

# Indian Institute of Technology, Madras - Centre for Continuing Education

## Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	IIT M QUALIFIER EXAM QPA1 16 Oct 2022
Subject Name :	2022 Oct: IIT M QUALIFIER EXAM QPA1
Creation Date :	2022-10-10 18:09:16
Duration :	240
Total Marks :	190
Display Marks:	Yes
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes
Calculator :	Scientific
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No

Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Group I

Group Number :	1
Group Id :	6406539327
Group Maximum Duration :	0
Group Minimum Duration :	90
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	190
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No
Revisit allowed for group Instructions? :	Yes
Maximum Instruction Time :	0
Minimum Instruction Time :	0
Group Time In :	Minutes
Navigate To Group Summary From Last Question? :	No
Disable Submit Button During Assessment? :	No

Maths 1

Section Id :	64065323926
Section Number :	1

Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	12
Number of Questions to be attempted :	12
Section Marks :	50
Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065355478
Question Shuffling Allowed :	No

Question Number : 1 Question Id : 640653387169 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "QUALIFIER: MATHEMATICS FOR DATA SCIENCE 1"  
MANDATORILY YOU HAVE TO ATTEND ALL THE SECTIONS.

Options :

- 6406531287420. ✓ Yes
- 6406531287421. ✗ No

Question Number : 2 Question Id : 640653387170 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

## Instructions:

- There are some questions which have functions with discrete valued domains (such as day, month, year etc). For simplicity, we treat them as continuous functions.
- For NAT type question, enter only one right answer even if you get multiple answers for that particular question.
- Notations:
  - $\mathbb{R}$  = Set of real numbers
  - $\mathbb{Q}$  = Set of rational numbers
  - $\mathbb{Z}$  = Set of integers
  - $\mathbb{N}$  = Set of natural numbers
- The set of natural numbers includes 0.

### Options :

6406531287422. ✓ Useful Data has been mentioned above.

6406531287423. ✗ This data attachment is just for a reference & not for an evaluation.

**Sub-Section Number :**

2

**Sub-Section Id :**

64065355479

**Question Shuffling Allowed :**

No

**Question Id : 640653387171 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (3 to 5)**

**Question Label : Comprehension**

Consider two quadratic functions,  $p(x)$  and  $q(x)$ , whose  $x$ -intercepts are shown in Figure 1. The leading coefficients of both  $p(x)$  and  $q(x)$  are 1 and the  $y$ -intercepts are  $-27$ . The axis of symmetry of  $q(x)$  is  $x = 3$ , which also passes through one of the zeroes of  $p(x)$ . The line  $y = d$  passes through the vertices of  $p(x)$  and  $q(x)$ .

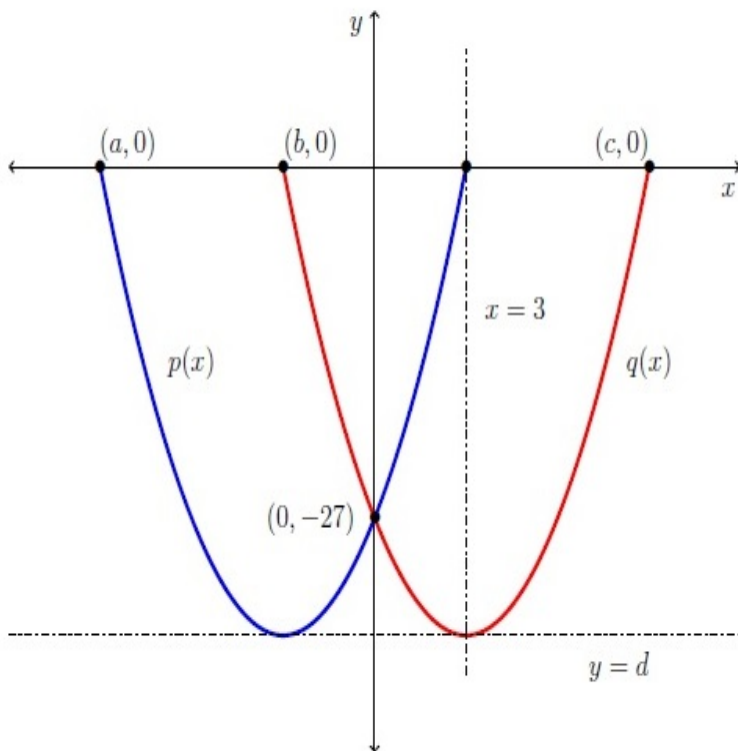


Figure 1

Based on this information, answer the given sub-questions

### Sub questions

Question Number : 3 Question Id : 640653387172 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

Enter the value of  $a + b + c$ ?

**NOTE:** Enter your answer to the nearest integer.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

-3

**Question Number : 4 Question Id : 640653387173 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

Enter the value of  $d$ ?

**NOTE:** Enter your answer to the nearest integer.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

-36

**Question Number : 5 Question Id : 640653387174 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Select Question

Choose the set of correct option(s)

**Options :**

6406531287426. ✓ The axis of symmetry of  $p(x)$  is  $x = -3$ .

6406531287427. ✗ The slopes of both  $p(x)$  and  $q(x)$  are same at  $(0, -27)$ .

6406531287428. ✓ The slope of  $p(x)$  is 6 but the slope  $q(x)$  is -6 at  $(0, -27)$ .

6406531287429. ✓ The discriminant of both the quadratic equations  $p(x) = 0$  and  $q(x) = 0$  are same.

**Sub-Section Number :**

3

**Sub-Section Id :**

64065355480

**Question Shuffling Allowed :**

No

**Question Id : 640653387175 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (6 to 7)**

**Question Label : Comprehension**

Ritwik wrote 12 mock tests. His score in each mock test  $M(n)$  is represented as  $M(n) = -(\frac{n^2}{1000})(n^3 - 15n^2 + 50n) + 40$ , where  $n$  represents the mock test number i.e.,  $n \in \{1, 2, \dots, 11, 12\}$ . He should score 40 or above to pass the assignment.

Based on this information, answer the given sub-questions

**Sub questions**

**Question Number : 6 Question Id : 640653387176 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

**Question Label : Short Answer Question**

How many times did Ritwik score exactly 40?

