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FOR JKSSEE PREPARATION

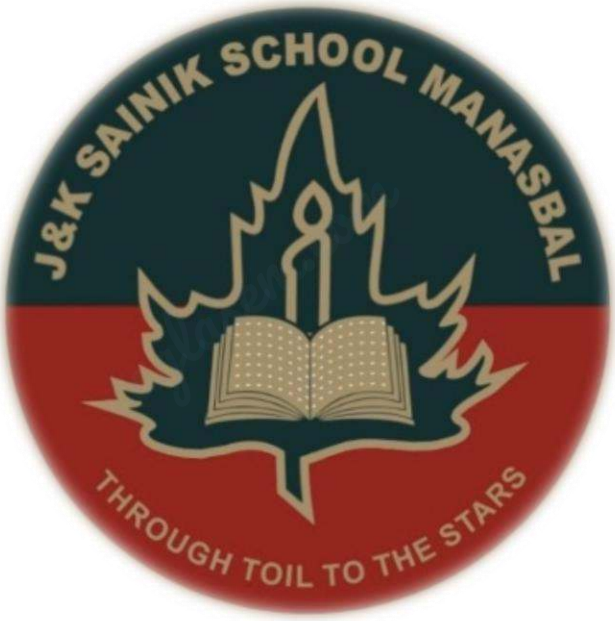
# JKSSEE 2026 Syllabus

| EXAM | YEAR | TYPE |
| --- | --- | --- |
| JKSSEE | 2026 | Syllabus |

# SYLLABUS

## Jammu and Kashmir Sainik School Entrance Examination (JKSSEE) - 2026

J & K SAINIK SCHOOL MANASBAL




## MANASBAL, GANDERBAL KASHMIR

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# J & K SAINIK SCHOOL MANASBAL

## Jammu and Kashmir Sainik School Entrance Examination (JKSSEE) - 2026

### 1. DURATION OF EXAMINATION

| Exam for admission to | Duration | From | To |
|---|---|---|---|
| VI Standard | 150 minutes | 11.00 am | 1.30 pm |
| IX Standard | 150 minutes | 11.00 am | 1.30 pm |
| XI Standard | 150 minutes | 11.00 am | 1.30 pm |

### 2. SCHEME OF EXAMINATION

**Mode of Examination**: OMR answer sheets for admission to Classes of VI, IX and XI.

**Type of Questions**: Multiple Choice Questions Scheme of Examination is as follows:

#### For VI Standard

| Section | Topic | No. of Questions | Marks for each correct answer | Total marks |
|---|---|---|---|---|
| A | Mathematics | 45 | 2 | 90 |
| B | Intelligence/Reasoning | 35 | 2 | 70 |
| C | English | 20 | 2 | 40 |
| D | General Science | 20 | 2 | 40 |
| E | Social Science/GK | 15 | 2 | 30 |
| | **Total** | **135** | | **270** |

#### For IX Standard

| Section | Topic | No. of Questions | Marks for each correct answer | Total marks |
|---|---|---|---|---|
| A | Mathematics | 45 | 2 | 90 |
| B | Intelligence/Reasoning | 35 | 2 | 70 |
| C | English | 20 | 2 | 40 |
| D | General Science | 20 | 2 | 40 |
| E | Social Science/GK | 15 | 2 | 30 |
| | **Total** | **135** | | **270** |

# J & K SAINIK SCHOOL MANASBAL

## For XI Standard

| Section | Topic | No. of Questions | Marks for each correct answer | Total marks |
|---|---|---|---|---|
| A | Mathematics | 50 | 2 | 100 |
| B | Intelligence/Reasoning | 35 | 2 | 70 |
| C | General Science | 30 | 2 | 60 |
| D | English | 25 | 2 | 50 |
| | **Total** | **140** | | **280** |

