



B.K. BIRLA CENTRE FOR EDUCATION

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



PERIODIC TEST 1 2026-2027

AI Marking Scheme (417) Set-01

Class: X

Date:

Admission No.

Time : 1 hr. 30 mins

Max Marks: 25

Roll No. :

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper contain two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. All questions of a particular section must be attempted in the correct order.
5. **SECTION A - OBJECTIVE TYPE QUESTIONS (07 MARKS):**
 - i. This section has 01 question.
 - ii. Marks allotted are mentioned against question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
6. **SECTION B – SUBJECTIVE TYPE QUESTIONS (18 MARKS):**
 - i. This section has 12 questions.
 - ii. A candidate has to do 8 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q.(1) Answer any 7 out of the given 10 questions :

(7 x 1 = 7)

- (i) a. To collect raw data for analysis and reference
- (ii) d. Selecting and evaluating the best algorithm to build the model
- (iii) c. Playing music based on mood
- (iv) b. Step-by-step guidance
- (v) c. Grouping photos in a gallery into "vacation", "family", and "pets" categories
- (vi) c. Reward and penalty feedback
- (vii) b. Receive data
- (viii) c. Reinforcement Learning
- (ix) a. Good work
- (x) d. All of these

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 6 out of the given 10 questions:

(6 x 2 = 12)

Q. (2) Explain any two applications of NLP.

- **Chatbots:** NLP helps chatbots understand user queries and respond in human-like language (e.g., customer support bots).
- **Language Translation:** Tools like translators convert text from one language to another automatically (e.g., English to Hindi).

Q. (3) Write and explain any two issues related to AI.

- **Bias in AI:** AI systems may give unfair results if trained on biased data.
- **Privacy Concerns:** AI systems often collect personal data, which can lead to misuse or data leaks.

Q. (4) What is Right-based ethical framework?

It is an ethical approach that focuses on respecting and protecting the fundamental rights of individuals, such as privacy, freedom, and equality while making decisions.

Q. (5) What is Data Acquisition?

Data acquisition is the process of collecting raw data from various sources for analysis in an AI project.

Q. (6) Define Deep Learning.

Deep Learning is a subset of AI that uses neural networks with many layers to learn patterns from large amounts of data.

Q. (7) What do you mean by a testing data set?

A testing dataset is a portion of data used to evaluate the performance and accuracy of a trained AI model.

Q. (8) Define Convolutional Neural Network.

A Convolutional Neural Network (CNN) is a type of deep learning model mainly used for image processing and recognition tasks.

Q. (9) What is Clustering?

Clustering is an unsupervised learning technique that groups similar data points into clusters based on their features.

Q. (10) What is non-verbal communication?

Non-verbal communication is the exchange of information without using words, such as through gestures, facial expressions, and body language.

Q. (11) Write any two don'ts of body language.

- Avoid crossing arms while communicating.
- Do not avoid eye contact.

Answer any 2 out of the given 4 questions:

(2 x 3 = 6)

Q. (10) What is the need of ethical frameworks for AI?

Ethical frameworks are needed in AI to ensure that systems are developed and used responsibly. They help prevent misuse, protect user privacy, reduce bias, and ensure fairness, transparency, and accountability in AI decisions.

Q. (11) 4W Project Canvas for GreenGro Technologies

1. Who (Stakeholders):

- Farmers
- Buyers (customers)
- GreenGro Technologies company
- Security authorities

2. What (Problem):

- Risk of theft or suspicious activities at unmanned kiosks
- Need for secure monitoring system

3. Where (Context):

- Unmanned kiosks in urban areas
- Locations where fresh produce is sold

4. Why (Purpose):

- To ensure safety and prevent theft
- To build trust among buyers and farmers
- To enable smooth and secure transactions

Q. (12) Differentiate between Supervised and Unsupervised Learning

Supervised Learning	Unsupervised Learning
Uses labelled data	Uses unlabelled data
Learns with input-output pairs	Finds patterns on its own
Used for prediction tasks	Used for grouping and pattern detection
Example: Predicting marks	Example: Clustering customers

Q. (13) Explain any two examples of Regression Model

- **House Price Prediction:**
A regression model predicts the price of a house based on features like size, location, and number of rooms.
- **Student Score Prediction:**
It predicts a student's marks based on study hours, attendance, and past performance.

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