**NOTE:** Enter your answer to the nearest integer.

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

2

**Question Number : 7 Question Id : 640653387177 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

**Question Label : Short Answer Question**

In total, how many mock tests did Ritwik pass?

**NOTE:** Enter your answer to the nearest integer.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

6

**Sub-Section Number :** 4

**Sub-Section Id :** 64065355481

**Question Shuffling Allowed :** No

**Question Id :** 640653387178 **Question Type :** COMPREHENSION **Sub Question Shuffling Allowed :** No **Group Comprehension Questions :** No **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

**Question Numbers :** (8 to 11)

**Question Label :** Comprehension

Consider a relation  $R \subseteq A \times A$ , where  $A = \{1, 2, 3\}$ . Given below is Table 1, in which Column A shows the relation and Column B shows the type of relation.

Relation ( $R$ ) (Column A)	Type of Relation (Column B)
$R_1 = \{(1, 1)\}$	Symmetric relation
$R_2 = \{(1, 1), (2, 2), (3, 3)\}$	Anti-symmetric relation
$R_3 = \{(1, 1), (1, 2)\}$	Identity relation
$R_4 = \{(1, 3)\}$	Transitive relation
$R_5 = \{(1, 1), (2, 2), (3, 3), (1, 2)\}$	Reflexive relation
$R_6 = \{(1, 1), (1, 2), (2, 1), (2, 3)\}$	Equivalence relation

Table 1

Based on this information, answer the given sub-questions

**Sub questions**



**Question Number : 8 Question Id : 640653387179 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

State 'True' or 'False' :  $R_6$  does not match with any type of relations given in Column B.

**Options :**

6406531287432. ✓ TRUE

6406531287433. ✗ FALSE

**Question Number : 9 Question Id : 640653387180 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

State 'True' or 'False' :  $R_7$  matches with all type of relations except anti-symmetric relation given in Column B.

**Options :**

6406531287434. ✗ TRUE

6406531287435. ✓ FALSE

**Question Number : 10 Question Id : 640653387181 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Short Answer Question

In total, how many relations given in Column A matches with transitive relation?

**NOTE:** Enter your answer to the nearest integer.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

5

**Question Number : 11 Question Id : 640653387182 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

In total, how many relations given in Column A matches with reflexive relation?

**NOTE:** Enter your answer to the nearest integer.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

2

**Sub-Section Number :** 5

**Sub-Section Id :** 64065355482

**Question Shuffling Allowed :** Yes

**Question Number : 12 Question Id : 640653387183 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 5**

Question Label : Multiple Select Question

Consider the following relations defined on the set of integers

- $R_1 = \{(x, y) \mid x, y \in \mathbb{Z}, \text{ and } y = x^2 - 1\}$
- $R_2 = \{(x, y) \mid x, y \in \mathbb{Z}, \text{ and } |x| + |y| = 1\}$

Choose the correct option(s)?

**Options :**

6406531287438. ✖  $R_1 \cap R_2$  represents an injective function

6406531287439. ✔  $R_2$  represents a relation but not a function.

6406531287440. ✔  $R_1$  represents a function.

6406531287441. ✖  $R_2$  represents a function

**Question Number : 13 Question Id : 640653387189 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 5**

**Question Label : Multiple Select Question**

Figure 2 shows the graph of a polynomial  $p(x)$ . Choose the set of correct option(s).

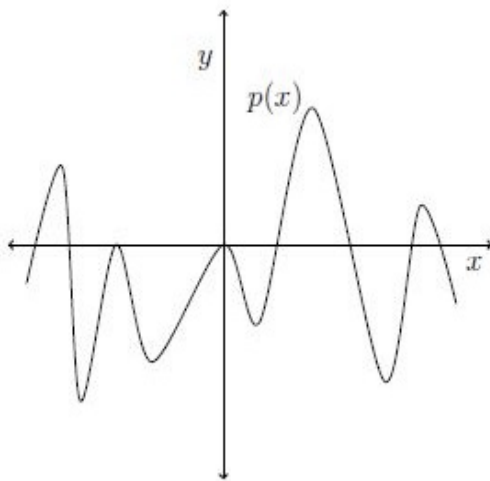


Figure 2

**Options :**

6406531287461. ✔ The degree of  $p(x)$  is at least 10.

6406531287462. ✔  $p(x)$  represent an even degree polynomial

6406531287463. ✖ Total number of turning point of  $p(x)$  are 8.

6406531287464. ✔ Multiplicities of zero and one of the negative root could be the same

**Sub-Section Number :**

**Sub-Section Id :** 64065355483

**Question Shuffling Allowed :** Yes

**Question Number : 14 Question Id : 640653387184 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 5**

Question Label : Short Answer Question

Let  $A$  be the set of all points on the curve defined by the function  $f_1(x) = x^2 - x - 30$  and let  $B$  be the set of all points on the curve  $f_2$  defined by the reflection of the curve  $f_1$  with respect to  $X$ - axis. If  $C$  is the set of all points on the axes(i.e.,  $x$  and  $y$  axis), then find the cardinality of set  $D$  where  $D = (A \cap B) \cup (A \cap C) \cup (B \cap C)$ .

**NOTE:** Enter your answer to the nearest integer.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

4

**Sub-Section Number :** 7

**Sub-Section Id :** 64065355484

**Question Shuffling Allowed :** Yes

**Question Number : 15 Question Id : 640653387185 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

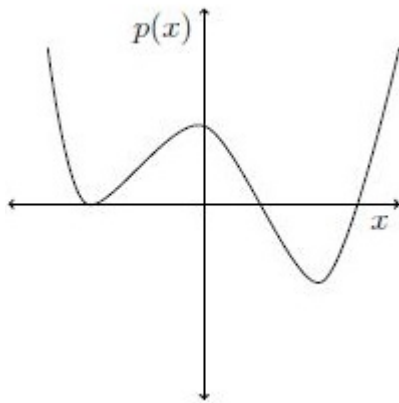
Question Label : Multiple Select Question

The polynomial  $p(x) = a_n x^n + a_{n-1} x^{n-1} + \dots + a_0$  has the following properties:

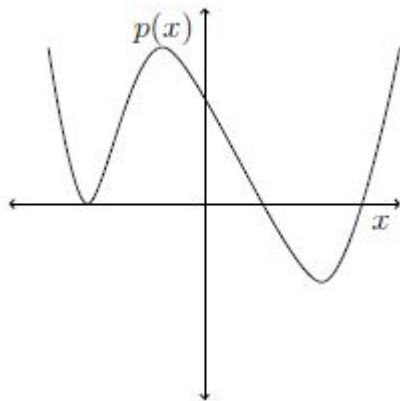
- $p(x)$  is an even degree polynomial.
- $p(x)$  has at least one positive real root and at least one negative real root.
- $(x + 4)^2$  is a factor of  $p(x)$ .
- $p(0) \neq 0$

From the options given, choose the possible representations of  $p(x)$ .