# SYLLABUS

## SYLLABUS FOR CLASS VI

### MATHEMATICS

**Total Question – 45 Max Marks – 90**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| 1 | Natural Numbers | 14 | Conversion of Units |
| 2 | LCM and HCF | 15 | Roman Numerals |
| 3 | Unitary Method | 16 | Types of Angles |
| 4 | Fractions | 17 | Circle |
| 5 | Ratio and Proportion | 18 | Volume of Cube and Cuboids |
| 6 | Profit and Loss | 19 | Prime and Composite Numbers |
| 7 | Simplification | 20 | Plane Figures |
| 8 | Average | 21 | Decimal Numbers |
| 9 | Percentage | 22 | Speed and Time |
| 10 | Area and Perimeter | 23 | Operation on Numbers |
| 11 | Simple Interest | 24 | Complementary and Supplementary Angles |
| 12 | Lines and Angles | 25 | Arranging of Fractions |
| 13 | Temperature | | |

### INTELLIGENCE/ REASONING

**Total Question – 35 Max Marks - 70**

Questions on Intelligence will be based on analogies (mathematical & verbal), pattern (spatial and mathematical), classification, visual, logical, reasoning etc.

# J & K SAINIK SCHOOL MANASBAL

## ENGLISH

**Total Question – 20 Max Marks - 40**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| 1 | Comprehension Passage | 14 | Sentence Formation |
| 2 | Preposition | 15 | Antonyms |
| 3 | Article | 16 | Synonyms |
| 4 | Vocabulary | 17 | Adjectives |
| 5 | Verbs and Type | 18 | Interjection |
| 6 | Confusing Words | 19 | Idiom and Phrases |
| 7 | Question Tags | 20 | Collective Nouns |
| 8 | Types of sentence | 21 | Number |
| 9 | Tense forms | 22 | Gender |
| 10 | Kinds of Nouns | 23 | Adverbs |
| 11 | Kinds of Pronouns | 24 | Rhyming Words |
| 12 | Correct Spelling | 25 | Singular/Plural |
| 13 | Ordering of words in sentence | | |

## GENERAL SCIENCE

**Total Question – 20 Max Marks – 40**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| 1 | Food Materials and Sources | 14 | Biotic & Abiotic Components |
| 2 | Deficiency Diseases | 15 | Characteristics of Living Organisms & Habitat |
| 3 | What Do Different Food Items Contain | 16 | Motion, Length and distance |
| 4 | Fibres and Fabrics | 17 | Light, Shadows and Reflections |
| 5 | Properties of Materials | 18 | Electric current, Cell and Electric switches |
| 6 | Solutions | 19 | Types of Magnets |
| 7 | Methods of separation of mixtures | 20 | Magnetic Properties |
| 8 | Reversible & Irreversible changes | 21 | Sources of water, Water Cycle |
| 9 | Expansion and Contraction | 22 | Air & Composition of Air |
| 10 | Relation between different types of leaves and roots | 23 | Wastes & Classification of wastes |
| 11 | Different parts of a leaf & Flower | 24 | Sense Organs of Animals |
| 12 | Body movements & Joints | 25 | Plant Parts and Animal Products as Food |
| 13 | Gaits of Animals | 26 | Balanced Diet |

# J & K SAINIK SCHOOL MANASBAL

## SOCIAL SCIENCE / GENERAL KNOWLEDGE

**Total Question – 15 Max Marks – 30**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| 1 | Different Types of Scientific Devices Used in Daily Life. | 15 | Non-Renewable Energy Sources (Fossil Fuels) |
| 2 | Icons and Symbols of India: National Insignia, National Emblem, Sports, Animal etc. (Elementary awareness of such symbols) | 16 | Food, Culture, Habitat, Languages etc of various regions (Basic concepts) |
| 3 | Major Religions of India (Elementary awareness about founder, place of origin, religious books and important ideas) | 17 | Names of young ones of different animals |
| 4 | Art and Culture (Music, Classical and Folk Dance); Renowned Personalities, Instrumental and Vocal Music, Major Dance Forms | 18 | Natural Calamities (Flood and Earthquake) |
| 5 | Defence (Equivalent Ranks in three services, Weapons, Aircraft, Missiles &Warships (Elementary awareness) | 19 | How historians study the Rigveda |
| 6 | Sports and Games (India & World). Renowned personalities, major competitions and trophies associated with various games | 20 | Heat Zones of the Earth |
| 7 | International Organizations: Basic knowledge about structure, functioning and objectives of United Nations, World Bank etc. | 21 | Key Elements of A Democratic Government |
| 8 | Indian Literary and Cultural Personalities: Names and fields of achievements | 22 | Special about Harappan cities |
| 9 | Indian Literary and Cultural Awards. (Names of the awards and recent recipients) | 23 | Changes in agriculture |
| 10 | Cooking and Preserving Techniques | 24 | Maps |
| 11 | Traditional Water Harvesting Techniques | 25 | The earliest people: why were they on the move |
| 12 | Concepts on Mountain Terrain and Lifestyle | | |
| 13 | Historical Monuments | | |
| 14 | Shape of Earth and Gravitation (Basic concepts) | | |

