Total Questions: 40   **Time:** 1 hour

DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED TO DO SO

➢ All questions are compulsory.

➢ Read the instructions on the **ANSWER SHEET** and fill in your **NAME**, **CLASS** and **OTHER INFORMATION**.

➢ To mark your choice of answer by darkening the circles in the **ANSWER SHEET**, use a **BLUE/BLACK BALL PEN** only.

➢ You **MUST** record your answers on the **ANSWER SHEET** only.

➢ There are **40 MULTIPLE CHOICE QUESTIONS**. Use the information provided to choose the **BEST** possible answer among the four options. On your **ANSWER SHEET** fill in the circle that matches your answer.

➢ $\frac{1}{2}$ **MARK** will be deducted for every **WRONG ANSWER**.

➢ Return the **ANSWER SHEET** to the invigilator at the end of the examination.

➢ You are **NOT** allowed to use a calculator. You may use a ruler and spare paper for rough work.

This question paper contains a total of 40 questions divided into three sections - A, B and C.
Read the instructions carefully before attempting these questions.

Section A (Logical Reasoning)

1. In a top secret message, if LIVING is called as KGSHLD, how will BUDDHA be coded?
   - (A) ATEEIB
   - (B) ASACFX
   - (C) ATCCGZ
   - (D) KGSHLD

2. Suresh, the son of Mahesh is married to Sia, whose sister Jia is married to Amar, the brother of Suresh. How is Jia related to Mahesh?
   - (A) Daughter-in-law
   - (B) Cousin
   - (C) Sister-in-law
   - (D) Sister

3. In the school mid-term exams, David has lower marks than Dechen, but has more than Sonam. However, Karna also has more marks than David. Who has the lowest marks?
   - (A) David
   - (B) Dechen
   - (C) Sonam
   - (D) Karna

4. Choose the most meaningful sequence for the following words.

   1. Job   2. Independence   3. Study   4. Income   5. Exam
   - (A) 1, 4, 2, 3, 5
   - (B) 2, 5, 3, 1, 4
   - (C) 3, 1, 2, 4, 5
   - (D) 3, 5, 1, 4, 2

5. The day before yesterday was Saturday. What day will it be the day after tomorrow?
   - (A) Tuesday
   - (B) Wednesday
   - (C) Thursday
   - (D) Friday

6. David prefers economics to math, english to social science and political science to history. If he prefers math to history and social science to math, which is David's least preferred subject?
   - (A) History
   - (B) Math
   - (C) Social Science
   - (D) Economics

7. In a math class, Riki divides 60 chalk sticks by half and adds fifteen more pieces. What answer does she get?
   - (A) 129 chalk sticks
   - (B) 130 chalk sticks
   - (C) 135 chalk sticks
   - (D) 145 chalk sticks

8. A school organised a knock-out football competition in which 23 teams played. What was the least number of matches they needed to play to decide the winner?
   - (A) 11
   - (B) 62
   - (C) 22
   - (D) 21

Section B (Subject Specific)

9. Gaurav is planning to steal Atul's presentation and present it as his own. What is the practice of taking someone else's idea or creation without his/her permission called?

   (A) Plagiarism
   (B) Phishing
   (C) Spamming
   (D) Stalking

10. To insert a hyperlink in a document in Microsoft Word, which of the following option should be used?

    (A)
    (B)
    (C)
    (D)

11. Natural Language Processing is a domain which works with the interaction between humans and computer systems using natural language. There are different types of NLP. Can you identify them?

    (A) Speech Recognition
    (B) Sentiment Analysis
    (C) Both A and B
    (D) None of these

12. Which of the following are the categories of functions in Microsoft Excel?

    (A)
    (B)
    (C)
    (D) All of these

13. Which of the following does not indicate a VR limitation?

    (A) Creating lessons and experiences can take a lot of time
    (B) It can only be used for science and geography
    (C) It can be expensive
    (D) Some teachers may be resistant to new technology

14. What is the most efficient method to duplicate a slide in Microsoft PowerPoint?

    (A) Right-click and select "Copy"
    (B) Press Ctrl+C
    (C) Press Ctrl+D
    (D) Use the "Duplicate Slide" option in the Home tab

15. In a computer network, what is the major function of a router?

    (A) Connects devices within a local area network
    (B) Filters and transmits data between networks
    (C) Manages device IP addresses
    (D) Provides wireless connectivity