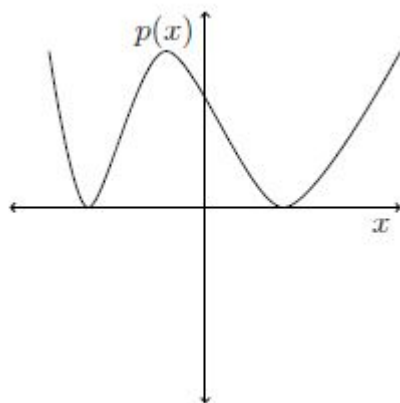
**Options :**



6406531287443. ✓

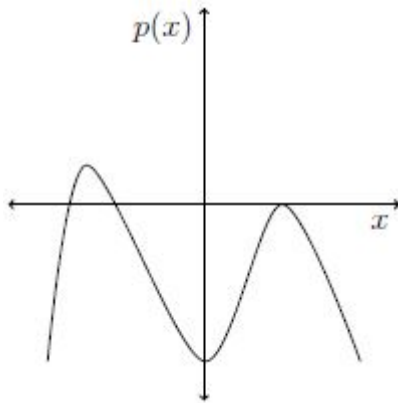
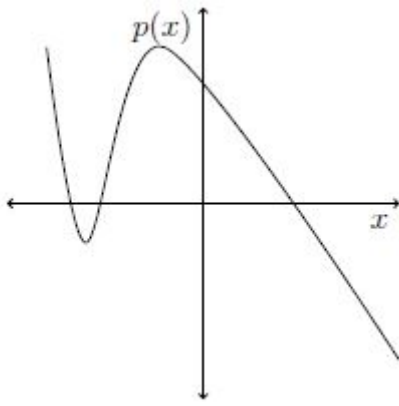


6406531287444. ✓

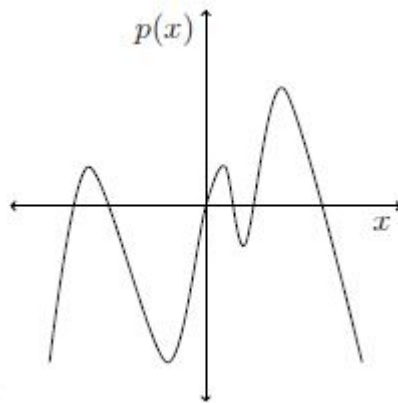


6406531287445. ✓

6406531287446. ✗



6406531287447. ✖



6406531287448. ✖

**Question Number : 16 Question Id : 640653387187 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Select Question

Which of the following statements is (are) correct?

**Options :**

6406531287453. ✔  $y - 20 = 3(x - 10)^2$  is an equation of a parabola whose vertex is at (10, 20).

6406531287454. ✓  $p(x) = ax^{10} + bx^5 + 2x + 8$  where  $a = 0$  and  $b \neq 0$ , is a polynomial of degree 5.

6406531287455. ✗  $-5x + 4y - 1 = 0$  and  $\frac{x}{4} - \frac{y}{5} = 1$  are perpendicular to each other.

6406531287456. ✓  $2x + 7y + 9 = 0$  and  $6x + 21y + 9 = 0$  are parallel to each other.

**Sub-Section Number :**

8

**Sub-Section Id :**

64065355485

**Question Shuffling Allowed :**

Yes

**Question Number : 17 Question Id : 640653387186 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

**Question Label : Multiple Select Question**

You are climbing a ladder which is slanted at an angle of 45 degrees (measured in the anticlockwise direction) with respect to the ground. The ladder, leaning against a wall, is at a vertical distance of 2 metres from the ground. If you are at a location which cuts the ladder in the ratio 2 : 1 from the bottom to top, what are the coordinates of your location? Assume origin (0,0) to be at the intersection of the ladder and the ground.

**Options :**

6406531287449. ✗ (3/2, 1/2)

6406531287450. ✗ (1/3, 2/3)

6406531287451. ✗ (2/3, 2/3)

6406531287452. ✓ (4/3, 4/3)

**Question Number : 18 Question Id : 640653387188 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

**Question Label : Multiple Select Question**

Sushmita was calculating SSE (sum squared error) and she found that SSE is a function of  $a$  as follows:  $SSE = f(a) = a^2 - 8a + 30$ . What will be the best fit value.

**Options :**

6406531287457. ✖ 9

6406531287458. ✔ 14

6406531287459. ✖ 0

6406531287460. ✖ -2

## English 1

Section Id :	64065323927
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	27
Number of Questions to be attempted :	27
Section Marks :	50
Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065355486
Question Shuffling Allowed :	No

Question Number : 19 Question Id : 640653387190 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0



Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "QUALIFIER: ENGLISH 1"

MANDATORILY YOU HAVE TO ATTEND ALL THE SECTIONS.

Options :

6406531287465. ✓ Yes

6406531287466. ✗ No

Sub-Section Number : 2

Sub-Section Id : 64065355487

Question Shuffling Allowed : No

Question Id : 640653387191 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (20 to 24)

Question Label : Comprehension

Nature is an infinite source of beauty. Sunrise and sunset, mountains and rivers, lakes and glaciers, forests and fields provide joy and bliss to the human mind and heart for hours together. Everything in nature is splendid and divine. Every day and every season of the year has a peculiar beauty to unfold. Only one should have eyes to behold it and heart to feel it like the English poet William Wordsworth who after seeing daffodils said; *"And then my heart with pleasure fills and dances with the daffodils"*. Nature is a great teacher. The early man was thrilled with beauty and wonders of nature. The Aryans worshipped nature. One can learn the lessons in the vast school of nature.

