



B.K. BIRLA CENTRE FOR EDUCATION

**SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL**



TERM-1 EXAMINATION (2025-26) ARTIFICIAL INTELLIGENCE (417)

**Class : IX
Date : 10-09-2025
Admission No.:**

**Duration: 2 Hrs
Max. Marks : 50
Roll No.:**

General Instructions:

Try to attempt all questions as per given order.

All questions are compulsory.

The Question Paper is divided into three sections Section A to C.

- Section A has 30 questions attempt 24 and carry 1 mark each.
- Section B has 10 questions attempt only 7 and carry 2 marks each.
- Section C has 6 questions attempt only 4 and carry 3 marks each.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q.1 Answer any 4 out of the given 6 questions (4 x 1 = 4)

1. When we communicate verbally, we should use _____. 1
a. Difficult words b. Simple words
c. Confusing words d. Abbreviations
2. What is the process called when a receiver communicates his/her response back to the sender? 1
a. Encoding b. Decoding c. Feedback d. Communication channel
3. _____ inculcate confidence within an individual to face and handle different situations in life. 1
a. Self-hatred b. Self-care c. Freedom d. Self-management
4. It is the ability to manage your impulse, emotions and behaviour. You should know yourself so you can manage your emotions and impulses. 1
a. Self-commitment b. Self-control c. Self-motivation d. Self-confident
5. Which of the following is a web browser? 1
a. Internet b. Chrome c. Windows d. None of these
6. Which shortcut key is used for Find option? 1
a. Ctrl + X b. Ctrl + H c. Ctrl + F d. Ctrl + P

Q.2 Answer any 5 out of the given 6 questions (5 x 1 = 5)

1. Which of the following best defines Artificial Intelligence (AI)?
a. The ability of computers to perform tasks without using any data
b. The ability of machines to mimic human intelligence and decision-making
c. A programming language used for app development
d. A hardware device for storing large amounts of data

2. Which stage of the AI Project Cycle involves identifying the goal and success criteria?
 - a. Data Acquisition
 - b. Problem Scoping
 - c. Modelling
 - d. Deployment
3. In the 4Ws Problem Canvas, the “Who” refers to:
 - a) The resources needed for the project
 - b) The people or stakeholders impacted by the problem
 - c) The steps to solve the problem
 - d) The expected timeline for the project
4. Which of these is an example of AI application in healthcare?
 - a) Voice-controlled smart assistants
 - b) AI-based disease diagnosis from X-ray images
 - c) Social media recommendation systems
 - d) Autonomous car navigation
5. Which activity is part of **data exploration**?
 - a) Cleaning data and finding missing values
 - b) Designing a machine learning algorithm
 - c) Deploying the AI solution
 - d) Writing a problem statement
6. Which phase of the AI Project Cycle ensures that the AI system works as intended before real-world use?
 - a) Deployment
 - b) Evaluation
 - c) Data Acquisition
 - d) Problem Scoping

Q.3 Answer any 5 out of the given 6 questions (5 x 1 = 5)

1. Using AI to recognize human faces in photos is an example of:
 - a) Natural Language Processing
 - b) Data Mining
 - c) Computer Vision
 - d) Robotics
2. Which is the final stage of the AI Project Cycle where the solution is made available to users?
 - a) Evaluation
 - b) Modelling
 - c) Data Acquisition
 - d) Deployment
3. In the Data Pyramid, **knowledge** refers to:
 - a) Raw facts and figures
 - b) Organized data with meaning
 - c) Applying information to make decisions
 - d) Personal experiences only
4. Which practice helps maintain **data security**?
 - a) Using weak passwords for convenience
 - b) Sharing login details with friends
 - c) Encrypting sensitive data
 - d) Disabling antivirus software
5. Data **privacy** focuses on:
 - a) Preventing hackers from entering the system
 - b) Protecting personal and sensitive data from unauthorized access
 - c) Converting data into charts and graphs
 - d) Organizing files alphabetically

6. A survey asking people's **favourite colour** collects:
- a) Nominal data b) Ordinal data
 - c) Quantitative data d) Continuous data

Q.4 Answer any 5 out of the given 6 questions (5 x 1 = 5)

1. **Quantitative data** refers to:
 - a) Data in text form
 - b) Numerical data that can be measured and counted
 - c) Categories without numbers
 - d) Personal opinions
2. Which of these is an example of **textual data**?
 - a) A student's name in a school database
 - b) Temperature readings from a sensor
 - c) The number of books in a library
 - d) Price list of items in a store
3. Data **interpretation** involves:
 - a) Collecting data from surveys
 - b) Analyzing processed data to draw conclusions
 - c) Formatting data into tables
 - d) Encrypting raw data
4. Which of these is **ordinal data**?
 - a) Names of countries
 - b) Roll numbers of students
 - c) Customer satisfaction ratings (Excellent, Good, Average)
 - d) Mobile phone numbers
5. _____ are repeating designs or sequences that can be observed in numbers, shapes, images, languages, or objects in our surroundings.
 - a) Patterns b) Iterations c) Sequences d) Statistics
6. Which of the following statements is not true?
 - a. Mathematics helps in the study of patterns.
 - b. With the use of mathematics, you can solve puzzles.
 - c. Mathematics helps to identify an order/ arrangement in the list of images or numbers.
 - d. The patterns only exist in mathematics.

Q.5 Answer any 5 out of the given 6 questions (5 x 1 = 5)

1. _____ measures the amount of certainty of an event.
 - a. Probability b. Calculus c. Series d. Pattern
2. _____ also helps in concluding data.
 - a. Statistics b. Information c. Probability d. Sequence
3. The _____ of an event occurring is somewhere between impossible and certain.
 - a. possibility b. existence c. probability d. outcome
4. If an event is certain or sure to happen, it will have a probability of _____.
 - a. 0 b. 1 c. True d. None

5. Picking a random day of the week, and it turns out to be both Monday and Friday at the same time. Identify events.
 - a. Likely events
 - b. Unlikely events
 - c. Impossible events
 - d. Certain events
6. If you toss a coin, the chance of getting a head or tail is an example of _____.
 - a. equal probability
 - b. unlikely events
 - c. impossible events
 - d. certain events

SECTION – B SUBJECTIVE TYPE QUESTIONS

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|-------------|---|---|
| Q6. | What is Oral Communication? | 2 |
| Q7. | What is Self-Control? | 2 |
| Q8. | What do you mean by Mobile OS? | 2 |
| Q9. | Differentiate between a File and a Folder. | 2 |
| Q10. | What is the main goal of creating a confusion matrix? | 2 |
| Q11. | What is Data Acquisition? | 2 |
| Q12. | Define the term Data Backup. | 2 |
| Q13. | What is Kaggle and how can it be useful? | 2 |
| Q14. | What are patterns? | 2 |
| Q15. | What do you mean by equal probability events? | 2 |

SECTION – C SUBJECTIVE TYPE QUESTIONS

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|-------------|---|---|
| Q16. | List any three uses of statistics in education. | 3 |
| Q17. | “Statistics is used for collecting, exploring and analyzing the data.” Elaborate with the help of an example. | 3 |
| Q18. | List any three best practices of cyber security. | 3 |
| Q19. | Write any two difference between Continuous data and Discrete data. | 3 |
| Q20. | Differentiate between Ethics and Moral. | 3 |
| Q21. | Give any three important applications of AI in real life. | 3 |

***** ALL THE BEST ! *****