16. What is the HTML <em> tag used for?

    (A) It denotes a high level of importance, severity, or urgency

    (B) It establishes emphasised text

    (C) It generates an embedded item

    (D) It specifies alternate text for an image

17. Which of the following data types is mutable in Python?

    (A) List

    (B) String

    (C) Integer

    (D) Tuple

18. What is the purpose of the **"Relationships"** feature in Microsoft Access?

    (A) Sorting records in a table

    (B) Creating queries

    (C) Defining connections between tables

    (D) Formatting reports

19. In a query, what does the criteria "Between #01/01/2022# And #12/31/2022#" represent?

    (A) Records before January 1, 2022

    (B) Records after December 31, 2022

    (C) Records between January 1, 2022, and December 31, 2022

    (D) Records excluding January 1, 2022, and December 31, 2022

20. What is the role of sensors in robotics?

    (A) Controlling actuators

    (B) Processing data

    (C) Generating code for AI algorithms

    (D) Providing feedback about the environment

21. What is the meaning of the term "machine learning" in AI?

    (A) Implementing precise instructions into machines through programming

    (B) Teaching machines to execute tasks automatically

    (C) Developing algorithms to control robotic motion

    (D) Conceptualising hardware components for Artificial Intelligence systems

22. In terms of digital security, what function does a Virtual Private Network (VPN) serve?

    (A) Anti-malicious website blocking

    (B) Establishing a private and secure internet connection

    (C) Managing online account credentials

    (D) Implementing email encryption

23. What does the acronym "5G" denote within the realm of telecommunications?

(A) An advancement to the fifth iteration of programming languages

(B) A novel standard for data encryption

(C) The fifth mobile network technology iteration

(D) A framework for the development of web applications

24. What is the function of a multimedia authoring tool?

(A) Playing multimedia content

(B) Designing and creating multimedia presentations

(C) Converting multimedia files to different formats

(D) Managing multimedia storage

25. How can you protect a Microsoft Word document with a password to restrict access?

(A) By selecting the "Encrypt" option from the File menu

(B) Configuring document characteristics as "Read-only"

(C) Implementing a digital signature

(D) Selecting the "Protect Document" option from the Review tab

26. What purpose does the Microsoft Excel function **"Conditional Formatting"** serve?

(A) Sorting data according to particular criteria

(B) Emphasising cells that satisfy specific criteria

(C) Data conversion to an alternative format

(D) Developing particular formulations

27. What is the function of the **"Action"** option in Microsoft PowerPoint?

(A) Modifying the transparency of entities

(B) Applying transitions for slides

(C) Specification of interactivity, including hyperlinks and button presses

(D) Enabling 3-dimensional shape rotation

28. How do you define a function named multiply that takes two parameters, a and b?

(A) function multiply(a, b):   (B) def multiply(a, b):

(C) define multiply(a, b):   (D) method multiply(a, b):

Instruction: Q. 29 to 33 are two-key based questions having four options A, B, C and D out of which TWO are correct.

29. In Access, which of these are valid data types?

(A) Currency   (B) Text

(C) String   (D) All of these

30. The attributes of <INPUT> tag are?

    (A) Value   (B) Size

    (C) bgcolor   (D) None of these

31. _____ and _____ are the two types of loops in Python.

    (A) for   (B) if

    (C) else   (D) while

32. Choose any two methods of communication used by humans.

    (A) Speaking   (B) Writing

    (C) Running   (D) Eating

33. _____ is a function of E commerce.

    (A) Marketing   (B) Supply Chain

    (C) Washing   (D) Beautification

Section C (Competency Enhancement)

34. Prabhnoor came to know that computers communicate with each other using Internet. He wondered whether they are connected through wires or not? Tell Prabhnoor that Internet uses which technology?

    (A) Wired   (B) Wireless

    (C) Robotics   (D) None of these

35. Bhawna has selected a word and wants its similar meaning. Which of the following features should she use?

    (A)   (B)

    (C)   (D)

36. Rituja has misspelled few words while typing the data. Which option should she use to correct it?

    (A) Review → Thesaurus   (B) Review → Compare

    (C) Review → Translate   (D) Review → Spelling & Grammar

37. Sanya has made a table in Access. She wants to view data from the table based on a specific criterion. Which option should she choose?

    (A) Query   (B) Modules

    (C) Form   (D) Report

38. Arya asked Riya about the company which secretly developed a driverless car in 2009 which also passed the Nevada's self-driving test by 2014. Help Riya to give the answer.

    (A) Google   (B) Apple

    (C) Honda   (D) Hyundai

39. Ashish was extremely happy when he received a mail that he has won a lottery of Rs. 10,00,000. He told this good news to his friend Rahul. Rahul explained him that it is a fraud. Which of the options given below are a trick to hack your computer or steal important information from it?

    (A) Free unauthorized software

    (B) Secret investment opportunity

    (C) Suddenly winning a big lottery

    (D) All of these

40. Tanmay is confused about the output of the following question. Help him find the output.

    x = 8

    x = 5

    print(x+x)

    (A) 13   (B) 10

    (C) 85   (D) None of these