Constitution a) The importance of rights • Bill of Rights b) Fundamental rights in the Indian Constitution • Right to Equality • Right to Freedom • Right against Exploitation • Right to Freedom of Religion • Cultural and Educational Rights • Right to Constitutional Remedies c) Directive principles of state policy • What do the directive principles contain? d) Relationship between fundamental rights and directive principles	**Students will be able to:** • Analyse the working of the Constitution in real life • Learn to respect others, think critically, and make informed decisions • Identify violations of the rights to equality and freedom in the society around them • Justify the need for reasonable restrictions on the rights guaranteed. • Use freedom of expression to advocate for ensuring rights is given to people around them.

3. Election and Representation a) Elections and democracy b) Election system in India • First Past the Post System • Proportional Representation c) Why did India adopt the FPTP system? d) Reservation of constituencies e) Free and fair elections • Universal franchise and right to contest • Independent Election Commission f) Electoral Reforms	**Students will be able to:** • Identify different types and methods of • election Develop critical thinking about the role of various stakeholders in ensuring free and fair elections. • Demonstrate the innate role played by Election Commission • Compare election systems of different countries of the world.
4. Executive a) What is an executive? b) What are the different types of executives? c) Parliamentary executive in India • Power and position of President • Discretionary Powers of the President d) Prime Minister and Council of ministers e) Permanent Executive: Bureaucracy	**Student will be able to:** • Recognise the meaning of Executive. • Compare and contrast the Parliamentary and Presidential Executive. • Analyse the composition and functioning of the executive. • Know the significance of the administrative machinery.
5. Legislature a) Why do we need a parliament? b) Why do we need two houses of parliament? • Rajya Sabha • Lok Sabha c) What does the parliament do? • Powers of Rajya Sabha • Special Powers of Rajya Sabha d) How does the parliament make laws? e) How does the parliament control the executive? f) What do the committees of parliament do? g) How does the parliament regulate itself?	**Students will be able to:** • Describe the law- making process in India. • Differentiate between the powers and functions of Lok Sabha and Rajya Sabha. • Examine the parliamentary control over the Executive. • Analyse the role of Parliamentary committees for the success of Indian democracy.
6. Judiciary a) Why do we need an independent judiciary? • Independence of Judiciary • Appointment of Judges • Removal of Judges b) Structure of the Judiciary	**Students will be able to:** • Identify the different aspects which makes the Judiciary independent • Compare and contrast the different jurisdictions

c) Jurisdiction of supreme Court • Original Jurisdiction • Writ Jurisdiction • Appellate Jurisdiction • Advisory Jurisdiction • Judicial Activism d) Judiciary and Rights • Judiciary and Parliament	• Analyse the reasons why Judiciary has become proactive. • Examine the reasons for the conflicts between the judiciary and parliament with respect to Constitutional Amendments.
7. Federalism a) What is Federalism? b) Federalism in the Indian Constitution • Division of Powers c) Federalism with a strong central Government d) Conflicts in India's federal system • Centre-State Relations • Demands for Autonomy • Role of Governors and President's Rule • Demands for New States • Interstate Conflicts e) Special provisions • Jammu and Kashmir	**Students will be able to:** • Explain the basic features of a federation. • Identify the different levels of the government &subjects on which the union and state governments can make laws. • Discuss the various constitutional provisions that led to a strong Centre in India.
8. Local Governments a) Why local governments? b) Growth of Local Government in India • Local Governments in Independent India c) 73rd and 74thamendments d) 73rd Amendment • Three Tier Structure • Elections • Reservations • Transfer of Subjects • State Election Commissioners • State Finance Commission e) 74th Amendment • Implementation of 73rdand 74th Amendments	**Students will be able to:** • Understand the Panchayati Raj system of local government in India, its emergence and significance • Identify the objectives, functions and sources of income of rural and urban local government bodies • Justify the significance of 73rd and 74th constitutional amendments • Acknowledge and examine the significance of decentralization • Introspect and realise the need to empower local government bodies
Constitution as a Living Document a) Are constitutions static? b) How to amend the constitution? c) Why have there been so many amendments?	**Students will be able to:** • Analyse the working of the Constitution. • Know the various amendments that have

9. Contents of amendments made so far • Differing Interpretations • Amendments through Political Consensus • Controversial Amendments e) Basic structure and evolution of the constitution f) Constitution as a Living Document • Contribution of the Judiciary • Maturity of the Political Leadership	• taken place and the controversies raised. • Appreciate why the Constitution is called a Living Document.
10. The Philosophy of the Constitution a) What is meant by philosophy of the constitution? • Constitution as Means of Democratic Transformation b) Why do we need to go back to the Constituent Assembly? c) What is the political philosophy of our constitution? • Individual freedom • Social Justice • Respect for diversity and minority Rights • Secularism • Universal franchise • Federalism • National identity d) Procedural Achievements e) Criticisms • Limitations	**Students will be able to:** • Appreciate the philosophical vision ofour Constitution. • Recognise the core features of the Indian Constitution. • Evaluate the strengths and limitations of the Constitution.
PART B **POLITICAL THEORY**	
1. Political Theory: An Introduction a) What is politics? b) What do we study in political theory? c) Putting Political theory into practice d) Why should we study political theory?	**Students will be able to:** • Define the term politics and identify various political principles. • Explain the innate ideas of various Political theories. • Appreciate the contribution of Political Thinkers

2. Freedom a) The Ideal of freedom b) The sources of Constraints-Why do we need constraints? c) The Harm Principle d) Negative and Positive liberty	**Students will be able to:** • Appreciate the ideal of freedom. • Critically evaluate the dimensions of negative and positive liberty. • Demonstrate spirit of enquiry • Explain the ideas introduced by J.S. Millin Harm Principle. • Assess the possible limitations on freedom resulting from the social and economic structures of society.
3. Equality a) Why does equality matter? • Equality of opportunities • Natural and Social Inequalities b) Three dimensions of equality c) Feminism, Socialism d) How can we promote equality?	**Students will be able to:** • Understand the moral and political ideals of equality. • Assess how equality is perceived through different ideologies • Recognise the means and methods to promote equality. • Evaluate the possible solutions to minimise inequality.
4. Social Justice a) What is Justice? • Equal Treatment for Equals • Proportionate Justice • Recognition of Special Needs b) Just distribution c) John Rawls Theory of Justice d) Pursuing Social Justice e) Free Markets versus State Intervention	**Students will be able to:** • Classify the different dimensions of justice. • Appreciate the measures taken by the government of India to secure social justice. • Enlist the basic minimum requirements of people for living a healthy and productive life. • State John Rawls' theory of veil of ignorance.
5. Rights a) What are Rights? b) Where do rights come from? c) Legal rights and the state d) Kinds of rights e) Rights and responsibilities	**Students will be able to:** • Define rights • Identify the need for rights and its importance to mankind. • why rights needto be sanctioned by law. • Describe the features of different kinds of rights.
6. Citizenship a) Introduction b) Full and equal membership c) Equal Rights d) Citizen and Nation e) Universal Citizenship f) Global Citizenship	**Students will be able to:** • Explain the meaning of citizenship. • Contribute to meaningful discussion on ways of granting citizenship. • Discuss the probable solutions or alternatives to solve citizenship issue • Analyse the problems to be surmounted to strengthen links between the people and governments

7. Nationalism

a) Introducing Nationalism
b) Nations and Nationalism
- Shared Beliefs and History
- Shared National Identity

c) National self-determination

d) Nationalism and Pluralism

Students will be able to:

- Understand the concepts of nation and nationalism
- Assess the strengths and limitations of nationalism.
- Identify and build an understanding on the factors related to creation of collective identities
- Examine the concept of national self-determination
- Acknowledge the need to make nations more democratic and inclusive

8. Secularism

a) What is Secularism?
b) Inter-religious Domination
c) Intra-religious Domination
d) Secular State
- The western model of secularism
- The Indian model of secularism

e) Criticisms of Indian secularism
- Western Import and Minoritism
- Interventionist
- Vote Bank Politics

Student will be able to:

- Define Secularism.
- Differentiate between Inter-religious and Intra-Religious Domination.
- Recognise the concept of a Secular State.
- Compare Western and Indian Model of Secularism.
- Make an appraisal of Indian Secularism.

Prescribed Textbooks:

1. Indian Constitution at Work, Class XI, Published by NCERT
2. Political Theory, Class XI, Published by NCERT
3. Added Reference Material available with the document in the Annexure

Note: The above textbooks are also available in Hindi and Urdu versions.

