



B.K. BIRLA CENTRE FOR EDUCATION

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

ANNUAL EXAMINATION: 2025-26 (SET-02) ARTIFICIAL INTELLIGENCE (843)

Class: XI

Date: 18-02-2026

Admission No. :

Time : 2 Hrs.

Max Marks: 50

Roll No. :

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of 21 questions in two sections : Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):**
 - i. This section has 05 question.
 - ii. Marks allotted are mentioned against question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
 - i. This section has 16 questions.
 - ii. A candidate has to do 10 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

MARKING SCHEME

SECTION A: OBJECTIVE TYPE QUESTIONS

Q.(1) Answer any 4 out of the given 6 questions on Employability Skills.

(4 x 1 = 4)

- i. Being able to refuse politely without offending others is an important quality of being:
 - a. submissive
 - b. confident and assertive *
 - c. indirectly aggressive
 - d. openly aggressive
- ii. Which of the following is NOT a form of spoken communication?
 - a. Panel discussion
 - b. Phone conversation
 - c. Online video meeting
 - d. Email message*
- iii. When both the idea and its execution are creative and new, the business opportunities are likely to:
 - a. reduce
 - b. grow*
 - c. remain unchanged
 - d. first reduce and then grow
- iv. Which type of business activity focuses on converting raw materials into usable finished goods?

- a. Startup business
- b. Buying and selling business
- c. Production-based business*
- d. Customer service business
- v. Environmental (green) policies mainly aim to ensure a respectable life and proper employment for:
 - a. Business organizations
 - b. Different sections of society*
 - c. Only workers
 - d. Only business owners
- vi. Which of the following government initiatives focuses on increasing and protecting forest areas?
 - a. Clean India Campaign
 - b. Green India Mission*
 - c. Sustainable Farming Mission
 - d. Light for All Campaign

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

(5 x 1 = 5)

- i. Technology that combines computer science and large sets of data to solve problems:
 - a. Deep Thinking
 - b. Machine Learning
 - c. Artificial Intelligence *
 - d. Deep Neural Network
- ii. The first artificial intelligence program is _____
 - a. Turing Test
 - b. Logic Theorist*
 - c. Python
 - d. Linux
- iii. _____ can be structured, semi-structured and unstructured.
 - a. Data *
 - b. Facts
 - c. Information
 - d. Concepts
- iv. What is a key responsibility of a Geographic Information Systems (GIS) Specialist?
 - a. Developing AI ethics policies
 - b. Building and maintaining robots
 - c. Analysing spatial data using AI *
 - d. Writing shell scripts
- v. Which skill is crucial for creating and training neural networks in AI?
 - a. Shell scripting
 - b. Deep learning*
 - c. Data visualisation
 - d. Communication skills
- vi. Which AI job role involves ensuring responsible development of AI technologies?
 - a. AI Engineer
 - b. Data Scientist
 - c. AI Ethicist *
 - d. Robotics Engineer

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

(5 x 1 = 5)

- i. What is an example of a valid identifier in Python?
 - a. lvariable
 - b. my-variable
 - c. calculate_sum*
 - d. my@var
- ii. Identify the relational operator from the following:
 - a. and
 - b. >= *
 - c. +
 - d. **
- iii. What is the type of the variable x after the following code executes?
x = None
 - a. int
 - b. None *
 - c. float
 - d. bool
- iv. What does the "Says quadrant in an Empathy Map represent?
 - a. The user's emotional state
 - b. The actions of the user
 - c. What the user says aloud in an interview*
 - d. What the user is thinking
- v. Which quadrant of the Empathy Map would capture the user's actions?
 - a. Says
 - b. Thinks
 - c. Does *
 - d. Feels
- vi. What is a key factor for a country's development and prosperity according to Goal 3?
 - a. Economic growth
 - b. Healthy citizens*
 - c. Political stability
 - d. Technological advancement

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

(5 x 1 = 5)

- i. In a dataset with no repeating values, what can be said about the mode?
 - a. There is one mode
 - b. There are multiple modes
 - c. There is no mode *
 - d. There is a mode, but it cannot be calculated
- ii. What is the purpose of data visualisation?
 - a. To make data analysis more complicated
 - b. To simplify the interpretation of complex data*
 - c. To hide information from the user
 - d. To increase the size of datasets
- iii. Which function is used to set the size of the plot in Matplotlib?
 - a. Title
 - b. xlabel
 - c. figure*
 - d. show
- iv. Which of the following is NOT a common machine learning method?
 - a. Decision trees
 - b. Neural networks
 - c. Support vector machines
 - d. Polynomial regression*
- v. Which type of learning does a Virtual Personal Assistant (VPA) like Siri or Alexa use?
 - a. Supervised learning
 - b. Unsupervised learning
 - c. Reinforcement learning
 - d. All of these*
- vi. In regression analysis, what type of events are typically forecasted?
 - a. Categorical
 - b. Continuous*
 - c. Binary
 - d. Discrete

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

(5 x 1 = 5)

- i. What field of study is crucial for understanding and improving human language communication?
 - a. Mathematics
 - b. Linguistics*
 - c. Chemistry
 - d. Physics
- ii. Which of the following is an example of a virtual assistant powered by NLP?
 - a. Google Search
 - b. Siri *
 - c. Microsoft Word
 - d. Photoshop
- iii. What is the first step in preparing a winning Project Debate using AI?
 - a. Reasoning
 - b. Understanding*
 - c. Interacting
 - d. Learning
- iv. Why is fairness critical in the context of AI ethics?
 - a. To accelerate the development of AI technologies
 - b. To ensure equal distribution of AI resources
 - c. To maximise AI's impact on environmental sustainability
 - d. To prevent bias and ensure equitable treatment of individuals*
- v. What is the purpose of the Moral Machine?
 - a. To develop autonomous vehicles
 - b. To explore ethical dilemmas in AI*
 - c. To create interactive decision-making scenarios
 - d. To quantify societal expectations about AI ethics
- vi. How do AI and data collaboration benefit decision-making?
 - a. By replacing human judgment entirely
 - b. By automating all decision-making processes
 - c. By identifying patterns and providing insights*
 - d. By increasing the complexity of decision-making tasks

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills.

(3 x 2 = 6)

Answer each question in 20-30 words.

Q6. List any two effective steps of time management.

Answer:

Q7. What is goal setting?

Answer:

Q8. How many text alignment are there? Name them.

Answer:

Q9. What is the use of Header?

Answer:

Q10. What do you mean by the attitude of an entrepreneur?

Answer:

Answer any 4 out of the given 6 questions in 20-30 words each.

(4 x 2 = 8)

Q11. What do you mean by NLP?

Answer:.

Q12. What are the traits required for an AI Professional?

Answer:

Q13. Define a primary data source.

Answer:

Q14. What is binary classification?

Answer:

Q15. What is Lexical analysis?

Answer:

Q16. What is AI bias?

Answer:

Answer any 3 out of the given 5 questions in 50-80 words each.

(3 x 4 = 12)

Q17. Explain the importance of soft skills for AI professionals and how they contribute to successful AI projects.

Answer:

Q18. Explain any four features of Python.

Answer:

Q19. Explain 5W and 1H problem canvas.

Answer:

Q20. Explain the steps of data preprocessing.

Answer:

Q21. Explain the classification process.

Answer:

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