



B.K. BIRLA CENTRE FOR EDUCATION

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

PERIODIC TEST 1 2026-2027 ARTIFICIAL INTELLIGENCE (417) Set-02

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) An AI Agent playing a game and learning from its rewards and penalties is example of:
 - a. Supervised
 - b. Unsupervised
 - c. Reinforcement
 - d. Evolutionary
- (ii) Self-driving Car use _____ to recognize objects?
 - a. NLP
 - b. Statistical Data
 - c. Computer Vision
 - d. None Of these
- (iii) Which of the following is NOT a real-time application of NLP?
 - a. Image recognition
 - b. Chatbots
 - c. Plagiarism checker
 - d. Sentiment analysis
- (iv) What do frameworks provide in the context of problem-solving?
 - a. Random solutions
 - b. Step-by-step guidance
 - c. Legal advice
 - d. Ethical justifications
- (v) Machine Learning focuses on _____.
 - a. Building Circuits
 - b. Learning from Data
 - c. Simulating Emotions
 - d. Physical Robots
- (vi) Which of these is an application of Machine Learning?
 - a. Building databases
 - b. Writing programming code
 - c. Manual data processing
 - d. Recommendation systems

- (vii) Which of the following is labelled data?
 a. Unmarked data b. Marked or tagged data
 c. Raw data d. Unusable data
- (viii) Which of the following types of datasets does unsupervised learning use?
 a. Labelled dataset b. Unlabelled dataset
 c. Partially labelled dataset d. Fixed rules dataset
- (ix) _____ is a word that shows a relationship between a noun and a pronoun in a sentence.
 a. Preposition c. Conjunction
 b. Verb d. Adjective
- (x) Which is a word used to modify or describe a noun or pronoun?
 a. Preposition b. Verb
 c. Conjunction d. Adjective

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 6 out of the given 10 questions:

(6 x 2 = 12)

- Q. (2) Explain any two application of statistical data.
 Q. (3) Write and explain any two concerns of AI.
 Q. (4) What is Virtue based ethical frameworks?
 Q. (5) What is Data Exploration?
 Q. (6) Define Machine Learning?
 Q. (7) What do you mean by a training data set?
 Q. (8) Define Convolutional Neural Network.
 Q. (9) What is Classification?
 Q. (10) Why is body language is important?
 Q. (11) What are Writing skills?

Answer any 2 out of the given 4 questions:

(2 x 3 = 6)

- Q.(10) What is the need of ethical frameworks for AI?
 Q.(11) 2. A self-driving car uses computer vision to navigate through traffic. It can detect pedestrians, other vehicles, traffic signs, and road conditions, making real-time decisions to ensure safe driving without human intervention. Explain how computer vision is critical to the operation of a self-driving car.
 Q.(12) Differentiate between Machine learning and Deep Learning
 Q.(13) Explain the working of Neural Network.

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