2025-26
Political Science(121)
CLASS XII

Time : 3 Hours **Theory One Paper** **Marks:80**

Chapter No.	Chapter Name	Marks Allotted
PART A-CONTEMPORARY WORLD POLITICS		
1	The End of Bipolarity	6
2	Contemporary Centres of Power	6
3	Contemporary South Asia	6
4	International Organizations	6
5	Security in the Contemporary World	6
6	Environment and Natural Resources	6
7	Globalisation	4
	PART A - Total	**40**
PART B-POLITICS IN INDIA SINCE INDEPENDENCE		
1	Challenges of Nation-Building	6
2	Era of One-Party Dominance	4
3	Politics of Planned Development	2
4	India’s External Relations	6
5	Challenges to and Restoration of the Congress System	4
6	The Crisis of Democratic Order	4
7	Regional Aspirations	6
8	Recent Developments in Indian Politics	8
	PART B - Total	**40**
	TOTAL	**80**

CLASS XII
COURSE CONTENT

Chapter No. and Name	Learning Outcomes with Specific Competencies
1. The End of Bipolarity Topics to be focused: a) The Soviet System b) Gorbachev and the disintegration c) Causes and Consequences of disintegration of Soviet Union d) Shock Therapy and its Consequences e) New entities in world politics • Russia • Balkan States • Central Asian States f) India's relations with Russia and other post-communist countries	**Students will be able to:** • Identify the basic features of the Soviet System. • Discuss the background and outcome of disintegration of the Soviet Union. • Examine the consequences of unipolar world • Assess the features of Shock Therapy • Probe into the recent happenings in the Post-Communist Countries. • Trace the developments between India & Russia
2. Contemporary Centres of Power Topics to be focused: a) European Union b) Association of Southeast Asian Nations c) Rise of China as an economic power d) Japan and South Korea as emerging powers	**Students will be able to:** • Compare and contrast the importance of European Union and ASEAN. • Evaluate the extent of rise of Chinese economy and its impact on world politics. • Summarise India's relations with China.
3. Contemporary South Asia Topics to be focused: a) Military and Democracy in Pakistan and Bangladesh b) Monarchy and Democracy in Nepal c) Ethnic Conflict and Democracy in Sri Lanka d) India-Pakistan Conflicts e) India and its Neighbours f) Peace and Cooperation	**Students will be able to:** • Identify & locate the seven countries of the South Asian region. • Appreciate the mixed record of democracy in the South Asian region. • Examine the role of Political leaders • Reflect upon the causes of various conflicts and movements in this region. • Justify the creation of SAARC • Understand the involvement of US and China in South Asia.
4. International Organizations Topics to be focused: a) Meaning and importance of International Organisations b) Evolution of the UN c) Structure and function of International Organisations d) Principal Organs of UN	**Students will beable to:** • Define International Organisation • Appreciate the role of United Nations and its agencies • Reflect on the events taking place in the post-cold war era • Understand the need for reforms in the United Nations

e) Reform of the UN after ColdWar f) Reform of Structures, Processes and Jurisdiction of the UN h) India and the UN Reforms i) Key Agencies: IMF, World Bank, WTO, ILO, IAEA. j) NGO: Amnesty International, Human Rights Watch. g) Implications and Future of International Organisations	
5. Security in the Contemporary World Topics to be focused: a) Meaning and Type of Security. b) Traditional concept of Security c) Non-tradition notions of Security. d) New Sources of Threats e) Cooperative Security f) India's Security strategy	**Students will be able to:** • Recognise the causes of security threats • Enhance analytical skills to provide solutions to security concerns. • Develop critical thinking about the role of various stakeholders in ensuring security today.
6. Environment and Natural Resources Topics to be focused: a) Environmental Concerns b) Global Commons c) Common but differentiated responsibilities d) India's Stand on Environment Issues f) Environmental Movements g) Resource Geopolitics e) Rights of Indigenous peoples	**Students will be able to:** • Enlist and explain the facts related to global environmental issues • Recognise and understand the need to conserve critical resources Demonstrate knowledge and appreciation towards India's responsibility in protecting environment • Realise the need to conserve resources and exhibitresponsibility towards prudential use to facilitate sustainable development • Know about the nature of concerns of indigenous communities and understand how the governments of different countries respond to their plea
7. Globalisation Topics to be focused: a) Concept of globalisation b) Causes and Consequences of globalisation c) India and globalization d) Resistance to globalisation e) India and resistance to globalization	**Students will be able to:** • Appreciate the significance of Globalisation • Elucidate the political, economic, and cultural dimensions of Globalisation. • Critically evaluate the impact of globalisation on India. • Draw attention to resistance movements to Globalisation and envisage its future trends.

PART B-POLITICS IN INDIA SINCE INDEPENDENCE	
1. Challenges of Nation Building Topics to be focused: a) Challenges for the new Nation. • Three Challenges. b) Partition: Displacement and Rehabilitation. • Consequences of Partition. c) Integration of Princely States. • The problem • Government's approach • Hyderabad • Manipur d) Reorganisation of States.	**Students will be able to:** • Analyse the challenges which Independent India faced. • Describe the factors that led to the partition of India. • Explain the circumstances under which different princely states signed the Instrument of Accession. • Assess how language became the basis of reorganisation of the states. • Evaluate the role played by leaders in Nation Building.
2. Era of One-Party Dominance Topics to be focussed: a) Challenge of building democracy. b) Congress dominance in the first three general elect ions. • Nature of Congress dominance • Congress as social and ideological coalition. • Tolerance and management of Factions c) Emergence of opposition parties.	**Students will be able to:** • Appreciate the sustenance of democratic politics in the country. • Evaluate the electoral politics post-Independence • Assess the dominance of the Indian National Congress from 1952 to1967. • Evaluate the role of Opposition parties
3. Politics of Planned Development Topics to be focussed: a) Political contestation. • Ideas of Development. • Planning • Planning Commission b) The Early Initiatives • The First Five Year Plan. • Rapid Industrialisation.	**Students will be able to:** • Identify the varied option considered by the government to balance growth and socio-economic justice. • Know the difference between Left and Right Ideology • Understand the need for the formation of the Planning Commission. • Appreciate the need for strategic long-term development programme and policies
4. India's External Relations Topics to be focussed: a) International Context b) The Policy of Non-Alignment.	**Students will be able to:** • Recognise the significance of NAM • Interpret, compare and contrast multi-lateral aspects of Indo-China relationship • Demonstrate knowledge on Indo-Pak wars

• Nehru's role • Distance from two camps. • Afro Asian Unity c) Peace and conflict with China • The Chinese Invasion1962 • War and Peace with Pakistan • Bangladesh War 1971 d) India's Nuclear Policy.	• Appreciate the steps taken by Indian government to develop military capacity • Reflect and introspect on the choices that the country must consider for the cause of development and peace Building
5. Challenges to and Restoration of the Congress System Topics to be focused: a) Challenge of Political Succession • From Nehru to Shastri • From Shastri to Indira Gandhi b) Fourth General Election1967 • Context of the Election. • Non Congressism • Electoral Verdict • Coalitions • Defections c) Split in the Congress • Indira vs the Syndicate • Presidential Election 1969 d) The 1971 Election and Restoration of Congress • The outcome and after Restoration	**Students will be able to:** • Understand the challenges of political succession after Nehru. Evaluate the opposition unity and the Congress split as a challenge to Congress dominance. • Compare and contrast the new Congress and the old Congress. • Summarise the initiatives taken by Indira Gandhi to overcome the challenges faced by her • Analyse the process of restoration of the Congress system
6. The Crisis of Democratic Order Topics to be focused: a) Background to Emergency. • Economic Context. • Gujarat and Bihar Movements • Conflict with Judiciary c) Declaration of Emergency • Crisis and response • Consequences c) Lessons of the Emergency. d) Politics after Emergency. • Lok Sabha Elections 1977 • Janata Government d) Legacy	**Students will be able to:** • Understand the causes and consequences of Emergency • Examine the lessons of Emergency • Evaluate the rule of Janata Government

7. Regional Aspirations Topics to be focused: a) Region and the Nation • Indian Approach • Areas of Tension • Jammu and Kashmir • Roots of the Problem • External and Internal disputes • Politics since 1948 • Insurgency and After • 2022 and Beyond b) Punjab • Political Context • Cycle of Violence • Road to Peace c) The Northeast • Demand for autonomy • Secessionist Movements • Movements against outsiders • Assam and National Integration	**Students will be able to:** • Discuss the implications of regional demands. • Analyse the importance of integrity in India. • Appreciate the initiatives taken by the government in dealing with regional aspirations
8. Recent Developments in Indian Politics Topics to be focused a) Context of 1990s b) Era of Coalition • Alliance Politics c) Political rise if the Backward Classes • Mandal Implemented • Political Fallouts d) Communalism, Secularism and Democracy. • Ayodhya Dispute • Demolition and after e) Emergence of New Consensus f) Lok Sabha Elections 2004 g) Growing Consensus	**Students will be able to:** • Understand momentous changes taking place in the nation since 1989 • Trace the rise and growth of BJP. • Identify the areas of growing consensus

Prescribed Books:

1. Contemporary World Politics, Class XII, Published by NCERT
2. Politics in India since Independence, Class XII, Published by NCERT
3. Added Reference Material available with the document in the Annexure

Project Work (Class XI and XII)

The marks will be allocated under the following heads:

S.No.	Components	Marks Allotted
1.	Introduction/Overview	2
2.	Variety Of Contents	3
3.	Presentation	3
4.	Conclusion	1
5.	Bibliography	1
6.	Viva-Voce	5
7.	Continuousl Assessment (Unit Test)	5
	TOTAL	**20**

Note:- Assessment of project will be done by internal examiner in both classes XI and XII

SUGGESTED TOPICS

CLASS XI

1. Making of the Constitution.
2. Elections in India.
3. Working of the Indian Judiciary System.
4. Social Justice: Are ethics followed in Indian Politics
5. Human Rights Act and its gratification in India.
6. Political impact on Indian Legislation.

