

Total No. of Printed Pages—9

HS/XII/V/CT/Paper—IV/23

2 0 2 3

COMPUTER TECHNIQUE

(Vocational Stream)

[Desktop Publishing (DTP)]

Paper—IV

(Theory)

Full Marks : 100

Time : 3 hours

The figures in the margin indicate full marks for the questions

General Instructions :

- (i) Write all the answers in the Answer Script.
- (ii) Attempt Part—A (Objective Questions) serially.
- (iii) Attempt all parts of a question together at one place.

(PART : A—OBJECTIVE)

(Marks : 60)

SECTION—I

(Marks : 30)

- 1.** Fill in the blanks from the list of words/phrases given below : 1×10=10

(a) The color model used by a color printer is ____.

(2)

- (b) If equal amounts of Red color and Green color are mixed together, then the resultant color will be ____.
- (c) The files that store CorelDRAW graphics or images consist of a list of ____.
- (d) PageMaker is an application software used for ____.
- (e) The image format which supports transparency is ____.
- (f) The images or graphics which are made of pixels are ____.
- (g) ____ controls the amount of space between lines of selected text in PageMaker.
- (h) ____ is to select multiple objects in CorelDRAW.
- (i) File extension of PageMaker document is ____.
- (j) File extension of CorelDRAW file is ____.

List of Words/Phrases		
Draw a Marquee	Leading	CMYK
Yellow	Lines	PNG
Page layout	.CDR	.PMD
Raster image		

2. State whether the following statements are *True* or *False* :

1×10=10

- (a) Pick tool is the least commonly used tool in CorelDRAW.
- (b) CorelDRAW defines text in two ways—paragraph text and artistic text.
- (c) Almost all the elements used in PageMaker are already created outside PageMaker.

(3)

- (d) Ctrl + Alt + P is used to insert page number in PageMaker.
- (e) In PageMaker, a third party plugins can be added.
- (f) In CorelDRAW, freehand tool is used to shape any curve.
- (g) Kerning is related with CorelDRAW.
- (h) Opaque graphics cannot be arranged one on the top of another in CorelDRAW.
- (i) PageMaker publication can be converted into HTML format or webpage.
- (j) In PageMaker, table of content (TOC) cannot be generated automatically.

3. Select the most appropriate answer from the given choices : 1×10=10

- (a) Which of these tools is not in toolbox of PageMaker?
 - (i) Ellipse tool
 - (ii) Polygon tool
 - (iii) Rotating tool
 - (iv) Move tool
- (b) The character displayed by showing it slightly above its normal size is called as
 - (i) superscript
 - (ii) drop cap
 - (iii) subscript
 - (iv) alignment

(4)

- (c) Which of the following is text flow option in PageMaker?
- (i) Standard
 - (ii) Autoflow
 - (iii) Semi-flow
 - (iv) All of the above
- (d) In CorelDRAW, filling an object with another object is by
- (i) lens
 - (ii) powerclip
 - (iii) transparency fill
 - (iv) fountain fill
- (e) In CorelDRAW, free transform tool is found in
- (i) zoom tools
 - (ii) pick tools
 - (iii) shape tools
 - (iv) freehand tools
- (f) Which of these is not the main part of PageMaker application?
- (i) Title bar
 - (ii) Color palette
 - (iii) Drawing toolbar
 - (iv) Control palette

(5)

- (g) In PageMaker, we can create the border automatically around the object by using an option from utilities-plugins that is
- (i) border
 - (ii) keyline
 - (iii) outline
 - (iv) None of the above
- (h) To cut an object into two in CorelDRAW, we use
- (i) shape tool
 - (ii) bezier tool
 - (iii) knife tool
 - (iv) clone stamp tool
- (i) The process of adjusting space between specific letter pairs in PageMaker is
- (i) leading
 - (ii) tracking
 - (iii) kerning
 - (iv) None of the above
- (j) In PageMaker, graphics can be imported by using
- (i) import
 - (ii) insert
 - (iii) place
 - (iv) None of the above

(6)

SECTION—II

(Marks : 30)

