



B.K. BIRLA CENTRE FOR EDUCATION

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



PRE MID TERM 2026-2027 ARTIFICIAL INTELLIGENCE (417) Set-02

Class: X

Date:

Admission No.

Time : 1 hr

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)

1. Which metric measures how many positive predictions made by the model are actually correct?
a. Recall b. Precision c. Accuracy d. F1-Score
2. What does Spotify create based on your listening history?
a. Movie suggestions b. Playlists c. Job recommendations d. Shopping ads
3. What comes naturally without efforts?
a. Ability c. Painting b. Interest d. Reading
4. Which term refers to the actual value being positive, but the model predicting it as negative?
a. True Positive b. False Positive c. False Negative d. True Negative
5. Which is not correct for working independently?
a. Self-awareness c. Self-regulation
b. Self-motivation d. Self-support
6. How do AI system learns?
a. Using human intelligence b. Algorithms and data
c. Interacting with People d. Collecting physical objects
7. What is used to load and import data into the platform?
a. Data analyser b. File Widget c. Data processor d. Report generator
8. The complete collection of raw data available for a test or experiment is called:
a. A sample b. A variable c. A dataset d. A population

9. Which metric is used to reduce the no. of false positives and false negatives?
a. Accuracy b. F1 - Score c. Precision d. Recall
10. A student solved 90 out of 100 questions correctly in a multiple-choice exam. What is the error rate of the student's answers?
a. 10% b. 9% c. 8% d. 11%

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 6 out of the given 10 questions:

(6 x 2 = 12)

- Q. (2) Write any two advantages of working independently.
Q. (3) What is SMART goal?
Q. (4) What is Overfitting model?
Q. (5) What is Classification?
Q. (6) What is Confusion matrix
Q. (7) What is Train-Test split technique?
Q. (8) What are the three main domains of AI?
Q. (9) Define Data science.
Q. (10) Explain low code approach.
Q. (11) What is Azure Machine Learning?

Answer any 2 out of the given 4 questions:

(2 x 3 = 6)

- Q.(12) Explain any three application of Data Science.
Q.(13) Explain any three disadvantage of No-code AI tools.
Q.(14) Explain any three ethical concerns around model evaluation.
Q.(15) A machine learning model was tested on 100 emails. The results are shown below:

	Predicted Spam	Predicted Not Spam
Actual Spam	40	10
Actual Not Spam	15	35

1. Identify the values of **True Positive (TP)**, **False Positive (FP)**, **False Negative (FN)**, and **True Negative (TN)**.
2. Calculate the **Accuracy** of the model.
3. Briefly explain what a **False Positive** means in this context.

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