



# **B.K. BIRLA CENTRE FOR EDUCATION**



 $(7 \times 1 = 7)$ 

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

### PRE MID TERM: 2025-26 ARTIFICIAL INTELLIGENCE (417)

Class: X	Time : 1 hr.
Date: 01-08-2025	Max Marks: 25
Admission No.:	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 14 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:

(i) Which one of the following is a sign of Good Stress?

(a) Excited(b) Pain in body(c) Fever(d) Irritating nature

(ii) The self management skills of an employee are very important at the workplace to acquire

(a) Driving skill

(b) Maintenance skill

(c) Self confidence

(d) Physical strength

(iii) Which of the following acts as an interface between the user and the computer?

(a) Operating System

(b) Excel

(c) Impress

(d) LibreOffice Calc

(iv) Which of the following is a valid file extension for Word file?

(a) .jpg

(b) .docx

(c) .text

(d) .txt

(v) What does 'Error' refer to in model evaluation?

- (a) The difference between the model's prediction and the actual outcome
- (b) The total number of correct predictions
- (c) The total number of false positives in the model
- (d) The percentage of false negatives in the model

- (vi) What is the primary purpose of model evaluation in machine learning?
  - (a) To reduce the size of the dataset
  - (b)To measure the model's performance and ensure it generalizes well to unseen data
  - (c) To increase the complexity of the model
  - (d) To avoid the need for real world testing
- (vii) In which scenario is a model said to be "underfitting"?
  - (a) The model performs poorly on both training and test sets
  - (b) The model performs well on both training and test sets
  - (c) The model memorizes the training data but fails to generalize
  - (d) The model performs well on the training set but poorly on the test set
- (viii) What does the success of AI mainly depend on?
  - (a) The size of the machine
- (b) The amount, quality and type of data it receives
- (c) The speed of the algorithm
- (d) The location of the AI system
- (ix) Which of the following tools is an open source data mining and machine learning tool designed for data analysis, visualization and exploration?
  - (a) Microsoft Excel
- (b) Tableau
- (c) Orange data Mining
- (d) SPSS
- (x) What is the main thing that drives Artificial Intelligence (AI) technology?
  - (a) Human intelligence
- (b) Algorithms

(c) Machines

(d) Data

## **SECTION B: SUBJECTIVE TYPE QUESTIONS**

### Answer any 6 out of the given 10 questions:

 $(6 \times 2 = 12)$ 

- Q. (2) What do you understand by "Ability to work Independently"?
- Q. (3) How is Self awareness helpful in enhancing your ability to work independently?
- Q. (4) What do you mean by an Operating System? Name any two operating system.
- **Q.** (5) What is the use of antivirus software? Name any two commonly used anti virus software.
- **Q.** (6) Why is it important to maintain a balance between bias and variance in a machine learning model?
- **Q.** (7) What is precision in model evaluation, and why is it important in spam detection?
- **Q.** (8) Why is it important to split the dataset into training and testing sets?
- **Q.** (9) What is Data Science?
- **Q.** (10) Write and explain any two disadvantages of no-code tools.
- **O.** (11) What is Teachable Machine?

#### Answer any 2 out of the given 4 questions:

 $(2 \times 3 = 6)$ 

- Q.(12) What are the tips for practicing the four steps for effective Time management? Write any three.
- **Q.(13)** What precautions will you take to protect your computer from computer viruses? Write any three.
- **Q.(14)** List the different evaluation model and explain any three.
- Q.(15) Differentiate between Custom Code, Low Code and No Code.

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