CLASSXII

1. NAM- 1961 to present times.
2. Division of Germany with special focus on the construction and dismantling of the Berlin Wall.
3. CIS-Central Asian Republics
4. Disintegration of USSR with special focus on Gorbachev.
5. Arab Spring
6. Cover the negative as well as positive aspects of relationship between India and the following countries.

Focus on any one of the following (current updates should be highlighted):

a) Relationship between India and Russia
b) Relationship between India and China
c) Relationship between India and Pakistan
d) Relationship between India and Bangladesh

7. ASEAN
8. European Union and BREXIT
9. BRICS
10. SAARC
11. India's Nuclear Policy
12. United Nations with focus on India's candidature in Security Council.
13. UN Agencies – UNICEF, UNESCO, WHO
14. Pandemics: Covid 19- Its global impact (focus on worldwide cooperation and preparedness along with controversies (please collect newspaper clippings for the same)
15. Partition of India-Theory behind it and its legacy
16. Comparison between NITI AAYOG and Planning Commission and their contribution in India's Development.
17. Election 2019- Rise of BJP and Downfall of Congress (1989-2019).
18. Imposition of Emergency in India
19. NDA III and NDA IV – Social and Economic welfare programmes.

2025-26
PSYCHOLOGY
CLASS XI
Theory one paper

Time : 3 Hours **Marks: 70**

Units	Topics	Marks
I	Understanding Psychology	11
II	Methods of Enquiry in Psychology	13
III	Human Development	11
IV	Sensory, Attentional and Perceptual Processes	8
V	Learning	9
VI	Human Memory	8
VII	Thinking	5
VIII	Motivation and Emotion	5
	Total	**70**

COURSE STRUCTURE

	Name of the Units
Unit I	**Understanding Psychology** *The topics in this unit are:* 1. Introduction 2. Nature of Psychology: ● Psychology as a Discipline ● Psychology as a Natural Science ● Psychology as a Social Science 3. Understanding Mind and Behaviour 4. Popular Notions about the Discipline of Psychology 5. Evolution of Psychology 6. Development of Psychology in India 7. Branches of Psychology 8. Psychology and Other Disciplines 9. Psychology in Everyday Life
Unit II	**Methods of Enquiry in Psychology** *The topics in this unit are:* 1. Introduction 2. Goals of Psychological Enquiry ● Steps in Conducting Scientific Research ● Alternative Paradigms of Research 3. Nature of Psychological Data

	4. Some Important Methods in Psychology ● Observational Method ● Experimental Method ● Correlational Research ● Survey Research ● Psychological Testing ● Case Study 5. Analysis of Data ● Quantitative Method ● Qualitative Method 6. Limitations of Psychological Enquiry 7. Ethical Issues
Unit III	**Human Development** *The topics in this unit are:* 1. Introduction 2. Meaning of Development ● Life-Span Perspective on Development 3. Factors Influencing Development 4. Context of Development 5. Overview of Developmental Stages ● Prenatal Stage ● Infancy ● Childhood ● Challenges of Adolescence ● Adulthood and Old Age
Unit IV	**Sensory, Attentional and Perceptual Processes** *The topics in this unit are:* 1. Introduction 2. Knowing the world 3. Nature and varieties of Stimulus 4. Sense Modalities ● Functional limitation of sense organs 5. Attentional Processes ● Selective Attention ● Sustained Attention 6. Perceptual Processes ● Processing Approaches in Perception 7. The Perceiver 8. Principles of Perceptual Organisation

	9. Perception of Space, Depth and Distance ● Monocular Cues and Binocular Cues 10. Perceptual Constancies 11. Illusions 12. Socio-Cultural Influences on Perception
Unit V	**Learning** *The topics in this unit are:* 1. Introduction 2. Nature of Learning 3. Paradigms of Learning 4. Classical Conditioning ● Determinants of Classical Conditioning 5. Operant/Instrumental Conditioning ● Determinants of Operant Conditioning ● Key Learning Processes 6. Observational Learning 7. Cognitive Learning 8. Verbal Learning 9. Skill Learning 10. Factors Facilitating Learning 11. Learning Disabilities
Unit VI	**Human Memory** *The topics in this unit are:* 1. Introduction 2. Nature of memory 3. Information Processing Approach : The Stage Model 4. Memory Systems : Sensory, Short-term and Long-term Memories 5. Levels of Processing 6. Types of Long-term Memory ● Declarative and Procedural; Episodic and Semantic 7. Nature and Causes of Forgetting ● Forgetting due to Trace Decay, Interference and Retrieval Failure 8. Enhancing Memory ● Mnemonics using Images and Organisation
Unit VII	**Thinking** *The topics in this unit are:* 1. Introduction 2. Nature of Thinking

	● Building Blocks of Thought 3. The Processes of Thinking 4. Problem Solving 5. Reasoning 6. Decision-making 7. Nature and Process of Creative Thinking ● Nature of Creative Thinking ● Process and strategies of Creative Thinking 8. Thought and Language 9. Development of Language and Language Use
Unit VIII	**Motivation and Emotion** *The topics in this unit are:* 1. Introduction 2. Nature of Motivation 3. Types of Motives ● Biological Motives ● Psychosocial Motives 4. Maslow's Hierarchy of Needs 5. Nature of Emotions 6. Expression of Emotions ● Culture and Emotional Expression ● Culture and Emotional Labeling 7. Managing Negative Emotions 8. Enhancing Positive Emotions

Practical (Projects/small study, experiments, Continuous Assessment) 30 marks

The students shall be required to undertake ***one project /small study and conduct two experiments.*** The project/small study would involve the use of different methods of enquiry like observation, survey, interview, questionnaire related to the following topics:

- Bullying/Cyberbullying
- Mental health and wellbeing
- Impact of social media on the youth today
- Altruism and its impact on wellbeing
- Peer Pressure
- Anger management
- Sleep Hygiene
- Changing Gender roles and stereotypes
- Cooperation and Competition
- Compliance and Obedience

You may also choose to do a project on any topic covered in the course (e.g., Human development, Learning, Memory, Motivation, Perception, Attention and Thinking). Experiments could focus on cause-and-effect relationships.

Practical Examination
Practical- 30 Marks

• Practical (Experiments) file	04 Marks
• Project File	04 Marks
• Viva Voce (Project and experiment)	05 Marks
• One experiment (04 marks for conduction of experiment and 08 marks for reporting)	12 Marks
Continuous Assessment(Unit Test)	**05**Marks
Total	**30 Marks**

2025-26
PSYCHOLOGY
CLASS XII
Theory one paper

Time : 3 Hours **Marks: 70**

Units	Topics	Marks
I	Variations in Psychological Attributes	13
II	Self and Personality	13
III	Meeting Life Challenges	9
IV	Psychological Disorders	12
V	Therapeutic Approaches	9
VI	Attitude and Social Cognition	8
VII	Social Influence and Group Processes	6
	Total	**70**

COURSE CONTENT

Unit I	**Variations in Psychological Attributes** *The topics in this unit are:* 1. Introduction 2. Individual Differences in Human Functioning 3. Assessment of Psychological Attributes 4. Intelligence 5. Psychometric Theories of Intelligence, Information Processing Theory: Planning, Attention-arousal and Simultaneous successive Model of Intelligence, Triarchic Theory of Intelligence; Theory of Multiple Intelligences. 6. Individual Differences in Intelligence 7. Culture and Intelligence 8. Emotional Intelligence 9. Special Abilities: Aptitude: Nature and Measurement 10. Creativity
Unit II	**Self and Personality** *The topics in this unit are:* 1. Introduction 2. Self and Personality 3. Concept of Self 4. Cognitive and Behavioural aspects of Self 5. Culture and Self 6. Concept of Personality 7. Major Approaches to the Study of Personality

	● Type Approaches ● Trait Approaches ● Psychodynamic Approach and Post Freudian Approaches ● Behavioural Approach ● Cultural Approach ● Humanistic Approach 8. Assessment of Personality ● Self-report Measures ● Projective Techniques ● Behavioural Analysis
Unit III	**Meeting Life Challenges** *The topics in this unit are:* 1. Introduction 2. Nature, Types and Sources of Stress 3. Effects of Stress on Psychological Functioning and Health ● Stress and Health ● General Adaptation Syndrome ● Stress and Immune System ● Lifestyle 4. Coping with Stress ● Stress Management Techniques 5. Promoting Positive Health and Well-being ● Life Skills ● Positive Health
Unit IV	**Psychological Disorders** *The topics in this unit are:* 1. Introduction 2. Concepts of Abnormality and Psychological Disorders ● Historical Background 3. Classification of Psychological Disorders 4. Factors Underlying Abnormal Behaviour 5. Major Psychological Disorders ● Anxiety Disorders ● Obsessive-Compulsive and Related Disorders ● Trauma-and Stressor-Related Disorders ● Somatic Symptom and Related Disorders ● Dissociative Disorders ● Depressive Disorder ● Bipolar and Related Disorders