Unfortunately, the strife, the stress and the tension of modern life have made people immune to beauties of nature. Their life is so full of care that they have no time to stand and stare. They cannot enjoy the beauty of flowing rivers, swinging trees, flying birds and majestic mountains and hills. There is however, a cry to go back to village from the concrete and artificial jungle of cities. Hence the town planners of today pay special attention to provide enough number of natural scenic spots in town planning. To develop a balanced personality, one needs to have a healthy attitude which can make us appreciate and enjoy the beauty of nature.

There is other balm to soothe our tired soul and listless mind than the infinite nature all around us. We should enjoy it fully to lead a balanced and harmonious life, full of peace and tranquillity.

Based on the above data, answer the given subquestions

### Sub questions

**Question Number : 20 Question Id : 640653387192 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

Choose the word which is most OPPOSITE in meaning of the word '*unfold*' as used in the passage?

**Options :**

6406531287467. ✖ Perpetuate

6406531287468. ✖ Describe

6406531287469. ✔ Conceal

6406531287470. ✖ Declare

**Question Number : 21 Question Id : 640653387193 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

What is needed to develop a balanced personality?

**Options :**

6406531287471. ✖ Going back to villages

6406531287472. ✔ Healthy attitude

6406531287473. ✖ Reading poetry

6406531287474. ✖ Interpersonal skills

**Question Number : 22 Question Id : 640653387194 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

What should we do to enjoy tranquil life?

**Options :**

6406531287475. ✔ Enjoy the nature around us.

6406531287476. ✖ Lead a disciplined and dedicated life.

6406531287477. ✖ Believe that nature is infinite source of beauty.

6406531287478. ✖ Get totally immersed in our daily routine.

**Question Number : 23 Question Id : 640653387195 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

According to the author of the passage, Nature:

**Options :**

6406531287479. ✔ Is abundantly glorious and divine

6406531287480. ✖ Brings uniformity in all seasons

6406531287481. ✖ Is the creator of this universe

6406531287482. ✖ Is the ultimate salvation of man

**Question Number : 24 Question Id : 640653387196 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

What are the town planners doing today?

**Options :**

6406531287483. ✖ Making efforts to inculcate healthy attitude among people

6406531287484. ✖ Supporting the cry to go back to villages

6406531287485. ✖ Establishing balance between concrete and artificial jungle of cities

6406531287486. ✔ Providing facilities for enjoying nature

**Question Id : 640653387197 Question Type : COMPREHENSION Sub Question Shuffling**  
**Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A**  
**Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (25 to 29)**

Question Label : Comprehension

Listen to the audio sample and answer the subquestions.



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### **Sub questions**

**Question Number : 25 Question Id : 640653387198 Question Type : MCQ Is Question**  
**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**  
**Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

Apple acquired NeXT

**Options :**

6406531287487. ✓ TRUE

6406531287488. ✗ FALSE

**Question Number : 26 Question Id : 640653387199 Question Type : MCQ Is Question**  
**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**  
**Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

According to Steve Jobs, *'the only way to do great work'* is \_\_\_\_\_.

**Options :**

6406531287489. ✗ To remain focused

6406531287490. ✓ To love what you do

6406531287491. ✖ To be disciplined

6406531287492. ✖ To remain calm

**Question Number : 27 Question Id : 640653387200 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

At what age did Steve Jobs read the quote '*if you live each day as if it was your last, someday you'll most certainly be right*'.

**Options :**

6406531287493. ✖ 14 years

6406531287494. ✖ 15 years

6406531287495. ✖ 16 years

6406531287496. ✔ 17 years

**Question Number : 28 Question Id : 640653387201 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

What does the phrase '*to get one's affairs in order*' mean?

**Options :**

6406531287497. ✔ Prepare for one's death

6406531287498. ✖ Criticize someone repeatedly

6406531287499. ✖ Throw away something

6406531287500. ✖ Have a good relationship

**Question Number : 29 Question Id : 640653387202 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

Identify the word that means '*instrument used to view internal body parts*'.

**Options :**

6406531287501. ✖ Telescope

6406531287502. ✖ Stethoscope

6406531287503. ✖ Horoscope

6406531287504. ✔ Endoscope

**Sub-Section Number :** 3

**Sub-Section Id :** 64065355488

**Question Shuffling Allowed :** No

**Question Id : 640653387203 Question Type : COMPREHENSION Sub Question Shuffling**

**Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A**

**Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (30 to 34)**

Question Label : Comprehension

**Read the following telephonic conversation and fill in the blank with appropriate responses:**

Tina: Hello. Good morning. Is this Meridian hotel?

Receptionist: Good morning. Yes. (i) \_\_\_\_\_

Tina: I would like to book a suite for New Year's eve.

Receptionist: (ii) \_\_\_\_\_. Let me check the availability.

Tina: Sure. Please let me know about other services on that day.

Receptionist: (iii)\_\_\_\_ that we have no suite rooms available on that day.

Tina: Could you please (iv) \_\_\_\_ me to the manager

Receptionist: Sure, (v) \_\_\_\_\_ for a second. I am connecting to the manager.

Tina: Thank you.

Based on the above data, answer the given subquestions.

**Sub questions**

**Question Number : 30 Question Id : 640653387204 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Complete blank (i) with an appropriate response.

**Options :**

6406531287505. ✖ What can I do for you?

6406531287506. ✔ How may I help you?

6406531287507. ✖ What do you want to know?

6406531287508. ✖ This is hotel Meridian

**Question Number : 31 Question Id : 640653387205 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Complete blank (ii) with an appropriate response.

**Options :**

6406531287509. ✖ Wait for a second

6406531287510. ✖ Could you call after sometime

6406531287511. ✔ Please hold down for a second

6406531287512. ✖ Wait

**Question Number : 32 Question Id : 640653387206 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Complete blank (iii) with an appropriate response.

