

# ATOMIC ENERGY CENTRAL SCHOOL-2, MUMBAI

## PT-2 EXAMINATION -2023

SUB: ARTIFICIAL INTELLIGENCE

CLASS: X

TIME: 2 Hrs.

MM-50

**Imp. Instructions:**

- Write down the proper question Sr. No. and answer it.
- Each section have choices. Don't do extra questions.

- Q.1 Fill in the blanks (do any 7) 7 x 1 = 7 marks [7]**
- a. \_\_\_\_\_ is a factor that contribute to stress. [1]
- b. \_\_\_\_\_ is an importance of the ability to work independently.. [1]
- c. Stress often arises due to lack of \_\_\_\_\_. [1]
- d. \_\_\_\_\_ activities are time-our activities, helps to manage stress. [1]
- e. \_\_\_\_\_ will helps in managing stress. (prioritise the tasks/always say yes to work [1]
- f. Decoding is done at \_\_\_\_\_ end. [1]
- g. Based on communication channel, communication are \_\_\_\_\_ types. (3/2) [1]
- h. \_\_\_\_\_ is a non-verbal communication, the tone of voice shows how a person is feeling like anger or joy. [1]
- i. Verbal communication relies heavily on \_\_\_\_\_. [1]
- j. \_\_\_\_\_ is not a barrier to communication. ( a cultural belief/simple language) [1]
- Q.2 Answer the following questions. (do any 7) 7 x 1 = 7 marks [7]**
- a. How does self-motivation help an individual in achieving one's goal? [1]
- b. How does self-awareness help in an individual's growth? [1]
- c. What is self-reliance? [1]
- d. Draw two visual communication examples? [1]
- e. How gestures is a part of communication? Give example? [1]
- f. Define descriptive feedback? [1]
- g. In the following sentence a phrase has been underlined. Write whether they function as nouns, adjective or adverb. [1]  
Helium-filled balloons fly off easily.
- h. Correct the sentence: [1]  
I am waiting in the Shopping mall.
- i. You will be in the college next year. [1]
- j. Give an example of complex sentence. [1]
- k. Define Jargon or Vocabulary? [1]
- Q.3 Answer the following questions. (do any 4) 4 x 2 = 8 marks [8]**
- a. Define 2 important advantages of the stress management? [2]
- b. State two important methods to enhance ability to work independently? [2]
- c. How self-awareness helps in the working independently? [2]
- d. What is a good feedback, give two points? [2]
- e. Draw communication cycle diagram? [2]
- f. Give 4 elements which are essential for a well-defined paragraph? [2]
- g. List 4 important barriers of effective communication? [2]

- Q.4 Fill in the blanks (Do any 6) 6 x 1 = 6 marks [6]**
- \_\_\_\_\_ is the first chatbot developed in 1966. [1]
  - \_\_\_\_\_ is the first gaming device by Microsoft. [1]
  - \_\_\_\_\_ intelligence helps to understand one's existence such as meaning of life and death. [1]
  - \_\_\_\_\_ is a fully automatic machine but not AI. [1]
  - Ecommerce based recommendations to customer is an example of \_\_\_\_\_. ( DS/CV/NLP) [1]
  - Self-driving car is an example of \_\_\_\_\_. (DL/NLP/CV) [1]
  - The \_\_\_\_\_ layer of neural networks deals with decision making or computations. [1]
  - \_\_\_\_\_ project is a part of SDG sustainable cities and communities. (IOT/smart city/smart home) [1]
  - \_\_\_\_\_ data required at the end of cycle to test the AI machine. [1]
  - Machine learning is based on \_\_\_\_\_ approach. (rule based/learning based) [1]
- Q.5 Answer the following questions. (do any 6) 6 x 1 = 6 marks [6]**
- State two advantages of machine learning. [1]
  - Define supervised learning? [1]
  - Draw the neural network design? [1]
  - Define dimensionality reduction model? [1]
  - Name two valid sources of data acquisition? [1]
  - Differentiate between training data and validating data? [1]
  - List 2 data visualisation tools used for automatic process of data exploration? [1]
  - Draw a sketch of 4-W canvas? [1]
  - An AI model trained to predict the number and name of the fruits. It collect the pictures and analyse the correct prediction. Name the model? [1]
  - Define deep learning? [1]
- Q.6 Answer the following questions. (Do any 4) 4 x 2 = 8 marks [8]**
- Give two differences between rule based and learning based approaches? [2]
  - State some ethical concerns of AI? [2]
  - List various stages involved in the Data Science process. [2]
  - State 2 applications of AI in various industries? [2]
  - List out some applications of NLP [2]
  - List four parameters of the evaluation stage? [2]
  - Draw diagrams of clustering and classification models? [2]
- Q.7 Answer the following questions. (Do any two) 2 x 4 = 8 marks [8]**
- State the nine modalities of intelligence? [4]
  - Define 4 important skills of stress-management? [4]
  - Define the principles of effective communication? [4]
  - Define the 4 important SDG goals in brief? [4]
  - Future retails e-commerce company profits are going down day by day. CEO of the Company wanted to do market research and evaluate the choice of the people and their buying preferences, so they can make necessary amendments in their strategies of earning profits. Draw 4-W canvas for the problem. [4]