	● Schizophrenia Spectrum and Other Psychotic Disorders ● Neurodevelopmental Disorders ● Disruptive, Impulse-Control and Conduct Disorders ● Feeding and Eating Disorders ● Substance Related and Addictive Disorders
Unit V	**Therapeutic Approaches** *The topics in this unit are:* 1. Nature and Process of psychotherapy ● Therapeutic relationship 2. Types of Therapies ● Behaviour Therapy ● Cognitive Therapy ● Humanistic-Existential Therapy ● Alternative Therapies ● Factors contributing to healing in Psychotherapy ● Ethics in Psychotherapy 3. Rehabilitation of the Mentally Ill
Unit VI	**Attitude and Social Cognition** *The topics in this unit are:* 1. Introduction 2. Explaining Social Behaviour 3. Nature and Components of Attitudes 4. Attitude Formation and Change ● Attitude Formation ● Attitude Change ● Attitude-Behaviour Relationship 5. Prejudice and Discrimination 6. Strategies for Handling Prejudice
Unit VII	**Social Influence and Group Processes** *The topics in this unit are:* 1. Introduction 2. Nature and Formation of Groups 3. Type of Groups 4. Influence of Group on Individual Behaviour ● Social Loafing ● Group Polarisation

Practical **30 Marks**

A. Development of case profile:
   Using appropriate methods like interview, observation & psychological tests.
B. Test administration:
   Students are required to administer and interpret five psychological tests related to various psychological attributes like intelligence, aptitude, attitude, personality, etc.
C. In the Practical examination, the student will be required to administer and interpret two psychological tests.

Distribution of Marks:

Topics	Internal Examiner	External Examiner
Practical File and Case Profile	10	-
Continuous Assessment (Unit Test)	05	-
Viva Voce (Case Profile & Two psychological tests)	-	03
Two tests (4 marks for conducting the tests and 8 marks for reporting)	-	12
	15	15

Prescribed Books:

1. Psychology, Class XI, Published by NCERT
2. Psychology, Class XII, Published by NCERT

2025-26

PUNJABI (107)

Class XI

Time: 3 Hours **One Paper** **Marks: 80**

Unit/Areas of Learning	Marks
A. Advanced Reading Skills	08
B. Effective Writing Skills	15
C. Prosody and Rhetoric	17
D. Literature	40

LANGUAGE **Marks**

Section A : Advanced Reading Skills **08**

One unseen passage of about 150 words followed by 4-5 questions to test comprehension and inferring meanings. A suggestive heading may be asked and vocabulary may be tested.
Question should be of MCQ types.

Section B : Effective Writing Skills **15**

1. Report Writing for Newspaper (100-125 Words) 06
2. Writing a long composition such as Essay, Article or Speech (150-200 Words) 09

Section C : **17**

Variety of questions as listed below will be included involving the application of grammar items-

1- Translation from English to Punjabi 03
2- Office Vocabulary (With very short answers) 03
3- Vocabulary related to various topics (With very short answers) 03
4- Sentences Related to Banks, Railways, Posts, Insurance Services and Computers (With very short answers) 02
5- Idioms (Making sentences expressing meaning) (Based on the Idioms given in text book) 03
6- Advertisements / Invitations 03

Section D : Punjabi Folk Literature (Based on Text Book) **40**

1- Folk Song (Suhaag, Ghori,Sitthani, Tappa) (MCQ based) 05

2- Folk Songs(Baliya, Dhola, Mahiya, Ridda) (MCQ based) 05
3- Short Answers on Folk Songs (Choice based) 10
4- Short Answers on Legends and Love Stories (Choice Based) 20

Internal Assessment **20 Marks**

S. N.	Topic	Marks
1.	Listening Skills	4
2.	Speaking Skills	4
3.	Project Work	
	a) Project Report/Script/Essay etc.	4
	b) Viva based on Project	3
4.	Continuous Assessment(Unit Test)	5
	Total	**20**

Any one of the following Project Work is to be undertaken -

1. Translation: Students are to translate a story written in English or Hindi or in any Indian language to Punjabi within 1000 words.
2. Interview : An interview of any distinguished persona lity can be taken by the students.
3. Dramatization : Students can transform a story written in any of the India languages into drama in Punjabi language within 1000 -2000 words.
4. Survey: students will conduct a survey or their own school or on any neighboring school to reveal the facts , history, configuration of the student 's and teacher's ethnic identity etc. of the school under survey.
5. Self Composed Story: Students can write a story on any special incident or day they experienced in their life.

Prescribed Text Book:- Compulsory Punjabi 11(लाजमी–कक्षा 11), Published by Punjab School Education Board

Web Link of Book: https://www.pseb.ac.in/books?catid=2

2025-26

PUNJABI (107)

Class XII

Time: 3 Hours **One Paper** **Marks: 80**

1. **Advanced Reading Skills**
   (i) Multiple Choice Questions based on Unseen Prose Passage 6
2. **Effective Writing Skills**
   (a) Letters of Conduct (Selective) 6
   (b) To compose a paragraph of 125-130 words on the given topic (Choice based) 10
3. **Grammar**
   (a) Syntax (Based on Compulsory Punjabi 12 textbook) 1x4=4
   (b) Akhan / Akhnauta: To clarify the situation 2x5=10
4. **The Poem**
   (a) Contextual Interpretation based on choice from given poetic passages. 8
   (b) MCQ 1x4=4
5. **Stories**
   (a) Subject Characterization, Critical Summary 8
   (b) MCQ 1x4=4
   (c) Short Answer Questions 4x2=8
6. **Introduction to Punjabi Culture**
   (a) MCQ 1x4=4
   (b) Short Answer Questions 4x2=8

PRESCRIBED BOOKS AND SELECTED TEXT
"COMPULSORY PUNJABI- 12"(POEMS)

1.Tukdi Jag toh Nyari- Bhai Vir Singh
2. Taj Mahal –Prof Mohan Singh

3. Chum Chum Rakho- Nand Lal Nurpuri
4. Varas Shah- Amrita Pritam
5. Mera Bachpan – Harbhajan Singh
6. Geet- Shiv Kumar Batalvi

"COMPULSORY PUNJABI-12"(STORIES)

1. Sanjh (Munal Mishra)
2. Neeli (Kartar Singh Duggal)
3. Mada Banda (Prem Prakash)
4. Ghar Ja Apne (Guljar Singh Sandhu)

"COMPULSORY PUNJABI-12"(INTRODUCTION TO PUNJABI CULTURE)

1. Punjabi De Mele te Tyohar- DR S. S. Vanjara Bedi
2. Punjab De Rasam Riwaz -Guljar Singh Sandhu
3. Punjab Diya Lok Kheda- Sukhdev Madpuri
4. Punjab De Lok Nach- Dr Jagir Singh Noor

Note- Compulsory Punjabi 12 Textbook os published by Punjab School Education Board.

This book is' also available on the web Link- https://www.pseb.ac.in/books?catid=2

Internal Assessment **20 Marks**

S. N.	Topic	Marks
1.	Listening Skills	4
2.	Speaking Skills	4
3.	**Project Work**	
	a) Project Report/Script/Essay etc.	4
	b) Viva based on Project	3
4.	Continuous Assessment(Unit Test)	5
	Total	**20**

Any one of the following Project Work is to be undertaken -

5. Translation: Students are to translate a story written in English or Hindi or in any Indian language to Punjabi within 1000 words.
6. Interview : An interview of any distinguished persona lity can be taken by the students.

7. Dramatization : Students can transform a story written in any of the India languages into drama in Punjabi language within 1000 –2000 words.
8. Survey: students will conduct a survey or their own school or on any neighboring school to reveal the facts , history, configuration of the student 's and teacher's ethnic identity etc. of the school under survey.
9. Self Composed Story: Students can write a story on any special incident or day they experienced in their life.

