

** SINDHI HIGH SCHOOL, HEBBAL**

**PERIODIC TEST-III [2023-24]**

**SUBJECT: Artificial Intelligence (417)**

**Class: IX Max Marks: 25**

**Date:15.12.2023 Reading Time :8.20 to 8.30am**

**No of sides : 3 Writing Time: 8.30 to 9.30am**

**Instructions**

1. **Section A consists of 15 questions of 1 mark each.**
2. **Section A consists of 2 questions of 2 marks each.**
3. **Section A consists of 18 questions of 1 mark each.**

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| 1 | Choose the five stages of AI project cycle in correct order   1. Evaluation -> Problem Scoping -> Data Exploration -> Data Acquisition -> Modelling 2. Problem Scoping -> Data Exploration -> Data Acquisition -> Evaluation -> Modelling 3. Data Acquisition -> Problem Scoping -> Data Exploration -> Modelling -> Evaluation 4. Problem Scoping -> Data Acquisition -> Data Exploration -> Modelling -> Evaluation | **1** |
| 2 | In “Why” block canvas, which of the following canvases is the base of problem solving.   1. Who the people that would be benefitted by the solution 2. What is to be solved 3. Where will the solution be deployed 4. All of the above | **1** |
| 3 | \_\_\_\_\_\_\_\_\_\_\_ can be a piece of information or facts and statistics collected together for reference or analysis.   1. Database c)Data 2. Data Type d)None of the above | **1** |
| 4 | Whenever we want an AI project to be able to predict an output, we need to \_\_\_\_\_\_\_ it first, using data.   1. Analyze c. Train 2. Explore d. All of the above | **1** |
| 5 | Which of the following is one of the government open sources for collecting data?   1. www.ayushmanbharat.org 2. www.india.gov.in 3. www.bharatdata.in 4. www.india.com | **1** |
| 6 | What are the different ways to collect data?  a. Web Scraping & API  b. Surveys & Sensors  c. Cameras & Observations  d. All of the above | **1** |
| 7 | Competency based question:   1. Understand and inspect the web page to find the HTML markers associated with the information we want.---d 2. Use Python libraries to pull out data from the HTML page. 3. Manipulate the collected data to get it in the form we need.   Q. The above given steps are for collecting data from which of the following data sources?   1. Cameras b.Sensors c.Surveys d.Web scraping | **1** |
| 8 | Assertion and Reasoning Questions on Project Cycle:  Assertion (A): A self-driving car is made up of a combination of sensors, cameras, radar and AI. Reason (R): The owner is liable if a self-driving car is involved in an accident   1. Both A and R are correct and R is the correct explanation of A. 2. Both A and R are correct but R is NOT the correct explanation of A 3. A is correct but R is incorrect 4. A is incorrect but R is correct | **1** |
| 9 | What is considered as the heart of an AI project? | **1** |
| 10 | Complete decision tree based on the classification of AI model. | **1** |
| 11 | Mark true or false:  a) E-mail spam detection is an example of supervised learning.  b) Forecasting the prices of gold is a classification problem. | **1** |
| 12 | Data sources : Surveys  Chatbots : \_\_\_\_\_\_\_\_ | **1** |
| 13 | \_\_\_\_\_\_\_\_\_\_ enables software to train itself to perform tasks with vast amounts of data. [Deep Learning, Supervised Learning] | **1** |
| 14 | \_\_\_\_\_\_\_\_ is a phenomenon that occurs when an algorithm produces results that are systematically prejudiced towards certain gender, language, race, wealth, etc. and therefore produces skewed output. Choose your answer [AI bias, AI methods] | **1** |
| 15 | Self-driving cars are built using Artificial Intelligence. To drive the vehicle AI can be combined with \_\_\_\_\_\_\_\_\_\_\_   1. Radar c. GPS and control signals 2. camera d. All of the above | **1** |
| 16 | **Section B**  **Answer the following:**  Mention the precautions to be taken while acquiring data for developing an AI Project. | **2** |
| 17 | What is the difference between Machine Learning and Deep Learning? | **2** |
| 18 | **Section C**  **Answer the following:**  Name the following:  a) A problem is when the output variable is a category, such as “red” or “blue” or “disease” and “no disease”. Name the model  b) One of the most reliable and authentic sources of information where we can download the authentic data for our project are \_\_\_\_\_\_\_\_\_\_\_\_.  c) Virtual assistants have female voices? Name the phenomenon | **3** |
| 19 | Mention the types of learning approaches for AI modeling. | **3** |

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