4. Answer any *ten* of the following questions in 1 or 2 sentence(s) each : 1×10=10

- (a) An image size of 2048 KB is equivalent to what size in MB? (Take 1 MB = 1024 KB)
- (b) Which requires more memory space—vector image or bitmap image? Justify.
- (c) What is the use of Pan tool in CorelDRAW?
- (d) From which tool can you define outline of an object in CorelDRAW?
- (e) Can a document prepared in PageMaker be used as webpage? If yes, then how?
- (f) Define index entries in PageMaker.
- (g) What is the use of a PDF document?
- (h) What is the use of nodes in CorelDRAW?
- (i) What is the bit depth in grey scale image?
- (j) What do you mean by locking a layer in CorelDRAW?
- (k) What is the use of knife tool in CorelDRAW?
- (l) How do you know whether a curve is closed or not in CorelDRAW?

(7)

5. Answer any *five* of the following questions in 2 to 3 sentences each : 2×5=10

- (a) What will be the minimum PC system requirement (in term of Operating System (OS), RAM size, HDD size) for installation of CorelDRAW 12 version?
- (b) Give three most prominent uses of DTP.
- (c) How many types of printers are used by professional DTP workers? What are these?
- (d) What are the basic differences between PageMaker and CorelDRAW software?
- (e) What are the different types of elements (objects) PageMaker can handle?
- (f) What are the three different color models available in PageMaker?

6. Explain the meanings and uses of each tool in respect of CorelDRAW or PageMaker (any *five*) : 2×5=10

- (a) Shape tool
- (b) Outline tool
- (c) Interactive fill tool
- (d) Crop tool
- (e) Hand tool
- (f) Ellipse frame

(8)

(PART : B—DESCRIPTIVE)

(Marks : 40)

GROUP—I

Answer any *five* of the following questions :

4×5=20

7. What are the steps in adding or deleting nodes in CorelDRAW?
8. What are the steps in defining printer style in PageMaker?
9. What are the different file formats supported by PageMaker? Describe briefly.
10. What are the steps in creating an index table in PageMaker?
11. What are the steps in re-shaping a circle into a square in CorelDRAW?
12. Differentiate between artistic text and paragraph text in CorelDRAW.
13. What is a master page? What are the steps in creating master page in PageMaker?

(9)

GROUP—II

Answer any *four* of the following questions :

5×4=20

14. What is a type menu in PageMaker? Explain briefly at least four commands of type menu.
15. What is arrange menu? Explain at least 4 commands of arrange menu.
16. What are the options for setting up a document in PageMaker?
17. What are the different tools found in freehand tool flyout in CorelDRAW? How to use the dimension tool?
18. Name at least 5 major palettes in PageMaker. Explain each briefly.

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Total No. of Printed Pages—8

HS/XII/V/CT/Paper-V/23

2 0 2 3

COMPUTER TECHNIQUE

(Vocational Stream)

(Computer Network)

(Theory)

Paper : V

Full Marks : 100

Time : 3 hours

The figures in the margin indicate full marks for the questions

General Instructions :

- (i) Write all the answers in the Answer Script.
- (ii) Attempt Part—A (Objective Questions) serially.
- (iii) Attempt all parts of a question together at one place.

(PART : A—OBJECTIVE)

(Marks : 50)

- 1.** Fill in the blanks from the list of words/phrases given below : 1×20=20

(a) A network of networks is known as _____.

(b) In a network, a machine identified by unique address is called _____.

(2)

- (c) The physical address assigned by NIC manufacturer is called _____ address.
- (d) The _____ is a central connection point where all network cables are concentrated.
- (e) A network having a span within a building is called a _____.
- (f) The _____ is a network device that can connect the network segments based on the same protocol.
- (g) The _____ is a network device that connects dissimilar network.
- (h) The _____ topology has a central line and all nodes are connected to it.
- (i) _____ is a protocol that allows to send / upload email message from local computer to an e-mail server.
- (j) Wired networks communication media are called _____ media.
- (k) A computer network that spans a relatively large geographical area is called _____.
- (l) A network with a dedicated server is called a _____ network.
- (m) A MAC address consumes _____ bytes _____ bits.
- (n) _____ is a device that modulates an analog signal to digital and also demodulates a digital signal to analog.

(3)

- (o) We can amplify the signal using ____.
- (p) A ____ is a set of rules that controls the data communication.
- (q) A ____ is the interconnection of LAN and MAN.
- (r) ____ cable has a single copper conductor at its center.
- (s) The bundle of data in a network travels in the form of a ____.
- (t) The Google Chrome is a popular ____.