**Options :**

6406531287513. ✓ Sorry to inform you

6406531287514. ✖ Sorry

6406531287515. ✖ We are sorry

6406531287516. ✖ I apologise

**Question Number : 33 Question Id : 640653387207 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Complete blank (iv) with an appropriate response.

**Options :**

6406531287517. ✓ Connect

6406531287518. ✖ Call

6406531287519. ✖ Message

6406531287520. ✖ Ask

**Question Number : 34 Question Id : 640653387208 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Complete blank (v) with an appropriate response.

**Options :**

6406531287521. ✖ Wait

6406531287522. ✓ Please hold down

6406531287523. ✖ Hold

6406531287524. ✖ Please wait

**Sub-Section Number :** 4

**Sub-Section Id :** 64065355489

**Question Shuffling Allowed :** No



**Question Id : 640653387211 Question Type : COMPREHENSION Sub Question Shuffling**  
**Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A**  
**Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (35 to 37)**

Question Label : Comprehension

Match Column A with suitable options in Column B. (Hint: Word collocation)

A	B
Surprised	a) With
Rely	b) At
Blessed	c) On

Based on the above data, answer the given subquestions.

**Sub questions**

**Question Number : 35 Question Id : 640653387212 Question Type : MCQ Is Question**  
**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**  
**Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Surprised \_\_\_\_\_

**Options :**

6406531287529. ✖ With

6406531287530. ✔ At

6406531287531. ✖ On

**Question Number : 36 Question Id : 640653387213 Question Type : MCQ Is Question**  
**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**  
**Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Rely \_\_\_\_\_

**Options :**

6406531287532. ✖ With

6406531287533. ✖ At

6406531287534. ✔ On

**Question Number : 37 Question Id : 640653387214 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Blessed \_\_\_\_\_

**Options :**

6406531287535. ✔ With

6406531287536. ✖ At

6406531287537. ✖ On

**Sub-Section Number :** 5

**Sub-Section Id :** 64065355490

**Question Shuffling Allowed :** Yes

**Question Number : 38 Question Id : 640653387209 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

*'She hates her mother having to suffer so badly// she moved out//'* has the same meaning as *'She hates her mother// having to suffer so badly/ she moved out//'*.

**Options :**

6406531287525. ✖ TRUE

6406531287526. ✓ FALSE

**Question Number : 39 Question Id : 640653387210 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Pause is like a punctuation mark to spoken language.

**Options :**

6406531287527. ✓ TRUE

6406531287528. ✗ FALSE

**Question Number : 40 Question Id : 640653387215 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

What is the meaning of the phrasal verb '*dig in*'?

**Options :**

6406531287538. ✗ To become extinct

6406531287539. ✗ To want something a lot

6406531287540. ✗ To become quieter or inaudible

6406531287541. ✓ To start eating greedily

**Question Number : 41 Question Id : 640653387216 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Choose the correct option.

\_\_\_\_\_ we leave now or do you want to wait?

**Options :**

6406531287542. ✖ Will

6406531287543. ✔ Shall

**Question Number : 42 Question Id : 640653387217 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

'Rocky was furious about the results'. Here the word '*furious*' can be replaced appropriately with \_\_\_\_\_.

**Options :**

6406531287544. ✖ Fuming

6406531287545. ✖ Sad

6406531287546. ✔ Angry

6406531287547. ✖ Disappointed

**Question Number : 43 Question Id : 640653387218 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Choose the odd one out from the following:

Flood, Delusion, Inundation, Downpour

**Options :**

6406531287548. ✖ Flood

6406531287549. ✔ Delusion

6406531287550. ✖ Inundation

6406531287551. ✖ Downpour

**Question Number : 44 Question Id : 640653387219 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

I have \_\_\_\_ interest in sports.

**Options :**

6406531287552. ✖ Some

6406531287553. ✔ Little

6406531287554. ✖ Few

6406531287555. ✖ A few

**Question Number : 45 Question Id : 640653387220 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

The officer showed \_\_\_\_ sentiments towards the grievances.

**Options :**

6406531287556. ✔ Cold

6406531287557. ✖ Dark

6406531287558. ✖ Active

6406531287559. ✖ None of these

**Question Number : 46 Question Id : 640653387221 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Identify the conjunction in the following sentence.

*The shop specializes in exotic vegetables, such as cherry tomatoes, baby corn, and parsley.*

**Options :**

6406531287560. ✖ Specializes

6406531287561. ✖ Exotic

6406531287562. ✔ Such as

6406531287563. ✖ Vegetables

**Question Number : 47 Question Id : 640653387222 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Choose the appropriate option.

I can't live on \_\_\_\_\_ 600 dollars a month.

**Options :**

6406531287564. ✖ A

6406531287565. ✖ An

6406531287566. ✖ The

6406531287567. ✔ No article

**Question Number : 48 Question Id : 640653387223 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Identify the preposition in the following sentence:

*Thirty years have passed away since they met.*

**Options :**

6406531287568. ✖ Thirty

6406531287569. ✖ Years

6406531287570. ✔ Since

6406531287571. ✖ They

**Question Number : 49 Question Id : 640653387224 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Identify the part of speech of the underlined word.

*The movie is starting now.*

**Options :**

6406531287572. ✖ Preposition

6406531287573. ✖ Conjunction

6406531287574. ✔ Adverb

6406531287575. ✖ Adjective

**Question Number : 50 Question Id : 640653387225 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Select the appropriate option.

The adjective formed from the word '*hope*' is \_\_\_\_.

**Options :**

6406531287576. ✖ Hopefully

6406531287577. ✔ Hopeful

**Question Number : 51 Question Id : 640653387226 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Choose the correct answer.

Much of the information found online \_\_\_\_\_ often misleading.

**Options :**

6406531287578. ✖ Has

6406531287579. ✖ Have

6406531287580. ✖ Are

6406531287581. ✔ Is

**Question Number : 52 Question Id : 640653387227 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Identify the part of speech of the underlined word.

He is the best football player in the team.