2025–26
संस्कृत (105)
कक्षा–11

अवधिः होरात्रयम् **एकम् प्रश्नपत्रम्** **पूर्णांका : 80**

अस्मिन् प्रश्नपत्रे चत्वार :: खण्डाः भविष्यन्ति	
खण्डः ''क'' अपठितांश–अवबोधनम्	**08**
खण्डः ''ख'' रचनात्मककार्यम्	**12**
खण्डः ''ग'' अनुप्रयुक्तव्याकरणम्	**20**
खण्डः ''घ''	**40**
(अ) पठितांश –अवबोधनम्	28
(ब) संस्कृतसाहित्येतिहासस्य परिचयः	12

प्रतिखण्डं विस्तृतविवरणम्

खण्डः 'क'
(अपठितांशावबोधनम्)

अङ्काः 08

80–100 शब्दपरिमितः एक सरलः अपठितः गद्यांशः। संस्कृतसाहित्यपरिचायकं विषयवस्तु स्यात्।

प्रश्नवैविध्यम्

i.	एकपदेन उत्तरम्	02
ii.	पूर्णवाक्येन उत्तरम्	02
iii.	वाक्ये कर्तृक्रिया–पदचयनम्	01
iv.	सर्वनामस्थाने संज्ञाप्रयोगः	01
v.	विशेषण–विशेष्य / पर्याय / विलोमादिचयनम्	01
vi.	समुचितशीर्षकप्रदानम्	01

खण्डः 'ख'
(संस्कृतेन रचनात्मकं लिखितकार्यम्)

अङ्काः 12

1.	अनौपचारिकं पत्राम / प्रार्थनापत्राम्	04
2.	लघुकथा (शब्दसूचीसाहाय्येन, रिक्तस्थानपूर्ति–माध्यमेन) / वार्तालापे एकपक्षपूरणम	04
3.	चित्रामधिकृत्य / निर्दिष्टशब्दसूचीसाहाय्येन (संकेताधारितम्) अनुच्छेदलेखनम्	04

खण्डः 'ग'
(अनुप्रयुक्तव्यकरणम्)

अङ्काः 20

1. (अ) वर्णानामः उच्चारणस्थानम् 02
   (आ) वर्तनी 02
   वर्णवियोजनम्, वर्णसंयोजनम्

2. **सन्धिः–** पाठ्यपुस्तकें प्रयुक्तपदानां सन्धिच्छेदः सन्धिकरणम् 03

स्वरसन्धिः– दीर्घः, गुणः, वृद्धि, यण्, अयादिः, प्रकृतिभावः

व्यंजनसन्धि– श्चुत्व, ष्टुत्व, जश्त्व, षत्व, णत्वविधानम्, अनुस्वारः, परसवर्णः

विसर्गसन्धि– सत्व, उत्व, रूत्व, लोपः, विसर्गस्थाने स्, श्, ष्।

3. **शब्दरूपाणि** 04
वाक्येषु सविभक्तिकप्रयोगः
(क) अजन्ताः–बालक, फल, रमा, कवि, पति, मति, वारि, नदी, शिशु, धेनू,
मधु, वधु, पितृ, मातृ, कर्तृ एवं समानान्तरप्रयोगाः।
(ख) हलन्ताः– राजन्, गच्छत्, भवत्, आत्मन्, विद्वस्, चन्द्रमस्, वाच् एवं समानान्तरप्रयोगाः।
(ग) सर्वनामानि– सर्व, यत्, तत्, किम्, इदम्, (त्रिषु लिङ्गेषु) अस्मद्, युष्मद्
(घ) संख्यावाचकशब्दाः– एकसंख्यातः दससंख्यापर्यन्तम् (त्रिषु लिङगेषु) एकतः शतपर्यन्तं संख्याज्ञानम्

4 **धातुरूपाणि–** (लट्, ल्ट, लोट्, लङ्, विधिलिङ् इति) पंचलकारेषु अधोलिखितधातुनां/
समानार्थकधातूनां वाक्येषु प्रयोगः। 03
(क) परस्मैपदिनः– भू, पठ्, गम्, लिख्, पा, स्था, दृश, अस्, कथ, भक्ष, घ्रा, क्रुध, हन्,
श्रु, नृत्, स्पृश, चुर्, कथ।
(ख) आत्मनेपदिनः– लभ्, सेव्, मुद, याच्।
(ग) उभयपदिनः– कृ, हृ, क्रि, ज्ञा, ग्रह्, शक्, (केवलं लट्–लृट–लकारयोः)

5 कारक– उपपदविभक्तिप्रयोगः 03

6 सामान्य–वाच्य– परिवर्तनम (केवलं लट्–लकारे) 03

खण्डः 'घ'

पूर्णांक : 40

भागः (i) 28
(पठितांश अवबोधनम्)

पठितसामग्री–अवबोधनम्
1. (अ) अंशत्रायम् 12
   एकः गद्यांशः, एकः पद्यांशः तथा एकः नाट्यांशः, (4+4+4)

पाठ्यांश–आधारितम् प्रश्नवैविध्यम्

एकपदेन उत्तरम् 01

पूर्णवाक्येन उत्तरम् 01

विशेषण–विशेष्य–अन्वितिः / पर्याय / विलोमचयनम् कर्तृ–क्रिया–पदचयनम् 01

सर्वनामस्थाने संज्ञाप्रयोगः 01

2. उद्धृतांशानाम् प्रसंङ्गसन्दर्भलेखनम् कः कम् कथयति / सन्दर्भग्रन्थस्य लेखकस्य च नामोल्लेखनम् 03
3. दत्ते भावार्थे रिक्तस्थानपूर्तिः 03
4. उदधृतश्लोकानाम् / प्रदत्तेषु अन्वयेषु रिक्तस्थानपूर्तिः 03
5. प्रदत्तवाक्यांशानाम् सार्थकं संयोजनम् 03
6. प्रदत्तपंक्तिषु प्रसंङ्गानुसारं श्लिष्टपदानाम् / पदानाम् अर्थलेखनम् 04

भागः (ii) **12**

(सामान्यः संस्कृत–साहित्य–परिचयः)

1. संस्कृतेन वस्तुनिष्ठ / अतिलघूत्तरप्रश्नमाध्यमेन अधोलिखितसंस्कृतसाहित्यविषयकं परीक्षणम्

संस्कृतशब्दस्य व्युत्पत्तिः परिभाषा च 02

वेदः, उपनिषद्, पुराणम्, स्मृतिः, रामायणम्, महाभारतम् 04

गद्यकाव्यम्, पद्यकाव्यम्, चम्पूकाव्यम् 03

नाटकम् प्रमुखनाट्यतत्वानां प्रदत्तपरिभाषासु शुद्धपरिभाषाचयनम 03

आन्तरिक मूल्यांकन **कक्षा–11**

क0 स0	मूल्यांकन बिन्दु	अक
1.	श्रवण कौशल	4
2.	वाचन कौशल	4
3.	परियोजना कार्य	
	अ. विषय वस्तु	3
	ब. भाषा एवं प्रस्तुति	2
	स. शोध एवं मौलिकता	2
4	सतत मूल्यांकन (इकाई परीक्षा)	5
	योग	20

पाठ्यपुस्तकम्– भास्वती प्रथमो खण्डः (पाठ्यपुस्तकम्), राण् शैण् अनुण् प्रण् परि0 द्वारा प्रकाशितम् ।

नोट– प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रकार के पूछे जायेगे जिनमें से आधे प्रश्न (8 अंक) बहुविकल्पीय प्रकार के होंगे।

कक्षा –11 विषय– संस्कृत

पुस्तक का नाम– भास्वती प्रथमो भागः

अध्याय स0	पाठ का नाम
1.	कुशलप्रशासनम्
2.	सूक्तिसुधा
3.	ऋतुचर्या
4.	वीरः सर्वदमनः
5.	शुकशावकोदन्तः
6.	भव्यः सत्याग्रहाश्रमः
7.	संगीतानुरागी सुब्बण्णः
8.	वस्त्रविक्रयः
9.	यद्भूतहितं तत्सत्यम्
10.	स मे प्रियः
11.	अथ शिक्षां प्रवक्ष्यामि

संशोधित पाठ्यक्रम(2025–26)

संस्कृत (105)

कक्षा – 12

अवधिः होरात्रयम् | एकम् प्रश्नपत्रम् | पूर्णांकः 80

अस्मिन प्रश्नपत्रे चत्वारः खण्डाः भविष्यन्ति			अंक
खण्डः "क"	अपठितांश–अवबोधम्		10
खण्डः "ख"	रचनात्मककार्यम्		15
खण्डः "ग"	अनुप्रयुक्तव्याकरणम्		20
खण्डः "घ"			35
	(अ) पठितांश–अवबोधनम्	25	
	(ब) संस्कृतसाहित्येतिहासस्य परिचयः	10	

भागानुसारं विषयाः अंङ्कविभाजनश्च

क्र.स.	विषयाः	प्रश्नप्रकाराः	मूल्यभारः
"क" भागः **अपठितावभोधनम्**			
1.	अपठितः गद्यांशः(100-200 शब्दपरिमितः)	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ शीर्षकम्(लघूत्तरात्मकः) भाषिककार्यम्	2x1=2 2x2=4 1x1=1 3x1=3
		पूर्णभारः	**10 अङ्काः**
"ख" भागः **रचनात्मककार्यम्**			
2.	पत्रम्	निबन्धात्मकः	10x1/2=5
3.	चित्राधारिता वाक्य संरचना (25-30 शब्दपरिमिता) अथवा अनुच्छेदलेखनम्	निबन्धात्मकः	5