# J & K SAINIK SCHOOL MANASBAL

## SYLLABUS FOR CLASS IX

## MATHEMATICS

**Total Questions - 45 Max Marks –90**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| 1 | Rational Numbers | 16 | Average, Median, Mode |
| 2 | Linear Equations in One Variable | 17 | Probability |
| 3 | Understanding Quadrilaterals | 18 | Pie Chart |
| 4 | Data Handling (Bar Graph and Line Graph) | 19 | Direct & Inverse Proportions |
| 5 | Squares and Square Roots | 20 | Factorizations |
| 6 | Cubes and Cube Roots | 21 | Introduction to Graph |
| 7 | Comparing Quantities (Percentage, Profit and Loss) | 22 | Unitary Method |
| 8 | Algebraic Expressions and Identities | 23 | Divisibility Exam |
| 9 | Area and Perimeters | 24 | Triangles (Angle Sum Property) |
| 10 | Volumes and Surface Areas | 25 | Parallel Lines |
| 11 | Exponents and Powers | 26 | Simple Interest and Compound Interest |
| 12 | Playing with Numbers | 27 | Time and Work |
| 13 | Visualizing Solid Shapes | 28 | Area and Perimeter of Circles |
| 14 | Triangles (Pythagoras Theorem) | 29 | Algebraic Expression (Addition, Subtraction, Multiplication, Division) |
| 15 | Euler's Formula | | |

## INTELLIGENCE/REASONING

**Total Question – 35 Max Marks – 70**

Questions on Intelligence will be based on analogies (mathematical & verbal), pattern (spatial and mathematical), classification, visual, logical, reasoning etc.

## ENGLISH

**Total Question – 20 Max Marks – 40**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| 1 | Spotting Errors | 17 | Sentence Improvement |
| 2 | Comprehension Passage | 18 | Change of sentence as directed |
| 3 | Antonyms | 19 | Sentence Formation |
| 4 | Synonyms | 20 | Types of Sentences |
| 5 | Prepositions | 21 | Phrase and Clauses |
| 6 | Articles | 22 | Kinds of Noun |
| 7 | Types of Verbs | 23 | Adjectives |

# J & K SAINIK SCHOOL MANASBAL

| | | | |
|---|---|---|---|
| **8** | Tense Form | **24** | Interjection |
| **9** | Narration | **25** | Question Tags |
| **10** | Voices | **26** | Adverbs |
| **11** | Modals | **27** | Conjunctions |
| **12** | Confusing Words | **28** | Conditions |
| **13** | Subject- Verb Agreement | **29** | Comparison of Adjectives |
| **14** | Correct Spellings | **30** | Personal Pronoun |
| **15** | Order of words in a sentence | **31** | Change of Gender |
| **16** | Idioms and Phrases | **32** | Change of Number |

