

**DAV BR PUBLIC SCHOOL, BINA**  
**Practice Paper for HY Examination Session (2024-25)**  
**Class X AI(417)**

**Time Allowed : 2 Hrs.**

**Maximum Marks : 50**

**General Instructions:**

1. This question paper consists of two parts viz. Section A: Employability Skills and Section B: Subject Skills.
2. Section A: Employability Skills (10 Marks)
  - i. Answer any 4 questions out of the given 6 questions of 1 mark each.
  - ii. Answer any 3 questions out of the given 5 questions of 2 marks each.
3. Section B: Subject Skills (40 Marks)
  - i. Answer any 10 questions out of the given 12 questions of 1 mark each.
  - ii. Answer any 4 questions out of the given 6 questions of 2 marks each.
  - iii. Answer any 4 questions out of the given 6 questions of 3 marks each.
  - iv. Answer any 2 questions out of the given 4 questions of 5 marks each.
4. This question paper contains 39 questions out of which 27 questions are to be answered.
5. All the questions of a particular part/section must be attempted in the correct order.

**SECTION A**

**A Answer any 4 questions out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**

1. **Which of the following is an example of oral communication?**  
A) Newspapers B) Letters C) Phone call D) e-mail
2. **Which of these is a positive (good) facial expression?**  
A) Frowning while concentrating B) Maintaining eye contact  
C) Smiling continuously D) Rolling up your eyes
3. **Which of these is NOT a common communication barrier?**  
A) Linguistic barrier B) Interpersonal barrier  
C) Financial barrier D) Organisational barrier
4. **What plays a major role in reaction to stress**  
A) Emotions B) Personality C) Confidence D) None of these
5. **Stress is identified as a condition in which a person is .....**  
A) tensed B) worried C) relaxed D) both (A) and (B)
6. **Which of the following is a valid file extension for Notepad file?**  
A) .jpg B) .doc C) .text (POST) starts D) .txt

**B Answer any 3 questions out of the given 5 questions of 2 marks each (2 × 3 = 6)**

7. What is stress?
8. What is self-motivation explain?
9. Write the utility of my computer.
10. Mention two threats that affect a computer system.
11. What are the parts of sentence? Explain briefly with example.

**SECTION B**

Subject Specific Skills (40 Marks)

**C Answer any 10 questions out of the given 12 questions of 1 mark each. (1 × 10 = 10)**

12. The AI Project Cycle mainly has \_\_\_\_\_.  
a. 2 Stages b. 3 Stages c. 4 Stages d. 5 Stages
13. What are the various parameters which affect the problem \_\_\_\_\_.  
a. You need to acquire data which will become the base of your project  
b. You go for data acquisition by collecting data from various reliable and authentic sources.  
c. After exploring the patterns, you can decide upon the type of model you would build to achieve the goal.  
d. All of the mentioned.
14. \_\_\_\_\_ by collecting data from various reliable and authentic sources.  
a. Data Acquisition b. Database c. Data Mining d. None of the above
15. \_\_\_\_\_ helps to determine the nature of the problem.  
a. Who b. What c. Where d. Why
16. \_\_\_\_\_ can be a piece of information or facts and statistics collected together for reference or analysis.  
a. Database b. Data c. Data Type d. None of the above
17. You would feed the data into the machine. This is the data with which the machine can be trained. Now, once it is ready, it will predict his next data efficiently. This next data is known as \_\_\_\_\_.  
a. Testing Data b. Training Data c. Exploring Data d. All of the above
18. For better efficiency of an AI project, the \_\_\_\_\_ needs to be relevant and authentic.  
a. Testing Data b. Training Data c. Exploring Data d. All of the above
19. Sometimes, you use the internet and try to acquire data for your project from some random websites. Such data might not be authentic as its accuracy cannot be proved. Due to this, it becomes necessary to find a \_\_\_\_\_.  
a. Reliable source b. Random source c. Unauthorize source d. All of the above
20. The \_\_\_\_\_ makes the data understandable for humans as we can discover trends and patterns out of it.  
a. Random Data b. Graphical Representation  
c. Unstructured Data d. None of the above
21. Which one of the following is correct for Learning based approach?  
a. Supervised Learning b. Unsupervised Learning  
c. Reinforcement Learning d. All of the above

22. We humans are able to visualize up to 3-Dimensions only but according to a lot of theories and algorithms, there are various entities which exist beyond 3-Dimensions.  
a. Clustering      b. Dimensionality Reduction  
c. Both a) and b)    d. None of the above
23. The Sustainable Development Goals aim is to achieve by the end of year\_\_\_\_\_.  
a. 2025    b. 2030    c. 2035    d. 2040

**D    Answer any 4 questions out of the given 6 questions of 2 marks each.**  
**(2 × 4 = 8)**

24. What are the two different approaches for AI modelling?  
25. Name the 4Ws of problem canvases under the problem scoping stage of the AI Project Cycle.  
26. Name the different types of learning based approaches for AI modelling  
27. What is machine learning?  
28. How is Deep learning different from machine learning?  
29. Explain two features of NLP.

**E    Answer any 4 questions out of the given 6 questions of 3 marks each.**  
**(3 × 4 = 12)**

30. Match Column A with Column B

A

B

- |                         |                          |
|-------------------------|--------------------------|
| a. Classification Model | i. The labelled data     |
| b. Regression Model     | ii. The discrete dataset |
| c. The continuous data  | iv. Unlabeled data       |

31. Name three Domains of AI and explain in brief.  
32. Name three applications where AI is implemented in real life.  
33. Explain moral issues related to self-driving cars.  
34. Explain the What Block in 4W's canvas.  
35. Explain two features of Data visualization.

**F    Answer any 2 questions out of the given 4 questions of 5 marks each.**  
**(5 × 2 = 10)**

36. Explain Regression and classification in detail.  
37. Write down the steps to solve a problem of supervised learning.  
38. Explain Input, hidden and output layer with diagram.  
39. Explain Problem scoping, data acquisition, Modelling, Evaluation.