**Options :**

6406531287582. ✖ Noun

6406531287583. ✖ Adjective

6406531287584. ✔ Pronoun

6406531287585. ✖ Adverb

**Question Number : 53 Question Id : 640653387228 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Fill in the blanks with an appropriate article:

We were not in \_\_\_\_\_ hurry to go to school

**Options :**

6406531287586. ✔ A

6406531287587. ✖ An

6406531287588. ✖ The



6406531287589. ✖ None of these

**Question Number : 54 Question Id : 640653387229 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Fill in the blanks with an appropriate article:

Alisha knows how to play \_\_\_\_ Guitar.

**Options :**

6406531287590. ✖ A

6406531287591. ✖ An

6406531287592. ✔ The

6406531287593. ✖ None of these

**Question Number : 55 Question Id : 640653387230 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Which among the following is a word without a diphthong?

**Options :**

6406531287594. ✖ Loiter

6406531287595. ✔ Stew

6406531287596. ✖ Maiden

6406531287597. ✖ None of these

**Question Number : 56 Question Id : 640653387231 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Which among the following has /k/ sound ?

**Options :**

6406531287598. ✖ Cathartic

6406531287599. ✖ Kitten

6406531287600. ✔ Both Cathartic and Kitten

6406531287601. ✖ Only Cathartic

**Question Number : 57 Question Id : 640653387232 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Choose the word with /i:/ sound from the following:

**Options :**

6406531287602. ✔ Mean

6406531287603. ✖ Jane

6406531287604. ✖ Mare

6406531287605. ✖ Both Jane and Mare

**Question Number : 58 Question Id : 640653387233 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

There isn't any word without vowel sound. This statement is

**Options :**

6406531287606. ✔ TRUE

6406531287607. ✖ FALSE

**Question Number : 59 Question Id : 640653387234 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

Which among the following words has the same sound as underlined in *strain*?

**Options :**

- 6406531287608. ✖ Naïve
- 6406531287609. ✖ Buy
- 6406531287610. ✔ Rail

**CT**

Section Id :	64065323928
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	15
Number of Questions to be attempted :	15
Section Marks :	50
Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065355491
Question Shuffling Allowed :	No

Question Number : 60 Question Id : 640653387235 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "QUALIFIER: COMPUTATIONAL THINKING"  
MANDATORILY YOU HAVE TO ATTEND ALL THE SECTIONS.

Options :

6406531287611. ✓ Yes

6406531287612. ✗ No

Question Number : 61 Question Id : 640653387236 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

Scores								
SeqNo	Name	Gender	DateOfBirth	TownCity	Mathematics	Physics	Chemistry	Total
0	Bhuvanesh	M	7 Nov	Erode	68	64	78	210
■ ■ ■								
29	Naveen	M	13 Oct	Vellore	72	66	81	219

Words			
SeqNo	Word	PartOfSpeech	LetterCount
0	It	Pronoun	2
■ ■ ■			
64	cane.	Noun	4

Library							
SeqNo	Name	Author	Genre	Language	Pages	Publisher	Year
0	Igniting Minds	Kalam	Nonfiction	English	178	Penguin	2002
■ ■ ■							
29	Malgudi Days	Narayan	Fiction	English	150	Indian Thought	1943

Olympics							
SeqNo	Name	Gender	Nationality	Host country	Year	Sport	Medal
0	Karnam Malleswari	F	Indian	Australia	2000	Weightlifting	Bronze
- - -							
49	Michael Phelps	M	American	China	2008	Swimming	Gold

### Three sample cards out of 30 for Shopping Bills dataset

Item List	SV Stores				
	Srivatsan 1				
	Item	Category	Qty	Price	Cost
	Carrots	Vegetables/Food	1.5	50	75
	Soap	Toiletries	4	32	128
	Tomatoes	Vegetables/Food	2	40	80
	Bananas	Vegetables/Food	8	8	64
	Socks	Footwear/Apparel	3	56	168
	Curd	Dairy/Food	0.5	32	16
	Milk	Dairy/Food	1.5	24	36
					547
Sun General					
Vignesh 14					
Item	Category	Qty	Price	Cost	
Phone Charger	Utilities	1	230	230	
Razor Blades	Grooming	1	12	12	
Razor	Grooming	1	45	45	
Shaving Lotion	Grooming	0.8	180	144	
Earphones	Electronics	1	210	210	
Pencils	Stationery	3	5	15	456

**Options :**

6406531287613. ✓ Useful Data has been mentioned above.

6406531287614. ✖ This data attachment is just for a reference & not for an evaluation.

**Sub-Section Number :**

2

**Sub-Section Id :**

64065355492

**Question Shuffling Allowed :**

Yes

Question Number : 62 Question Id : 640653387237 Question Type : MCQ Is Question

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

Select the most appropriate datatype specific to "Scores" dataset for the left column.

Field	Data Type
a. Is Bhuvanesh's total marks > 200 ?	1. String
b. Gender	2. Character
c. TownCity	3. Boolean
d. Sequence number	4. Integer

**Options :**

6406531287615. ✓ a - (3), b - (2), c- (1), d - (4)

6406531287616. ✗ a - (1), b - (2), c- (4), d - (3)

6406531287617. ✗ a - (2), b - (3), c- (1), d - (4)

6406531287618. ✗ a - (3), b - (1), c- (3), d - (4)

**Sub-Section Number :**

3

**Sub-Section Id :**

64065355493

**Question Shuffling Allowed :**

Yes

**Question Number : 63 Question Id : 640653387238 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Choice Question

The following pseudocode is executed using the "Words" dataset. What will **count** represent at the end of the execution?

```

1  count = 0, Flag = False
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      if(X.PartOfSpeech == "Noun"){
5          Flag = True
6      }
7      else{
8          if(Flag and X.PartOfSpeech == "Verb"){
9              count = count + 1
10         }
11     }
12     Move X to Table 2
13 }

```

### Options :

6406531287619. ✖ Number of nouns before the first verb in the dataset

6406531287620. ✖ Number of verbs before the first noun in the dataset

6406531287621. ✖ Number of nouns after the first verb in the dataset

6406531287622. ✔ Number of verbs after the first noun in the dataset

**Question Number : 64 Question Id : 640653387239 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Choice Question

The following pseudocode is executed using the "Scores" dataset. What will **count** represent at the end of the execution?

```

1  count = 0, A = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      if(X.Gender == 'M' or X.Mathematics > X.Physics){
5          A = 1
6      }
7      else{
8          count = count + 1
9      }
10     Move X to Table 2
11 }