## GENERAL SCIENCE

**Total Question – 20 Max Marks – 40**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| **1** | Fossil Fuel: Coal and Petroleum | **14** | Micro-Organisms |
| **2** | Combustion and Flame | **15** | Some Natural Phenomenon |
| **3** | Cell Structure and Function | **16** | How to find calorific value of fuel? |
| **4** | Reproduction in Plants and Animals | **17** | Electroplating and Artificial Jewellery |
| **5** | Force, Friction and Pressure | **18** | Relation between types of friction. |
| **6** | Sound and its basics | **19** | Cropping Seasons |
| **7** | Reflection and Dispersion of Light | **20** | Agricultural Practices |
| **8** | Metals and Non Metals | **21** | Conservation of Plants and Animals |
| **9** | Synthetic Fibres and Plastics | **22** | Biosphere Reserves, National Parks and Sanctuaries |
| **10** | Chemical Effects of Electric Current | **23** | Reaching the age of Adolescence |
| **11** | Stars and Solar Systems | **24** | Changes during Puberty |
| **12** | Pollution of Air and Water | **25** | Endocrine Glands and Hormones |
| **13** | Global Warming | | |

## SOCIAL SCIENCE/ GENERAL KNOWLEDGE

**Total Question – 15 Max Marks –30**

| S. No. | Topics | S. No. | Topics |
|---|---|---|---|
| **1** | Revolt of 1857 | **20** | Interior of Earth |
| **2** | Freedom Fighters | **21** | Climate Change |
| **3** | Important Freedom Movements | **22** | Earthquakes and Major Land Forms |
| **4** | Social and Caste Reforms | **23** | Types of Rainfall |
| **5** | Resources and sustainable development | **24** | Major Grasslands |
| **6** | Rock cycle of water cycle | **25** | Types of Forests |
| **7** | Pressure and Wind System | **26** | Means of Transport |

# J & K SAINIK SCHOOL MANASBAL

| | | | |
|---|---|---|---|
| **8** | Land Soil and Water Resources | **27** | Communication |
| **9** | Minerals and Power Resources | **28** | Life in deserts |
| **10** | Indian Constitution and Secularism | **29** | Panchayat System |
| **11** | Importance of Parliament | **30** | Local Self Government |
| **12** | Types of Agriculture | **31** | Law and Social Justice. |
| **13** | Types of Government and different tiers of Government | **32** | Judiciary and Criminal Justice System |
| **14** | Understanding Markets | **33** | Marginalisation |
| **15** | Elections | **34** | Public Facilities |
| **16** | Role of Government in Health | **35** | Natural Vegetation and Wildlife |
| **17** | Delhi Sultanate | **36** | Industries |
| **18** | Mughals | **37** | Human Resources |
| **19** | Bhakti and Sufi Movement | 38 | Changes in the Arts |

# SYLLABUS FOR CLASS XI

## SECTION A: MATHEMATICS

**Total Question – 50 Max Marks – 100**

| Units | Unit Name | Marks |
|---|---|---|
| **I** | NUMBER SYSTEMS | **10** |
| **II** | ALGEBRA | **20** |
| **III** | COORDINATE GEOMETRY | **15** |
| **IV** | GEOMETRY | **15** |
| **V** | TRIGONOMETRY | **15** |
| **VI** | MENSURATION | **15** |
| **VII** | STATISTICS & PROBABILITY | **10** |
| | **Total** | **100** |

# J & K SAINIK SCHOOL MANASBAL

## UNIT 1: NUMBER SYSTEMS

### 1. REAL NUMBER

Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples, Proofs of irrationality of $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$

## UNIT 2: ALGEBRA

### 1. POLYNOMIALS

Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials.

### 2. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination. Simple situational problems.

### 3. QUADRATIC EQUATIONS

Standard form of a quadratic equation $ax^2 + bx + c = 0$, $(a \neq 0)$. Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots. Situational problems based on quadratic equations related to day to day activities to be incorporated.

### 4. ARITHMETIC PROGRESSIONS

Motivation for studying Arithmetic Progression Derivation of the nth term and sum of the first n terms of A.P. and their application in solving daily life problems.

## UNIT 3: COORDINATE GEOMETRY

### 1. Coordinate Geometry

Review: Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division).

## UNIT 4: GEOMETRY

### 1. TRIANGLES

Definitions, examples, counter examples of similar triangles.

1. (Prove) If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.
2. (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.
3. (Motivate) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.
4. (Motivate) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.
5. (Motivate) If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.