	(25-30 शब्द्परिमितम्)		
4.	लघुकथापूर्ति: अथवा वार्तालापे एकलपक्षपूरणम्	निबन्धात्मक:	10x1/2=5 5x1=5
		पूर्णभार:	**20 अङ्का:**
"ग" भाग:			
5.	सन्धि:	लघूत्तरात्मक:	4x1=4
6.	समास:	लघूत्तरात्मक:	4x1=4
7.	प्रत्यया:	लघूत्तरात्मक:	4x1=4
8.	उपपदविभक्तिप्रयोग:	लघूत्तरात्मक:	4x1=4
9.	वाच्यम्	लघूत्तरात्मक:	4x1=4
		पूर्णभार:	**20 अङ्का:**
"घ" भाग: (i) **पठितावभोधनम्**			
10.	गद्याश:	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2x1/2=1 2x1=2 2x1=2
11	पद्यांश:	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2x1/2=1 2x1=2 2x1=2
12.	नाट्यांश:	अति-लघूत्तरात्मकौ पूर्णवाक्यात्मकौ लघूत्तरात्मकौ (भाषिककार्यम्)	2x1/2=1 2x1=2 2x1=2
13.	भावार्थै रिक्तस्थानपूर्ति: अथवा शुद्धभावार्थचयनम्	निबन्धात्मक:/ लघूत्तरात्मक:	3x1=3
14.	अन्वय:	निबन्धात्मक:	3x1=3
15.	प्रदत्तवाक्याशानां सार्थकं संयोजनम् अथवा प्रद्त्तपङ्कतिषु प्रसङ्गानुसारं पदनाम् अर्थलेखनम्	लघूत्तरात्मक:	4x1=4
		पूर्णभार:	**20 अङ्का:**

"घ" भाग: (ii) संस्कृत–साहित्येतिहासस्य सामान्यः परिचयः			
16.	भास्वतीपाठ्यपुस्तकस्थ-पाठानां सन्दर्भग्रन्थाः, रचयितारः तेषां रचनाः च (1+1+1)	लघूत्तरात्मकः	3x1=3
17.	महाकाव्यम्ए गद्यकाव्यम्ए चम्पूकाव्यम्	लघूत्तरात्मकः	3x1=3
18.	नाट्यतत्वानां मुख्यविशेषतानां परिचयः	लघूत्तरात्मकः	4x1=4
		पूर्णभारः	**10 अङ्काः**
			सम्पूर्णभारः 80 अङ्काः

आन्तरिक मूल्यांकन **कक्षा–12**

क्र0 स0	मूल्यांकन बिन्दु	अंक
1.	श्रवण कौशल	4
2.	वाचन कौशल	4
3.	परियोजना कार्य	
	अ–विषय वस्तु	3
	ब–भाषा एवं प्रस्तुति	2
	स–शोध एवं मौलिकता	2
4	सतत मूल्यांकन	5
	योग	**20**

निर्धारित पुस्तक का नाम– भास्वती द्वितीयो भागः एन0सी0ई0आर0टी0 नई दिल्ली द्वारा प्रकाशित।

नोट– प्रश्नपत्र में 20 प्रतिशत प्रश्न (16 अंक)वस्तुनिष्ठ प्रकार के पूछे जायेगे जिनमें से आधे प्रश्न (8 अंक) बहुविकल्पीय प्रकार के होंगे।

2025-26
SOCIOLOGY(123)
CLASS XI

Time: 3 Hours **Theory One Paper** **Max. Marks: 80**

Units		Marks
A	**Introducing Sociology**	
	1. Sociology, Society and its relationship with other Social Science Disciplines	10
	2. Terms, concepts and their use in Sociology	10
	3. Understanding Social Institutions	12
	4. Culture and Socialization	12
	Total	**44**

B	**Understanding Society**	
	7. Social Change and Social order in Rural and Urban Society	12
	9. Introducing Western Sociologists	12
	10. Indian Sociologists	12
	Total	**36**
Total		**80**
Project Work		**20**

COURSE CONTENT

A.	**INTRODUCING SOCIOLOGY**	**44 Marks**
Unit 1	**Sociology, Society and its Relationship with other Social Sciences** Introducing Society: Individuals and collectivities. Pluralities and Inequalities among societies. Introducing Sociology: Emergence. Nature and Scope. Relationship with other Social Science disciplines	
Unit 2	**Terms, Concepts and their use in Sociology** Social Groups and Society Social Stratification Status and Role Society & Social Control	
Unit 3	**Understanding Social Institutions** Family, Marriage and Kinship	

	Work & Economic Life Political Institutions Religion as a Social Institution Education as a Social Institution
Unit 4	**Culture and Socialization** Defining Culture Dimensions of Culture Socialization Agencies of Socialisation &Sociology

B.	**UNDERSTANDING SOCIETY**	**36 Marks**
Unit 7	**Social Change and Social Order in Rural and Urban Society** Social Change: Types, Causes and Consequences Social Order: Domination, Authority and Law; Contestation, Crime and Violence Concepts: Village, Town and City Social Order and Social Change in Rural and Urban Areas	
Unit 9	**Introducing Western Sociologists** The Context of Sociology Karl Marx on Class Conflict Emile Durkheim: Division of Labour in society Max Weber: Interpretive Sociology, Ideal Type & Bureaucracy	
Unit 10	**Indian Sociologists** G.S. Ghurye on Caste and Race D.P. Mukherjee on Tradition and Change A.R. Desai on the State M.N. Srinivas on the Village	

PROJECT WORK	
Max. Marks: 20	
A. Project 1. Introduction -2 Marks 2. Statement of Purpose – 2 Marks 3. Research Question – 2 Marks 4. Methodology – 2 Marks 5. Data Analysis – 2 Marks 6. Conclusion – 2 Marks 7. Viva– 3 Marks	**15 Marks**
B. Continuous Assessment (Unit Test)	**05 Marks**

2025-26
SOCIOLOGY(123)
CLASS XII

Time: 3 Hours **Theory One Paper** **Max. Marks: 80**

Units		Marks
A	**Indian Society**	
	1. Introducing Indian Society	Non- evaluative
	2. The Demographic Structure of Indian Society	10
	3. Social Institutions: Continuity and Change	10
	5. Patternsof Social Inequality and Exclusion	10
	6. The Challenges of Cultural Diversity	10
	7. Suggestions for Project Work	Non- evaluative
		40
B	**Social Change and Development in India**	
	8. Structural Change	5
	9. Cultural Change	5
	11.Change and Development in Rural Society	10
	12. Change and Development in Industrial Society	10
	15. Social Movements	10
		40
Total		**80**

COURSE CONTENT

A.	INDIAN SOCIETY	40 Marks
Unit 1	**Introducing Indian Society** Colonialism, Nationalism, Class and Community **(Non- evaluative)**	
Unit 2	**The Demographic Structure of the Indian Society** Theories and concepts in demography Rural-Urban Linkages and Divisions Population Policy in India	

Unit 3	**Social Institutions: Continuity and Change** Caste and the Caste System Tribal Communities Family and Kinship	
Unit 5	**Patterns of Social Inequality and Exclusion** Social Inequality and Social Exclusion Systems justifying and perpetuating Inequality - Caste, Tribe, the Other Backward Classes Adivasi Struggles The Struggle for Women's Equality and Rights The struggles of the Differently Abled	
Unit 6	**The Challenges of Cultural Diversity** Cultural communities and the nation state Regionalism in the Indian context The Nation state and religion related issues and identities Communalism, secularism and the nation state State and Civil Society	
Unit 7	**Suggestions for Project Work**	
B.	**SOCIAL CHANGE AND DEVELOPMENT IN INDIA**	**40 Marks**
Unit 8	**Structural Change** Understanding Colonialism, Industrialization, Urbanization	
Unit 9	**Cultural Change** Social Reform Movements Different Kinds ofSocialChange:Sanskritisation,Westernisation, Modernization, Secularization	
Unit 11	**Change and Development in Rural Society** Agrarian Structure: Caste & class in Rural India Land Reforms, Green Revolution and Emerging Agrarian society Green revolution and its social consequences Transformation in Rural Society Circulation of labour Globalization, Liberalization and Rural Society	

Unit 12	**Change and Development in Industrial Society** From Planned Industrialization to Liberalization How people find Jobs Work Processes: How work is carried out, working conditions, home based work, Strikes and Unions
Unit 15	**Social Movements** Concept of Social Movements Theories and Classification of Social Movements Environmental Movements Class-Based Movements: Workers, Peasants Caste-Based Movements: Dalit Movement, Backward Class/Castes, Trends in Upper Caste Responses Tribal Movements Women's Movements in Independent India

PROJECT WORK (Class XII)		
Max. Marks: 20		
1	Introduction	2
2	Statement of Purpose	2
3	Research Question	2
4	Methodology	2
5	Data Analysis	2
6	Conclusion	2
7	Viva	3
8	Internal Asessment (Continuous Assessment)	5

Prescribed Books:

1. Introducing Sociology, Class XI, Published by NCERT
2. Understanding Society, Class XI, Published by NCERT
3. Indian Society, Class XII, Published by NCERT
4. Social Change and Development in India, Class XII, published by NCERT

2025-26

URDU (106)

CLASS XI

Section	Content	Marks
Section A: Comprehension and Writing		**45**
1. Reading		**05**
	Comprehension of an unseen passage (factual) of about 150 words followed by five questions.	05
2. Writing		**25**
	(a) Paragraph Writing	10
	(b) General Study of newspapers, magazines and periodicals in the language with the object of writing	10
	(i) Letter Writing: (Personal, Formal and Professional (Internal choice)	
	(ii) Advertisements	5
3. Grammar		**15**
	(a) Knowledge of Part of Speech:	10
	(i) Ism ki Qismein: Marafa, Nakra	
	(ii) Zameer ki Qismein: Mutakallim, Hazer, Ghaeb	
	(iii) Sifat ki Qismein: Zaati, Nisbati, Adabi, Miqdari	
	(b) Completion of sentences with suitable words, phrases and idiomatic phrases	05
Section B: Nai Awaaz, text book of 'Urdu' for class XI published by NCERT		**35**
1. Prose		**20**
	(i) One extract from the prescribed book followed by short answer type questions for comprehension.	07
	(ii) One essay type question (100 words) on content/theme of the prescribed book. (internal choice) (General or Value Based)	05
	(iii) Four short answer type questions on the prescribed book.	08
2. Poetry		**15**

	(i) One out of two extracts from the prescribed book followed by short answer type questions for comprehension.	05
	(ii) An essay type question (100 words) on theme/ content or a Value Based Question (Long answer type) (General or Value based)	05
	(iii) Five very short answer type questions on characters/ events/ evaluative nature	05
	Total	**80**
Section C:	Internal Assessment	20

	Grand Total	**100**

Note:-20 percent questions (16 marks) from Reading Comprehension (Unseen Passage), Grammar and Literature(Text book &Supplementary Reader) wil be of Objective types and 8 marks questions among them will be of MCQ type.

