

Maharaja Agrasen Model School, Pitampura, Delhi
Mid Term Examination | (**Sample Paper**)
Class IX (2024-25)
Subject - Artificial Intelligence (CBSE Subject Code : 417)

Max Marks : 50

Time Allowed: 2 Hours

Blueprint(Mid Term)

SNO	Chapters	Marks	1 Mark	2 Mark	4 Marks
1.1	AI Reflection and Domains	25	10	4x2=8	2x4=8
1.2	Project Cycle	25	10	3x2=6	2x4=8
	Total	50	20	14	16

Section - A (MCQ) (20 Marks)		
1.	<p>1. Which of the following is a benefit of AI? A) Active learning B) Cultural diversity C) Emotional intelligence D) Automation</p> <p>2. Which conference first coined the term AI? A) MIT Conference B) Harvard Conference C) Stanford Conference D) Dartmouth Conference</p> <p>3. What is the ability of AI to analyze data at a faster rate than humans? A) Decision-Making B) Interpersonal Skills C) Analysis D) Creativity</p> <p>4. Which type of AI system replicates human intelligence for a dedicated purpose? A) Generalize knowledge B) Alter and adapt to circumstances C) Narrow/ weak AI D) Broad AI</p> <p>5. What is the function of a smart chatbot?</p>	

- A) Analyzing data
- B) Simulate near-human interactions with customers
- C) Ordering pizza
- D) Understanding natural language

6. In which year was ELIZA, the first natural language programming-based conversation program described?

- A) 1966
- B) 1976
- C) 1986
- D) 1956

7. What method of inquiry is the Turing Test used for?

- A) Analyzing data at a faster rate
- B) Automating repetitive tasks
- C) Determining if a computer can think like a human
- D) Replicating human intelligence for a dedicated purpose

8. What are the applications of AI in vision systems?

- A) Optimizing conversation bots
- B) Executing dangerous tasks
- C) Analyzing financial investments
- D) Understanding and describing visual input on the computer

9. What is the first stage of the AI project cycle?

- A) Data Exploration
- B) Problem Scoping
- C) Modeling
- D) Data Acquisition

10. What is the main focus of Problem Scoping?

- A) Collecting data
- B) Designing algorithms
- C) Identifying the problem and setting a vision to solve it
- D) Testing the project

11. What kind of questions can be answered using Question Answering?

- A) Questions about computer vision applications
- B) Questions about natural language processing techniques
- C) Questions asked by humans in natural language
- D) Questions about machine learning algorithms

12. What is Speech Recognition used for?

- A) Detecting named entities in a paragraph
- B) Translating text from one language to another
- C) Analyzing sentiment and emotional state
- D) Converting spoken words into text

13. What is the purpose of the Problem Statement Template in the AI project cycle?

- A) To collect data
- B) To summarize the 4Ws and provide a clear problem definition
- C) To design the AI model
- D) To explore data

14. In the Data Acquisition stage, what does "Acquisition" refer to?

- A) Processing data
- B) Analyzing data
- C) Acquiring data from relevant sources
- D) Visualizing data

15. What does NLP help users do?

- A) Automatically generate human-like interactions
- B) Ask questions about any subject and get direct responses within seconds
- C) Inform computers about human languages
- D) Filter out unnecessary and unwanted information

16. Which of the following is an example of structured data?

- A) Youtube videos
- B) Facebook photos
- C) Cricket scoreboard
- D) Dashboard data

17. What type of data is a combination of structured and unstructured data?

- A) Numeric Data
- B) Text Data
- C) Semi-Structured Data
- D) Basic Data

18. What is the main goal of Data Exploration in the AI project cycle?

- A) Collecting raw data
- B) Visualizing data to identify trends, relationships, and patterns
- C) Testing the AI model
- D) Writing the final report

19. Which of the following AI approaches involves feeding the machine with data and rules?

- A) Learning-Based Approach
- B) Rule-Based Approach
- C) Data Exploration
- D) Data Acquisition

20. Which of the following statements is true about the Learning-Based Approach?

- A) The machine follows predefined rules given by the developer.
- B) The machine designs its own algorithms based on the data and desired output.
- C) It does not require any data to train the machine.
- D) It is the same as the Rule-Based Approach.

Section - B		
2.	How do you think AI is already impacting your present-day life? Give example	2
3.	Do you think that AI will impact jobs in future? Justify your answer.	2
4.	What is the Turing Test?	2
5.	When was the first chatbot invented? Give its name as well.	2
6.	What can be the authentic sources while collecting data?	2
7.	Why is data visualization important in the Data Exploration stage?	2
8.	Differentiate between structured and unstructured data with examples.	2
Section - C		
9.	Explain the relationship between Artificial Intelligence, Machine Learning and Deep Learning.	4
10.	Describe the difference between the Rule-Based and Learning-Based approaches in AI. Provide examples of each.	4
11.	How many domains of AI are there? Explain them.	4
12.	List four applications of NLP.	4