**2. CIRCLES**

Tangent to a circle at, point of contact

1. (Prove) The tangent at any point of a circle is perpendicular to the radius through the point of contact.
2. (Prove) The lengths of tangents drawn from an external point to a circle are equal.

**UNIT 5: TRIGONOMETRY**

**1. INTRODUCTION TO TRIGONOMETRY**

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined); motivate the ratios whichever are defined at $0^o$ and $90^o$. Values of the trigonometric ratios of $30^0$, $45^0$ and $60^0$. Relationships between the ratios.

**2. TRIGONOMETRIC IDENTITIES**

Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given.

**3. HEIGHTS AND DISTANCES: Angle of elevation, Angle of Depression.**

Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30°, 45°, and 60°.

**UNIT 6: MENSURATION**

**1. AREAS RELATED TO CIRCLES**

Area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating

area of segment of a circle, problems should be restricted to central angle of 60°, 90° and 120° only.

**2. SURFACE AREAS AND VOLUMES**

Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones.

**UNIT 7: STATISTICS AND PROBABILITY**

**1. STATISTICS**

Mean, median and mode of grouped data (bimodal situation to be avoided).

**2. PROBABILITY**

Classical definition of probability. Simple problems on finding the probability of an event.

## SAECTION B: INTELLIGENCE/ REASONING

**Total Question – 35 Max Marks - 70**

**1.** Pattern Completion
**2.** Figure Series Completion
**3.** Geometrical Figure Completion (Triangle, Square, Circle)
**4.** Mirror Imaging
**5.** Punched Hole Pattern (Folding/Unfolding)
**6.** Calendar, Time, and Clock
**7.** Embedded Figure
**8.** Coding-Decoding
**9.** Orientation/Direction
**10.** Space Visualization

## SECTION C: GENERAL SCIENCE

**Total Question – 30 Max Marks – 60**

| Unit | Marks |
|---|---|
| **I.** Chemical Substances-Nature and Behaviour | 15 |
| **II.** World of Living | 15 |
| **III.** Natural Phenomena | 12 |
| **IV.** Effects of Current | 13 |
| **V.** Natural Resources | 05 |
| **Total** | **60** |

**Unit 1: Chemical Substances - Nature and Behaviour**

Chemical reactions: Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic exothermic reactions, oxidation and reduction.

**Acids, bases and salts:** Their definitions in terms of furnishing of $H^+$ and $OH^-$ ions, General properties, examples and uses, neutralization, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

**Metals and non-metals:** Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Basic metallurgical processes; Corrosion and its prevention.

**Carbon compounds:** Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydro carbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.

**Unit 2: World of Living**

**Life processes: 'Living Being'.** Basic concept of nutrition, respiration, transport and excretion in plants and animals.

**Control and co-ordination in animals and plants**: Tropic movements in plants; Introduction of plant hormones; Control and co-ordination in animals: Nervous system; Voluntary, involuntary and reflex action; Chemical co-ordination: animal hormones.

**Reproduction**: Reproduction in animals and plants (asexual and sexual) reproductive health - need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women's health.

**Heredity and Evolution**: Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination.

**Unit 3: Natural Phenomena**

**Reflection of light** by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification.

**Refraction;** Laws of refraction, refractive index. Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens.

**Human eye:** Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses.

Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.

**Unit 4: Effects of Current**

**Electricity:** Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.

**Magnetic effects of current:** Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule, Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits.

**Unit 5: Natural Resources**

**Our environment:** Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.

# J & K SAINIK SCHOOL MANASBAL

## SECTION D: ENGLISH

**Total Question – 25 Max Marks - 50**

**Section A: Reading Skills**

This section assesses students' reading comprehension abilities through unseen passages. The passages can be discursive or case-based, incorporating visual inputs such as statistical data or charts.

**Section B: Grammar**

The grammar section evaluates students' understanding of various grammatical concepts. The topics covered include tenses, modals, subject-verb concord, reported speech (commands, requests, statements, and questions), determiners, spelling, and syntax. Emphasis is given to accurate usage of spelling, punctuation, and grammar in context.