Prescribed Books:

1. **NAI AWAAZ**, text book of 'Urdu ' for class XI published by NCERT (2011)

Note: Following topics has been deleted: (1) Robot (Mazmoon), (2) Khane khana ki Faiyazi (Mazmoon),

(3) Khawahish (Nazm)- Afsar Merathi , (4) Kalyug, Nazeer Akbarabadi (Nazm).

2. **DHANAK:**

Note: Following topics has been deleted: (1) Ghazal (Mir Dard) (2) (Ghazal) Mushafi, (3) (Ghazal) Nasikh, (4) (Ghazal) Zauque, (5) Shuae ummid (Nazm) Iqbal, (6) Desh Singaar- Nazir Banarasi, (7) Sare Raah Guzare (Nazm) Akhtarul Iman, (8) Rubaiyat (Hali).

3. **URDU QAWAID**, PUBLISHED BY NCERT, NEW DELHI

Internal Assessment 20 Marks

S. N.	Topic	Marks
1.	Listening Skills	4
2.	Speaking Skills	4
3.	Project Work	
	a) Project Report/Script/Essay etc.	4
	b) Viva based on Project	3
4.	Continuous Assessment (Unit Test)	5

	Total	**20**

DETAILS OF LISTENING & SPEAKING SKILLS

LISTENING (SUGGESTIVE ACTIVITES)

1. To comprehend the explain content.
2. To do discussions on topics taken from the textbooks.
3. To listen to News bulletins and to develop the ability to discuss informally on wide ranging issues like current, National and International affairs, sports, business and any other relevant issue.
4. Formal group discussions and their reporting.
5. Development of art of formal public speaking.
6. Listening of lectures and talks and to extract relevant and useful information and to do presentations.
7. To listen to business news and to be able to extract relevant important information.

SPEAKING (SUGGESTVIE ACTIVITES)

1. Organization of Debates.
2. Poem recitation
3. Group Discussions – Any relevant topic
4. Programme Anchoring
5. To present any event
6. Story Telling
7. Story Completion
8. Role Play
9. Reporting
10. Picture Narration – Students are asked to tell the story taking place in the sequential pictures by paying attention to the criteria provided by the teacher as a Rubric.
11. Picture Description – A single picture may be given to student/ group of student's and they may ask to describe the picture.
12. Organization of a Seminar.
13. Presentation of a book review/ a play a short story or any other given by the teacher to be followed by a Q & A session.
14. Poetry Reading and reciting to be followed by interpretative tasks based on literary analysis of the content.
15. Critical review of a film or a play.

Note:

1. Teacher's may develop their own rubrics to assess the performance of student objectively. 2. It is recommended that listening & speaking skills should be regularly practiced in the class.

GUIDELINES FOR ASSESSMENT IN LISTENING & SPEAKING SKILLS

Parameters for Assessment – The listening & speaking skills are to be assessed on the following parameters:

i) Interactive competence (Institution & turn taking relevance to the topic)

ii) Fluency (cohesion, coherence and speed of delivery)
iii) Pronunciation
iv) Language (accuracy & vocabulary)

Note:

1. The practice of listening & speaking skills should be done throughout the academic year. 2. The final assessment of the skills is to be done as per the convenience and schedule of the school.
3. The record of the activities conducted and the marks given must be kept for three months after the declaration of result for any random checking by the Board (No recording of the speaking skill is to be done).

SOME SUGGESTIVE PROJECTS

1. Review of any prescribed textbook
2. Critical review of any poem included in the prescribed textbook
3. History of Urdu literature
4. Nationalism
5. Freedom struggle of India
6. Secularism
7. Environmental projection
8. Rivers of India
9. Mountains of India
10. Seasons and their Impact on life
11. Our Soldiers
12. Our Freedom Fighters (any one may be given)
13. Our Villages
14. Farmers of India
15. Biography & contribution of any author of the prescribed text book
16. Global Warming
17. Industrialization
18. Role of technology in today's life
19. Role of multimedia in Education
20. Condition of Education in India
21. Inclusive Education
22. Population Explosion
23. Co-operative learning
24. Importance of Skill development
25. Importance of Sports in life
26. Importance of Science and Technology in life
27. Cyber Safety
28. Merits and demerits of advertisement
29. Importance of Newspaper and Magazines
30. Swachh Bharat Abhiyan

Note: Emphasis may be given on the use of computer in the preparation and presentation of project.

2025-26

URDU (106)

CLASS – XII

Time: 3 Hours **Theory One Paper** **Marks:80**

Section	Content	Marks
Section A: Comprehension and Writing		**45**
1. Reading		10
	Comprehension of an unseen passage (factual) of about 150 words followed by five questions.	10
2. Writing		35
	(a) Essay (internal choice)	10
	(b) Letter Writing (Personal, business and official connected with daily life and application writing) (Internal choice)	08
	(c) Precis Writing	07
	(d) Sentence making with the help of idiomatic phrases	10
Section B: Nai Awaaz, text book of 'Urdu Core' for class XI published by NCERT		**35**
3. Prose		20
	(i) One extract from the prescribed book followed by short answer type questions for comprehension.	07
	(ii) One essay type question (100 words) on content/theme of the prescribed book. (internal choice) (General or Value Based)	05
	(iii) Four short answer type questions on the prescribed book.	08
4. Poetry		15
	(iv) One essay type question (100 words) on theme/ content or a Value Based Question (Internal choice)	05

	(v) Five very short answer type questions on characters/ events/ analytical nature (one word/ one sentence)	05
	(vi) Five text book based one word questions (objective type/ or a Value Based Question (Long answer type)	05
	Total	**80**
Section C:		**20**
1.	Speaking and listening skill	04+04
2.	Project Work	04
3.	Viva on Project Work	03
4.	Continuous Assessment (Unit Test)	05
	Grand Total	**100**

Note:-20 percent questions (16 marks)from Reading Comprehension (Unseen Passage), Grammar and Literature(Text book & Supplementary Reader) wil be of Objective types and 8 marks questions among them will be of MCQ type.

Prescribed Books:

1. **NAI AWAAZ,** text book of 'Urdu Core' for class XI published by NCERT (2011)

Note: Following topics has been deleted: (1) Japan (safarnama), (2) Bade Bol Ka Sar Neecha (Afsana), (3) Ek Gadhe Ki Sarguzasht (4) (Jagat Mohan Lal Ravaan) Rubaiyan, (5) Phoolmala (Nazm), Chakbast.

2. DHANAK:

Note: Following topics has been deleted: (1) Aql Badi ya bhains (Kahani), (2) Boorhi kaaki (Kahani), (3) Saf Shikan Bater (Novel), (4) chiria chire ki Kahani (Inshayia), (5) Mirza Ghalib (Drama).

3. **URDU QAWAID**, Published by NCERT, New Delhi

Section C.

DETAILS OF LISTENING & SPEAKING SKILLS

LISTENING (SUGGESTIVE ACTIVITES)

1. To comprehend the explain content.
2. To do discussions on topics taken from the textbooks.
3. To listen to News bulletins and to develop the ability to discuss informally on wide ranging issues like current, National and International affairs, sports, business and any other relevantissue.
4. Formal group discussions and their reporting.
5. Development of art of formal public speaking.
6. Listening of lectures and talks and to extract relevant and useful information and to dopresentations.
7. To listen to business news and to be able to extract relevant important information.

SPEAKING (SUGGESTVIE ACTIVITES)

1. Organization of Debates.
2. Poem recitation

3. Group Discussions – Any relevant topic
4. Programme Anchoring
5. To present any event
6. Story Telling
7. Story Completion
8. Role Play
9. Reporting
10. Picture Narration – Students are asked to tell the story taking place in the sequential picturesby paying attention to the criteria provided by the teacher as a Rubric.
11. Picture Description – A single picture may be given to student/ group of student's and theymay ask to describe the picture.
12. Organization of a Seminar.
13. Presentation of a book review/ a play a short story or any other given by the teacher to befollowed by a Q & A session.
14. Poetry Reading and reciting to be followed by interpretative tasks based on literary analysisof the content.
15. Critical review of a film or a play.