List of Words / Phrases

Modem	Hub	Repeater	Co-axial
Packet	Intranet	Web browser	HTML
Client/Server	LAN	MAC	WAN
PAN	IP address	Protocol	Bridge
6,48	Guided	SMTP	Workstation
Bus	Topology	Gateway	TCP/IP

2. State whether the following statements are *True* or *False* :

1×10=10

- (a) Internet computers communicate through network.
- (b) Internet Explorer is the name of ISP.
- (c) A webpage is a collection of websites.
- (d) It is possible for two users to have the same e-mail address.
- (e) A hub is used to boost the signal strength as it passes along a cable.
- (f) Firewall prevents the network from intruders.

(4)

- (g) A fibre-optic cable may transmit pulses of laser light in an all-digital network.
- (h) A dedicated server functions only as a server and is not used as a client or workstation.
- (i) Analog signals can take on many values.
- (j) A dial-up connection is more reliable than a direct connection.

3. Choose and write the correct answer :

1×5=5

- (a) What is the use of bridge in a network?
 - (i) To connect LANs
 - (ii) To separate LANs
 - (iii) To control network speed
 - (iv) All of the above
- (b) Each IP packet must contain
 - (i) only source address
 - (ii) only destination address
 - (iii) source and destination addresses
 - (iv) None of the above
- (c) Which of the following is the smallest network?
 - (i) WAN
 - (ii) MAN
 - (iii) PAN
 - (iv) LAN

(5)

(d) Which type of transmission media is the least expensive to manufacture?

(i) Co-axial cable

(ii) Twisted-pair cable

(iii) CAT cable

(iv) Fibre-optic cable

(e) A device that forwards data packet from one network to another is called a

(i) bridge

(ii) router

(iii) hub

(iv) gateway

4. Write short notes on the following in not more than 4 to 5 sentences each (any five) : 3×5=15

(a) URLs

(b) Cookies

(c) Software libraries

(d) Language processor

(e) V-sat

(f) Hubs

(g) Tree topologies

(6)

(PART : B—DESCRIPTIVE)

(Marks : 50)

Answer any *two* questions from each Section

SECTION—I

(**Network Technologies**)

5. (a) What are the major types of networks? Explain. 4
- (b) What are the components of a computer network? Explain. 5
6. (a) Differentiate among simplex, half-duplex and full-duplex modes of data transmission. 6
- (b) What are analog and digital transmissions? 3
7. (a) What is switch? Why is it used in a network? Explain. 5
- (b) What is a file server? Explain its functions. 4
8. Write short notes on the following (any *two*) : $4\frac{1}{2} \times 2 = 9$
- (a) Fibre optic
- (b) NIC
- (c) Workstations

(7)

SECTION—II

(**Network Environment**)

9. (a) What are cookies? Explain. 4
- (b) What is DNS? Explain. 5
10. (a) What is file transfer protocols? Explain its advantages. 5
- (b) What is computer virus? What are the types of computer virus? Explain. 4
11. (a) What is TCP/IP? Explain the functions of each layer of TCP/IP. 3+4=7
- (b) What is TELNET? 2
12. (a) What is serial data transmission? What is parallel data transmission? Explain. 5
- (b) Write a short note on Remote Access Service. 4

SECTION—III

(**Network Application**)

13. What is HTML? What are container tag and empty tag? 2+5=7

(8)

14. (a) What is a facsimile? Explain. 3

(b) Write short notes on the following : 2+2=4

(i) e-mail

(ii) Intranet

15. (a) What is the addressing of Internet? Explain. 3

(b) Explain class—A and class—B IP addresses. 4

16. Write short notes on the following : $3\frac{1}{2}+3\frac{1}{2}=7$

(a) Routers

(b) POP

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Total No. of Printed Pages—12

HS/XII/V/CT/Paper-VI/23

2 0 2 3

COMPUTER TECHNIQUE

(Vocational Stream)

(Computer Commercial Application)

(Theory)

Paper : VI

Full Marks : 100

Time : 3 hours

The figures in the margin indicate full marks for the questions

GROUP—A

(Introduction to Statistical Techniques)

