



# Delhi Public School, Howrah

PERIODIC ASSESSMENT I (2024-2025)

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: DATA SCIENCE (SUBJECT CODE 419)**

**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**

<b>Q. 1</b>	<b>Answer any 3 out of the given 4 questions on Employability Skills (1 x 3 = 3 marks)</b>	
i.	Interpersonal communication takes place – (a) in our mind (b) between two individuals (c) in a small group (d) in public speaking	(1)
ii.	Written communication is a type of _____ communication. (a) Verbal (b) non-verbal (c) visual (d) oral	(1)
iii.	Being a good listener is a trait of – (a) self-confidence (b) self-control (c) interest (d) ability	(1)
iv.	Which of the following models can be followed to instill positive thoughts? (a) SMILE (b) LAUGH (c) THINK (d) POSITIVE	(1)

<b>Q. 2</b>	<b>Answer any 4 out of the given 6 questions (1 x 4 = 4 marks)</b>	
i.	Which of the following is the appropriate meaning of information? (a) “Organised and raw fact” (b) “Organised and structured data” (c) “Raw facts that is to be organised” (d) “Facts which needs meaningful interpretation”	(1)
ii.	Which of the following statements is/ are true about data? (a) Raw facts which are unstructured and unorganized (b) Data doesn’t depend on information (c) Data can never be used for making decisions (d) All of these	(1)

iii.	Which level of DIKW model gives a clear view about the goal of collected data through systematic analysis of data? (a) Knowledge (b) Wisdom (c) Data (d) Information	(1)
iv.	Which of the following activities is/ are responsible for creating active data footprints on the world wide web? (a) Visiting and browsing items in a store where digital items are being sold (b) Searching and browsing items from an e-commerce website (c) Browsing through items in a shopping mall and writing a feedback in a physical feedback form (d) Discussing about digital items with a friend over a telephonic call	(1)
v.	Which kind of data footprint would be created when a user doesn't know that his/ her activities are being monitored by a company on the internet? (a) Active (b) Passive (c) Hybrid (d) None of these	(1)
vi.	Which of the following is not an advantage of data footprints? (a) Frauds or legal issues are easily detected (b) Personalize customer experience (c) Potentially lead to identity or data theft (d) Companies can more easily offer incentives	(1)

<b>Q. 3</b>	<b>Answer any 4 out of the given 6 questions (1 x 4 = 4 marks)</b>	
i.	Which of the following is not a part of data processing? (a) Data Analysis (b) Data Interpretation (c) Data Collection (d) Data Building	(1)
ii.	The steps involved in data collection are given below in a jumbled order. i. Planning how the data collection process will do ii. Decide how to collect data iii. Data collection iv. Identify the objective Which of the following options represent the correct order of the steps? (a) i -> ii -> iii -> iv (b) iv -> ii -> i -> iii (c) iii -> i -> ii -> iv (d) iv -> iii -> ii -> i	(1)
iii.	Data such as age, weight, blood pressure are type of _____ data. (a) discrete (b) continuous (c) nominal (d) ordinal	(1)
iv.	Data which is subjective in nature is classified as _____ data. (a) qualitative (b) quantitative (c) numerical (d) none of these	(1)
v.	In which of the following type, data has no hierarchy? (a) discrete (b) continuous (c) nominal (d) ordinal	(1)
vi.	Which of the following statement is not an advantage of quantitative data? (a) Quantitative data is highly reliable (b) The process of analysing quantitative data is quiet easy (c) Quantitative data provides larger datasets to get more accurate results (d) The process of analysing quantitative data may require expertise of statistics	(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	Define the term communication. State two factors that affect perspective in communication.	(2)
Q. 5	There are seven C's of effective communication which are applicable to both written as well as oral communication. Awareness of seven C's make one an effective communicator. Explain any two C's from the seven C's of communication.	(2)
Q. 6	Discuss two features of self-management skills.	(2)
Q. 7	Vikas is a student of class IX. In a particular class of Data Science, the topic being discussed was self-confidence where the teacher says that a self-confident person is sure of self and he/she has full faith in his/her abilities and discussions. State four qualities of self-confident people in this regard.	(2)

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

Q.8	Differentiate between data and information.	(2)
Q.9	In the digital era, internet has become an indispensable part of our lives as we are more comfortable in meeting almost all sorts of official/unofficial requirements online. We end up leaving large data trails each and every second while doing such activities over internet. What are two main categories of digital footprints? Explain them in brief.	(2)
Q.10	State four measures to protect ourselves from creating data footprints.	(2)
Q.11	Discuss two major causes of Data loss.	(2)
Q.12	Data processing is an important step to get usable information from the raw data and it occurs when the data is collected. Discuss the last two stages of data processing in brief.	(2)

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

Q.13	Sujit is a student of class IX and he is preparing a school project on Data Science and DIKW model. Explain Sujit the DIKW model. Draw the DIKW pyramid and demonstrate its layers for him.	(4)
Q.14	Discuss the impact of data and its application on our lives in the following sectors- (a) Healthcare (b) Education	(4)
Q.15	In mathematics, an attribute or a parameter that holds a data is known as variable. In general, a variable is an attribute that can be measured as it always contains some values which may be different and depend upon the situation. In this context define and explain the two categories of variable.	(4)