Note:

1. Teacher's may develop their own rubrics to assess the performance of student objectively. 2. It is recommended that listening & speaking skills should be regularly practiced in the class.

GUIDELINES FOR ASSESSMENT IN LISTENING & SPEAKING SKILLS

Parameters for Assessment – The listening & speaking skills are to be assessed on the following parameters:

i) Interactive competence (Institution & turn taking relevance to the topic)
ii) Fluency (cohesion, coherence and speed of delivery)
iii) Pronunciation
iv) Language (accuracy & vocabulary)

Note:

1. The practice of listening & speaking skills should be done throughout the academic year. 2. The final assessment of the skills is to be done as per the convenience and schedule of the school.
3. The record of the activities conducted and the marks given must be kept for three months after the declaration of result for any random checking by the Board (No recording of the speaking skill is to be done).

DETAILS OF PROJECT WORK

GUIDELINES FOR THE EVALUATION OF PROJECT – 07 MARKS

1. Content (Max, Word limit 1000) ,Language & Vocabulary 2 Marks
2. The Pictures and data presented based on the topic 1 Mark
3. Presentation 1 Marks
4. Viva on the project 3 Marks

SOME SUGGESTIVE PROJECTS

1. Review of any prescribed textbook
2. Critical review of any poem included in the prescribed textbook
3. History of Urdu literature

4. Nationalism
5. Freedom struggle of India
6. Secularism
7. Environmental projection
8. Rivers of India
9. Mountains of India
10. Seasons and their Impact on life
11. Our Soldiers
12. Our Freedom Fighters (any one may be given)
13. Our Villages
14. Farmers of India
15. Biography & contribution of any author of the prescribed text book
16. Global Warming
17. Industrialization
18. Role of technology in today's life
19. Role of multimedia in Education
20. Condition of Education in India
21. Inclusive Education
22. Population Explosion
23. Co-operative learning
24. Importance of Skill development
25. Importance of Sports in life
26. Importance of Science and Technology in life
27. Cyber Safety
28. Merits and demerits of advertisement
29. Importance of Newspaper and Magazines
30. Swachh Bharat Abhiyan

Note: Emphasis may be given on the use of computer in the preparation and presentation ofproject.

Note:-20 percent questions (16 marks) from Reading Comprehension (Unseen Passage), Grammar and Literature(Text book &Supplementary Reader) wil be of Objective types and 8 marks questions among them will be of MCQ type.

2025-2026

VOCATIONAL SUBJECTS (INTERMEDIATE- Class 11 & 12)

IT-ITeS (145)

(Junior Software Developer- SSC/Q0508)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1 Software Construction Essentials	
	Unit 2 Operating System and Computer Network	
	Unit 3 Python Programming	
	Unit 4 Data Structure	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**
Class- 12		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Unit 1 Relational Database Management System	
	Unit 2 Advanced Python Programming	
	Unit 3 Software Engineering	
	Unit 4 Emerging Trends and Social Impact	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

2025-2026

AUTOMOTIVE (146)

(Automotive Service Technician- ASC/Q1402)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11	**THEORY: 2 Hrs.**	**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Engineering Drawing	
	Unit 2: Fasteners	
	Unit 3: Material	
	Unit 4: Measuring Equipment	
	Unit 5: Regular maintenance of an Engine	
	Unit 6: Regular maintenance of transmission system	
	Unit 7: Regular maintenance of Gearbox	
	Unit 8: Servicing of Wheels	
	Unit 9: Maintenance of Brakes	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**
Class- 12	**THEORY: 2 Hrs.**	**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Service Manual	
	Unit 2: Serviceability, Replacement or Repair of Engine Components	
	Unit 3: Transmission system	
	Unit 4: Suspension system	
	Unit 5: Auto Electrical System	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

2025-2026

RETAIL (147)

(Retail Sales Associate- RAS/Q0104)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Fundamentals of Retailing	
	Unit 2: Process of Credit Application	
	Unit 3: Mechanism for Customers to Choose Right Products	
	Unit 4: Specialist Support to Customers	
	Unit 5: Health and Safety Management	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**
Class- 12		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Resolve Customer Concerns	
	Unit 2: Delivery of Reliable Service	
	Unit 3: Customer Relationship Management	
	Unit 4: Continuous Improvement in Service	
	Unit 5: Work in Team & Organization	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

2025-2026

TOURISM & HOSPITALITY (150)

(Customer Service Executive (Meet and Greet)- THC/Q4205)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Introduction to Tourism Industry	
	Unit 2: Introduction to Hospitality Industry	
	Unit 3: Customer Service	
	Unit 4: Prepare for providing Customer Services	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**
Class- 12	**THEORY: 2 Hrs.**	**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Etiquette and Hospitable Conduct	
	Unit 2: Gender and Age Sensitive Service Practices	
	Unit 3: Health and Hygiene	
	Unit 4: Safety at Workplace	
	Unit 5: Learn a foreign or local language(s) including English	
	Unit 6: Customer-centric Services	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

2025-2026

BEAUTY & WELLNESS (151)

(Beauty Therapist- BWS/Q0102)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Beauty & Wellness Industry and Beauty Therapy	
	Unit 2: Skincare Services	
	Unit 3: Manicure & Pedicure Services	
	Unit 4: Depilation Services	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**
Class- 12		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Make Up Services	
	Unit 2: Facial Beauty Services	
	Unit 3: Salon Reception Duties	
	Unit 4: Creating Positive Impression at Workplace	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

2025-2026

AGRICULTURE (153)

(Floriculturist (Open Cultivation)- AGR/Q0701)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Introduction to Floriculture	
	Unit 2: Nursery Management	
	Unit 3; Tools and Equipment	
	Unit 4: Field preparation and Cultural Operation	
	Unit 5: Plant Nutrition and Irrigation	
	Unit 6: Insect Pest, Diseases and Weed Management	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**
Class- 12		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Cultivation of Commercial Crop-I	
	Unit 2: Cultivation of Commercial Crop-II	
	Unit 3: Growing of Annuals	
	Unit 4: Growing of Perennials	
	Unit 5: Post Harvest Management and Value Addition	
	Unit 6: Maintain Health and Safety at the workplace	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

2025-2026

ELECTRONIC & HARDWARE (154)

(Field Technician-Wireman Control Panel- ELE/Q7302)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11

THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1 Basics of Electricity and Electronics	
	Unit 2 Electrical and Electronic Components	
	Unit 3 Components Value Identification	
	Unit 4 Electrical Earthing System	
	Unit 5 Cabling	
	Unit 6 Electrical Safety	
	Unit 7 Tools and Equipment	
	Unit 8 Electromechanical Assembly	
	Unit 9 Wire Preparation Methods	
	Unit 10 Hazards with Panel Assembly and Wiring	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

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ELECTRONIC & HARDWARE (154)

(Field Technician-Wireman Control Panel- ELE/Q7302)

TOTAL MARKS- 100 ¡ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 12

THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Chapter 1 Electrical Power	
	Chapter 2 Busway in Control Panel Design	
	Chapter 3 Circuit Breaker	
	Chapter 4 Installation of Residential Control Panel	
	Chapter 5 Installation of Industrial Control Panel	
	Chapter 6 Installation of a Switchboard	
	Chapter 7 AC Drives and Soft Starters	
	Chapter 8 Electrical Machines	
	Chapter 9 Programmable Logic Controller	
	Chapter 10 Testing and Measurement in an Electrical Panel	
	Chapter 11 Occupational Health and Safety Measures	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**

2025-2026

PLUMBING (156)

(Plumber (General)- PSC/Q0104)

TOTAL MARKS- 100 ¿ 30 (Theory) + 50 (Practical) + 20 (Internal Assessment)À

Class- 11		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-III	
	Unit 2: Self-management Skills-III	
	Unit 3: Information and Communication Technology (ICT) Skills-III	
	Unit 4: Entrepreneurial Skills-III	
	Unit 5: Green Skills-III	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Introduction to the sector and the job role	
	Unit 2: Basics of plumbing	
	Unit 3: Preparation for plumbing installation and maintenance	
	Unit 4: Installation of water supply system	
	Unit 5: Installation of drainage system	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**
Class- 12		
THEORY: 2 Hrs.		**30 Marks**
Part A	**Employability Skills**	08 Marks
	Unit 1: Communication Skills-IV	
	Unit 2: Self-management Skills-IV	
	Unit 3: Information and Communication Technology (ICT) Skills-IV	
	Unit 4: Entrepreneurial Skills-IV	
	Unit 5: Green Skills-IV	
Part B	**Vocational Skills**	22 Marks
	Unit 1: Installation of plumbing fixtures	
	Unit 2: Troubleshooting and maintenance for plumbing	
	Unit 3: Health and safety	
	Unit 4: Working effectively with others	
	Unit 5: Optimum utilization of resources	
PRACTICAL		**50 Marks**
INTERNAL ASSESSMENT		**20 Marks**
	TOTAL	**100 Marks**