```

**Options :**

6406531287623. ✖ Number of male students whose Physics marks are greater than Mathematics marks

6406531287624. ✖ Number of male students whose Physics marks are greater than or equal to Mathematics marks

6406531287625. ✔ Number of female students whose Physics marks are greater than or equal to Mathematics marks

6406531287626. ✖ Number of female students whose Physics marks are less than or equal to Mathematics marks

**Question Number : 65 Question Id : 640653387241 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Choice Question

The following pseudocode is executed using the "Shopping Bills" dataset. Procedure **findCommon** takes pair of cards **X** and **Y** as input and returns True if the two cards share at least one common item otherwise returns False. What will **count** represent at the end of the execution?

```
1  count = 0
2  while(Pile 1 has more cards){
3      Read the top card X from Pile 1
4      Move the card X to Pile 2
5      while(Pile 1 has more Cards){
6          Read the top card Y from Pile 1
7          if(X.ShopName != Y.ShopName and findCommon(X, Y)){
8              count = count + 1
9          }
10         Move the card Y to Pile 3
11     }
12     Move all the cards from Pile 3 to Pile 1
13 }
```

**Options :**

6406531287631. ✖ Number of pairs of bills from the same shop with at least one common item

6406531287632. ✔ Number of pairs of bills from the different shops with at least one common



item

6406531287633. ✖ Number of pairs of bills with at least two common items

6406531287634. ✖ Number of pairs of bills from the different shops with no common items

**Sub-Section Number :** 4

**Sub-Section Id :** 64065355494

**Question Shuffling Allowed :** Yes

**Question Number : 66 Question Id : 640653387240 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Choice Question

The following pseudocode is executed using the "Scores" dataset. What will **count** represent at the end of the execution?

```
1  count = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      Move X to Table 2
5      Flag = True
6      while(Table 1 has more rows){
7          Read the first row Y in Table 1
8          if(X.Mathematics == Y.Mathematics){
9              Flag = False
10             Move Y to Table 2
11         }
12         else{
13             Move Y to Table 3
14         }
15     }
16     if(Flag){
17         count = count + 1
18     }
19     Move all rows from Table 3 to Table 1
20 }
```

**Options :**

6406531287627. ✖ Number of students with same Mathematics marks

6406531287628. ✖ Number of pairs of students with same Mathematics marks

6406531287629. ✓ Number of students with distinct Mathematics marks

6406531287630. ✗ Number of pairs of students with distinct Mathematics marks

**Question Number : 67 Question Id : 640653387242 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Choice Question

The following pseudocode is executed using the "Words" table. At the end of the execution, **count** stores the number of pairs of words with same letter count where both are either nouns or both end with a full stop. Choose the correct code fragment to complete the pseudocode.

```
1  count = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      Move X to Table 2
5      while(Table 1 has more rows){
6          Read the first row Y in Table 1
7          Move Y to Table 3
8          if(**Statement 1**){
9              if(X.PartOfSpeech == "Noun"){
10                 if(**Statement 2**){
11                     count = count + 1
12                 }
13             }
14             else{
15                 if(**Statement 3**){
16                     count = count + 1
17                 }
18             }
19         }
20     }
21     Move all rows from Table 3 to Table 1
22 }
```

**Options :**

6406531287635. ✗ Statement 1: **X.PartOfSpeech == Y.PartOfSpeech**

Statement 2: **X.LetterCount == Y.LetterCount**

Statement 3: **X.Word and Y.Word end with a full stop**

6406531287636. ✗ Statement 1: **X.Word and Y.Word end with a full stop**

Statement 2: **X.PartOfSpeech == Y.PartOfSpeech**

Statement 3: **X.LetterCount == Y.LetterCount**

6406531287637. ✖ Statement 1: **X.LetterCount == Y.LetterCount**

Statement 2: **X.Word** and **Y.Word** end with a full stop

Statement 3: **X.PartOfSpeech == Y.PartOfSpeech**

6406531287638. ✔ Statement 1: **X.LetterCount == Y.LetterCount**

Statement 2: **X.PartOfSpeech == Y.PartOfSpeech**

Statement 3: **X.Word** and **Y.Word** end with a full stop

**Sub-Section Number :** 5

**Sub-Section Id :** 64065355495

**Question Shuffling Allowed :** Yes

**Question Number : 68 Question Id : 640653387243 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Select Question

Sripriya has used a variable **min** to find the minimum total score using "Scores" dataset. There are many ways of initializing **min**. Choose the correct option(s) regarding the initialization of **min**.

It is a Multiple Select Question (MSQ)

**Options :**

6406531287639. ✖ Initialize **min** to 0

6406531287640. ✔ Pick any random card **X** from the dataset and **min = X.Total**

6406531287641. ✔ Pick the top card **X** from the dataset and **min = X.Total**

6406531287642. ✔ Initialize **min** with any value greater than the possible maximum total score

6406531287643. ✖ Initialize **min** with any value less than the possible minimum total score

**Sub-Section Number :** 6

**Sub-Section Id :** 64065355496

**Question Shuffling Allowed :** Yes

**Question Number : 69 Question Id : 640653387244 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Select Question

The following pseudocode is executed using the "Scores" dataset. At the end of the execution, **count** captures the number of boys who scored at least 75 marks in Chemistry. Choose the correct code fragment(s) to complete the pseudocode.