1. Select the correct answer for each of the following : 1×5=5

(a) The standard error (SE) for a given sample of standard deviation of value 3 and sample size of value 25 is

(i) 0.5

(ii) 0.6

(iii) 0.7

(2)

(b) The variance of population, whose standard deviation is 2.33, is

(i) 5.43

(ii) 6.43

(iii) 7.43

(c) The correlation coefficient of 0.35 between two variables is considered as

(i) negative relationship between the two variables

(ii) positive relationship between the two variables

(iii) neutral relationship between the two variables

(d) In a least square method of curve fitting the best fit curve of a given type is the curve that has the

(i) minimal sum of deviations

(ii) medium sum of deviations

(iii) maximum sum of deviations

(e) If mean deviation is given as 51 and median as 58, then the coefficient of mean deviation is calculated as

(i) 0.85

(ii) 0.88

(iii) 0.91

(3)

2. Fill in the blanks of the following sentences : 1×5=5

- (a) In a step deviation method, to find the mean of group data, the formula is given as

$$\bar{x} = a + h \frac{\sum f_i u_i}{\sum f_i}$$

where a is assumed mean, f_i is total frequency, $u_i = \frac{x_i - a}{h}$ and h is _____.

- (b) If $\bar{x}$ is the mean and s^2 is the variance, then the variance of n observations $x_1, x_2, \dots, x_n$ is given by the formula _____.
- (c) The square root of a variance is called as _____.
- (d) The regression line shows the relation between the dependent y variable and the independent _____ when there is a linear pattern.
- (e) In the formula of straight line $y = mx + b$, m value is known as the _____ of a straight line.

3. Define the following (any five) : 2×5=10

- (a) Standard error in dispersion
- (b) Harmonic mean
- (c) Geometric mean
- (d) Correlation coefficient
- (e) Mean deviation
- (f) Covariance

(4)

4. Solve any *two* of the following : 5×2=10

- (a) Find the mean deviation about the median for the following data :

3, 9, 5, 3, 12, 10, 18, 4, 7, 19, 21

- (b) Following are the given marks obtained and weights assigned to the subjects of a student. Calculate weighted arithmetic mean (AM) :

<i>Subjects</i>	<i>Marks</i>	<i>Weight</i>
English	60	1
Physics	65	1
Chemistry	53	2
Mathematics	50	3
Computer	40	4

- (c) From the following data, calculate the harmonic mean (HM) :

<i>Marks</i>	10	20	25	40	50
<i>No. of students</i>	20	30	50	15	5

GROUP—B

(**Simple Accounting**)

5. Select the correct answer for each of the following : 1×10=10

- (a) Long-term assets without any physical existence but possessing a value are called
- (i) fixed assets
 - (ii) intangible assets
 - (iii) current assets
 - (iv) investments

- (b) The assets that can easily be converted into cash within a short-period, i.e., one year or less are known as
- (i) intangible assets
 - (ii) investments
 - (iii) fixed assets
 - (iv) current assets
- (c) Copyrights, patents and trademarks are examples of
- (i) investments
 - (ii) fixed assets
 - (iii) current assets
 - (iv) intangible assets
- (d) The debts, which are to be repaid within a short period (one year or less), are referred to as
- (i) current liabilities
 - (ii) fixed liabilities
 - (iii) contingent liabilities
 - (iv) All of the above
- (e) Gross Profit is
- (i) Cost of Goods Sold + Opening Stock
 - (ii) Sales – Cost of Goods Sold
 - (iii) Sales – Purchases
 - (iv) Net Profit – Expenses

- (f) Net Profit is calculated in which of the following accounts?
- (i) Profit and Loss Account
 - (ii) Balance Sheet
 - (iii) Trial Balance
 - (iv) Trading Account
- (g) Supplier's Personal Accounts are seen in the
- (i) sales ledger
 - (ii) nominal ledger
 - (iii) purchase ledger
 - (iv) general ledger
- (h) Sales invoices are first entered in
- (i) cashbook
 - (ii) purchase journal
 - (iii) sales journal
 - (iv) sales account
- (i) If a Trial Balance totals do not agree, the difference must be entered in
- (i) Profit and Loss Account
 - (ii) Nominal Account
 - (iii) Capital Account
 - (iv) Suspense Account

(7)

(j) If it is required to maintain fixed capitals, then the partner's shares of profit must be

- (i) credited to Capital Account
- (ii) debited to Capital Account
- (iii) debited to Partner's Current Account
- (iv) credited to Partner's Current Account

6. Fill in the blanks of the following sentences : 1×5=5

- (a) Goods withdrawn for personal use is called as ____.
- (b) A person, to whom money is owed by a firm against purchase of goods, is known as ____.
- (c) The amount invested by the proprietor in a business is termed as ____.
- (d) ____ are persons and/or other entities who owe to a business an amount for buying goods and service on credit.
- (e) ____ are obligation or debts that an enterprise has to pay in the future.

