



Delhi Public School, Howrah

PERIODIC ASSESSMENT I (2025-2026)

CLASS – IX

Care must be taken not to write anything on the question paper. All the questions must be attempted in the correct sequence.

SUBJECT: ARTIFICIAL INTELLIGENCE (SUBJECT CODE 417)

THEORY EXAMINATION

Time Allowed:-1 Hour

F.M.-25

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **15 questions** in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. Out of the given (3 + 12 =) **15 questions**, a candidate has to answer (3 + 6 =) **9 questions** in the allotted (maximum) time of **1 hour**.
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (11 MARKS):**
 - i. This section has 03 questions.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (14 MARKS):**
 - i. This section has 12 questions.
 - ii. A candidate has to do 6 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. 1	Answer any 3 out of the given 4 questions on Employability Skills (1 x 3 = 3 marks)	
i.	Which of the following is not a factor of 7C's of communication? (A) Completeness (B) Clarity (C) Courtesy (D) Classic	(1)
ii.	State whether the following statement is True or False. Rewrite the statement, if false. Non-Verbal Communication refers to the process of sending and receiving messages without using words – especially using visual cues.	(1)
iii.	Being a good listener is a trait of _____. (A) Interest (B) Ability (C) Self-confidence (D) Self-control	(1)
iv.	Which of the following models can be followed to instill positive thoughts? (A) SMILE (B) LAUGH (C) THINK (D) POSITIVE	(1)

Q. 2	Answer any 4 out of the given 6 questions (1 x 4 = 4 marks)	
i.	Auto complete suggestion feature in search engines is an example of _____. (A) Deep learning (B) Neural network (C) Machine learning (D) Robotics	(1)
ii.	Which of the following option is true about rule-based system? (A) Static (B) Dynamic (C) Raw text (D) Summarized Text	(1)

iii.	The _____ sensors are used as a water saving upgrade in smart homes. (A) smoke sensors (B) smart moisture (C) smart grid (D) smart thermostats	(1)
iv.	_____ are one of the basic forms of AI that do not have any past memory. (A) Self-awareness (B) Limited memory (C) Theory of mind (D) Reactive machines	(1)
v.	Which of the following terms refer to a set of inputs and outputs required to achieve a predetermined or specific goal? (A) Project work (B) Project (C) Project life cycle (D) IPO Cycle	(1)
vi.	The term _____ refers to a process of framing a problem in such a way that you will have a vision to solve it. (A) data acquisition (B) data exploration (C) future scope (D) problem scoping	(1)

Q. 3	Answer any 4 out of the given 6 questions (1 x 4 = 4 marks)	
i.	Which of the following stages is considered the last step of the AI project life cycle? (A) Deployment (B) Evaluation (C) Modeling (D) Training	(1)
ii.	Fill in the blank: The process of training using a machine learning algorithm based on accurate data is called the _____ stage.	(1)
iii.	Identify the term: _____ is used for the design, development, analysis and visualization of processed data. It is a method of creating a prototype of a real system.	(1)
iv.	A _____ is basically a tool that helps us in making decisions and actions in complex situations. (A) Decision Tree (B) System map (C) Algorithm (D) Flowchart	(1)
v.	Which of the following elements is not a part of sustainable development? (A) Society (B) Environment (C) Ecology (D) Ecosystem	(1)
vi.	Fill in the blank: Google Home or Nest is a Google Assistant based smart speaker which uses _____ technology.	(1)

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 2 out of the given 4 questions on Employability Skills (2 x 2 = 4 marks)

Answer each question in 20 – 30 words.

Q. 4	Namrata is preparing for an interview where she needs to focus on the non-verbal aspects of communication such as sitting posture, eye contact, hand gestures while talking etc. Apart from the several advantages of non-verbal communication there are some disadvantages too that needs to be kept in mind during an interview session. Explain two disadvantages of non-verbal communication and suggest Namrata some means to overcome these disadvantages.	(2)
Q. 5	Define the term self-management. State two features of self-management skills.	(2)
Q. 6	Often a strength can be a weakness and a weakness can be a strength. The most important trait is to identify strength or weaknesses properly for effective self-management. State two measures that can help identify strength.	(2)
Q. 7	Differentiate between Abilities and Interests.	(2)

Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)

Q.8	What are the types of AI based on capability?	(2)
Q.9	Differentiate between machine learning and deep learning with respect to their learning power and application.	(2)
Q.10	Computer Vision is one of the most important AI domain having a wide application area in today's fast growing technology. Write a brief note on Computer Vision with their application areas.	(2)

Q.11	Adarsh is a village boy and he used to be a topper in his school. Recently he has cracked a job interview where he got selected for a highly paid job profile. He now wants to settle in a smart city and set a reside with his family. He is unaware about the ways he can connect to the new life style. Discuss two major areas in which smart cities connect with citizens in this regard.	(2)
Q.12	Data being shared to many agencies for the sake of using AI tools are no more private. There are several concerns pertaining to the ethical aspects of handling data by these agencies. Discuss two ethical concerns related to implications of AI.	(2)

Answer any 1 out of the given 3 questions in 50 – 80 words (4 x 1 = 4 marks)

Q.13	The main goal of AI is to aid human capabilities and help us make advanced decisions with far reaching consequences. The key goal of AI is to build an intelligence with some traits and capabilities. Explain four such traits in this regard.	(4)
Q.14	Define the term NLP. Describe two of its main components.	(4)
Q.15	Write a brief note on Decision Tree. Discuss two advantages of a Decision Tree.	(4)