



Indian School Al Wadi Al Kabir
Mid Term Examination
ARTIFICIAL INTELLIGENCE (CODE: 417)

Class: IX
Date: 14/09/2023

Time: 2 Hour
Max. Marks: 50

General Instructions:

SECTION A: I. All Questions are compulsory.

SECTION B: II. Answer any 5 out of the given 6 questions each carries 2 marks.

III. Answer any 4 questions out of given 5 questions each carries 4 marks.

SECTION A: OBJECTIVE TYPE QUESTIONS

1. Answer all the following: (24 x 1 =24 marks)

1. Artificial Intelligence is about_____.

- a. Playing a game on Computer b. Programming on Machine with your Own Intelligence
c. Putting your intelligence in Machine d. Making a machine Intelligent

2. _____ is an AI game based on data science.

- a. Rock, Paper, Scissors b. Akinator with alexa c. Emoji Scavenger d. None of the above

3. Which of these an ethical concern for humans

- a. Data privacy b. Moral Issues c. AI bias d. All the above

4. This is a program that allows the computer to simulate conversation with a human being:

- a. Speech Application Program Interface b. Chatbot
c. Voice Recognition d. Speech Recognition.

5. Natural language processing has two subfields, namely:

- a. algorithmic and heuristic b. time and motion
c. understanding and generation d. symbolic and numeric

6. _____ is a branch of artificial intelligence that allows computers to learn and develop without being explicitly programmed.

- a. Machine Learning b. Natural Language Processing c. Expert System d. Computer Vision

7. A leading multinational company operates on a chain of hypermarkets and grocery stores deployed an AI application to make it easier for employees to keep their stores running smoothly. They used thousands of video cameras, weighted sensors on shelves, and other technologies that can tell employees when certain products is starting to go bad. One of the task of the application is to identify bananas that had started to turn brown, eliminating the need for employees to manually inspect fruit. Which of the following domain is used to achieve this?
- a. Data sciences b. Computer vision c. Natural Language Processing d. Fuzzy logic
8. Amazon had been working on a secret AI recruiting tool. The machine-learning specialists uncovered a big problem: their new recruiting engine did not like women. The system taught itself that male candidates were preferable. It penalized resumes that included the word “women”. This led to the failure of the tool. This is an example of
- a. Data Privacy b. AI access c. AI Bias d. Data Exploration
9. The situation that is created by a system itself and the developer of the system cannot resolve them is known as _____.
- a. Unemployment b. Inequalities c. Negative Adoptions d. Black Box problem
10. Which of the following is not a stage in the AI Project Cycle:
- a. Problem Scoping b. Data Acquisition c. Data Exploration d. Prototyping
11. What are the 4 W’s of problem scoping _____ in AI.
- a. Who & What b. Where c. Why d. All of the above
12. If data is easily accessible by humans and program, and easy to read is known as _____.
- a. Structured Data b. Unstructured Data c. Both a) and b) d. None of the above
13. _____ refers to AI modeling in which the developer hasn’t specified the relationship or patterns in the data.
- a. Learning Based b. Rule Based c. Decision Tree d. None of the above
14. After a model has been created and trained, it must be thoroughly tested in order to determine its efficiency and performance; this is known as _____.
- a. Evaluation b. Learning c. Decision d. None of the above

15. The method of collecting correct and dependable data to work with is known as _____.
16. _____ dataset is a large dataset that is used for teaching a machine learning model.
17. Statement 1: Where block helps you to focus on the context/situation/location of the problem.
Statement 2: What block helps you need to determine the nature of the problem.
- Statement1 is correct and Statement2 is incorrect
 - Statement2 is correct and Statement1 is incorrect
 - Both Statement1 and Statement 2 are incorrect
 - Both Statement1 and Statement 2 are correct
18. _____ allows computers and systems to extract useful information from digital photos, videos, and other visual inputs.
- Data Science
 - Natural Language Processing
 - Computer Vision
 - All of the above
19. A _____ is a flexible house setup in which appliances and devices may be managed remotely using a mobile or other networked device from anywhere with an internet connection.
- Smart Home
 - Smart City
 - Smart Class
 - None of the above
20. What skills required when you are working as AI professional.
- Training to become a expertise
 - Good knowledge of Math and Science
 - Required Programming Languages
 - All of the above

Questions 21-24 Match List 1 with list 2

List 1	List 2
21. SDG 10	a) Climate Change
22. SDG 13	b) Life on Land
23. SDG 14	c) Reduced Inequalities
25. SDG 15	d) Life below Water

SECTION B: SUBJECTIVE TYPE QUESTIONS

II. Answer any 5 out of the given 6 questions

(5 x 2 = 10 marks)

25. How AI can help in attaining SDG11
26. List any 4 basic skills that anyone should have for building a career in AI?
27. Explain any one example of possibilities of AI technology for customer experience.
28. What is Rule based Learning?
29. Define Problem statement template.
30. Explain Data Exploration stage.

III. Answer any 4 questions out of given 5 questions

(4x 4 = 16 marks)

31. Explain any four components of a good AI policy.
32. AI and robotics have raised some questions regarding liability. Take for example the scenario of an 'autonomous' or AI-driven robot moving through a factory. Another robot surprisingly crosses its way and our robot draws aside to prevent collision. However, by this maneuver the robot injures a person.
a) Who can be held liable for damages caused by autonomous systems? List two AI Ethics.
33. Differentiate Artificial Intelligence, Machine Learning and Deep Learning.
34. Suhana works for a company wherein she was assigned the task of developing a project using AI project cycle. She knew that the first stage was scoping the problem. Help her list and explain the remaining stages that she must go through to develop the project.
35. Differentiate Supervised and Unsupervised learning with examples