7. Define any *five* in 1 or 2 sentence(s) each : 1×5=5

- (a) Credit transaction
- (b) Fixed assets
- (c) Revenue
- (d) Income
- (e) Voucher
- (f) Invoice

8. Write on any *five* of the following : 2×5=10

- (a) Assets and Liabilities
- (b) Expenses and Losses
- (c) Credit Note and Debit Note
- (d) Ledger and Journal
- (e) Trial Balance and Balance Sheet
- (f) Double Entry System of Accounting

9. Journalize the following transactions in the books of Mr. Gupta as on October, 2020 : 10

<i>Days</i>	<i>Transactions</i>
3	Bankatlal informs Gupta that Navnath's acceptance of ₹ 16,000 endorsed to him dishonoured and noting charges paid ₹ 200.
9	Vishwanath's acceptance for 120 days of ₹ 15,500 dated 24th Sept., 2018 deposited into bank for collections.
11	Gupta sold goods to Kartik for ₹ 4,500 and received own acceptance from him, which was given to Milind of ₹ 4,500 and due payment on this date.
20	Recovered 40% of the amount due to the private estate of Jyoti who declared as insolvent, against bill accepted by her for ₹ 6,000 which was dishonoured on 29th Sept., 2018.
21	Gupta renews his acceptance of ₹ 7,500 to Pandurang by paying cheque of ₹ 3,500 and accepting new bill for 2 months for the balance plus interest at 18% p.a.

(9)

GROUP—C

(Marketing and Salesmanship)

10. Select the correct answer for each of the following :

1×10=10

- (a) Which of the following business enterprises does not have a separate legal entity?
- (i) Sole proprietorship
 - (ii) Partnership
 - (iii) Company
 - (iv) Cooperative society
- (b) The company which does not invite the public to subscribe to its share capital is
- (i) both private and public companies
 - (ii) public company
 - (iii) private company
 - (iv) None of the above
- (c) A prospectus is issued by
- (i) public company
 - (ii) private company
 - (iii) statutory corporation
 - (iv) departmental store

(10)

(d) Which of the following is not a feature of joint stock company?

(i) Artificial person

(ii) Separate legal entity

(iii) Formation

(iv) Lack of business continuity

(e) Which of the following does not characterize business activity?

(i) Production of goods and services

(ii) Presence of risk

(iii) Sale or exchange of goods and services

(iv) Salary and wages

(f) Which of the following promotional tools is thought to be the most expensive to use?

(i) Advertising

(ii) Personal selling

(iii) Public relation

(iv) Sales promotion

- (g) The promotion tool that may include coupons, contests, premiums and other means of attracting consumer attention is best described as
- (i) advertising
 - (ii) personal selling
 - (iii) public relations
 - (iv) sales promotion
- (h) The promotional tool that the marketing person tends to underuse or use only as an after-thought is
- (i) advertising
 - (ii) personal selling
 - (iii) public relation
 - (iv) sales promotion
- (i) Communicate the high value of services over the competition is part of
- (i) communication
 - (ii) influence and persuasion
 - (iii) negotiation
 - (iv) prioritising and goal setting
- (j) Department stores are example of
- (i) wholesaling
 - (ii) retailing
 - (iii) franchising
 - (iv) buying organization

(12)

11. Write short notes on any *four* of the following : $2\frac{1}{2} \times 4 = 10$

- (a) Marketing mix
- (b) Service business
- (c) Online business
- (d) Associate business
- (e) Product distribution

12. What are the different types of business organization?
Briefly explain each. 5

13. What are the different types of salesman? Briefly explain
each of them. 5

Or

Write about digital marketing.

★ ★ ★