It is a Multiple Select Question (MSQ).

```
1  count = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      *****
5      *****Fill the code*****
6      *****
7      Move X to Table 2
8  }
```

**Options :**

```
1  if(X.Gender == 'M' or X.Chemistry >= 75){
2      count = count + 1
3  }
```

6406531287644. ✖

```
1  if(X.Gender == 'M'){
2      A = 1
3  }
4  if(X.Chemistry >= 75){
5      B = 1
6  }
7  if((A + B) > 1){
8      count = count + 1
9  }
```

6406531287645. ✖

6406531287646. ✔

```

1 | A = 0, B = 0
2 | if(X.Gender == 'M'){
3 |     A = 1
4 | }
5 | if(X.Chemistry >= 75){
6 |     B = 1
7 | }
8 | if((A + B) > 1){
9 |     count = count + 1
10 | }

```

```

1 | A = 0, B = 1
2 | if(X.Gender == 'M'){
3 |     A = 1
4 | }
5 | if(X.Chemistry < 75){
6 |     B = 0
7 | }
8 | if((A + B) > 1){
9 |     count = count + 1
10 | }

```

6406531287647. ✓

**Question Number : 70 Question Id : 640653387245 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Select Question

The following pseudocode is executed using the "Scores" dataset. At the end of the execution, **A** captures the number of students who are male from Bengaluru or have scored more marks in Physics than average Physics marks. Assume that **Avg** holds the value of the average Physics marks. But the pseudocode may have mistakes. Identify all such mistakes (if any). Assume that all statements not listed in the options below are free of errors.

It is a Multiple Select Question (MSQ).

```

1  A = 0
2  while(Table 1 has more rows){
3      Read the first row x in Table 1
4      C = False, D = False
5      if(x.Gender == 'F' and x.CityTown == "Bengaluru"){
6          C = True
7      }
8      if(x.Physics < Avg){
9          D = True
10     }
11     if(C or D){
12         A = A + 1
13     }
14     Move x to Table 2
15 }

```

**Options :**

6406531287648. ✖ Line 1

6406531287649. ✔ Line 5

6406531287650. ✔ Line 8

6406531287651. ✖ Line 12

6406531287652. ✖ No error in the code

**Question Number : 71 Question Id : 640653387246 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Select Question

The following pseudocode is executed using the "Words" dataset. At the end of the execution, **count** captures the number of pairs of words with either same letter count or same part of speech but not both. Choose the correct code fragment(s) to complete the pseudocode.

It is a Multiple Select Question (MSQ).

```

1  count = 0
2  while(Table 1 has more rows){
3      Read the first row X in Table 1
4      Move X to Table 2
5      while(Table 1 has more rows){
6          Read the first row Y in Table 1
7          Move Y to Table 3
8          count = count + findPair(X, Y)
9      }
10     Move all rows from Table 3 to Table 1
11 }
12 Procedure findPair(X, Y)
13     *****
14     ***** Fill the code *****
15     *****
16 End findPair

```

Options :

```

1  A = 0, B = 0
2  if(X.LetterCount== Y.LetterCount or X.PartOfSpeech == Y.PartOfSpeech){
3      A = A + 1
4  }
5  if(X.LetterCount== Y.LetterCount and X.PartOfSpeech == Y.PartOfSpeech){
6      B = B + 1
7  }
8  return(A-B)

```

6406531287653. ✓

```

1  A = 0, B = 0
2  if(X.LetterCount== Y.LetterCount and X.PartOfSpeech == Y.PartOfSpeech){
3      A = A + 1
4  }
5  if(X.LetterCount== Y.LetterCount or X.PartOfSpeech == Y.PartOfSpeech){
6      B = B + 1
7  }
8  return(A-B)

```

6406531287654. ✖

6406531287655. ✓



```

1  A = False, B = False
2  if(X.LetterCount== Y.LetterCount){
3      A = True
4  }
5  if(X.PartOfSpeech == Y.PartOfSpeech){
6      B = True
7  }
8  if((A and not B) or (not A and B)){
9      return(1)
10 }
11 return(0)

```

```

1  A = False, B = False
2  if(X.LetterCount== Y.LetterCount){
3      A = True
4  }
5  if(X.PartOfSpeech == Y.PartOfSpeech){
6      B = True
7  }
8  if((A or not B) and (not A or B)){
9      return(1)
10 }
11 return(0)

```

6406531287656. ✖

**Question Number : 72 Question Id : 640653387247 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Select Question

The following pseudocode is executed using the "Library" dataset. Assume that Table 1 contains all the books authored by "Narayan" only. Also assume that the "Year" field of each book is distinct in the Table.



```

1  Procedure groupBooks(Table 1)
2      A = 2023, B = 0
3      while(Table 1 has more rows){
4          Read the first row Z from Table 1
5          if(Z.Year < A){
6              A = Z.Year
7              B = Z.SeqNo
8          }
9          Move Z to Table 2
10     }
11     while(Table 2 has more rows){
12         Read the first row K from Table 2
13         if(K.SeqNo == B){
14             Move K to Table 3
15         }
16         else{
17             Move K to Table 4
18         }
19     }
20 End groupBooks

```

Which of the following statement(s) are correct at the end of execution of this pseudocode?

It is a Multiple Select Question (MSQ).

**Options :**

6406531287657. ✔ Table 2 will be empty

6406531287658. ✖ Table 3 will have one record corresponding to the most recently published book of "Narayan".

6406531287659. ✔ Table 3 will have one record corresponding to the oldest published book of "Narayan".

6406531287660. ✖ Table 4 will have one record corresponding to the oldest published book of "Narayan".

6406531287661. ✖ Table 4 will have one record corresponding to the most recently published book of "Narayan".

**Question Number : 73 Question Id : 640653387248 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

## Correct Marks : 4

Question Label : Multiple Select Question

The procedure **countGirls** is executed using the "Scores" dataset which counts the number of girls who have got more than the subject-wise average marks in at least one of the three subjects.

Assume that the subject-wise average marks for Physics, Chemistry and Mathematics are stored in variables **P,C** and **M** respectively. Choose the correct code fragment(s) to complete the procedure.

It is a Multiple Select Question (MSQ).

```
1 Procedure countGirls(P,C,M)
2     count = 0
3     while(Table 1 has more rows){
4         Read the first row X from Table 1
5         *****
6         ****Fill in the code****
7         *****
8         Move X to Table 2
9     }
10    return(count)
11 End countGirls
```

Options :

```
1 if(X.Gender == 'F'){
2     if(X.Mathematics > M or X.Physics > P or X.Chemistry > C){
3         count = count + 1
4     }
5 }
```

6406531287662. ✓

```
1 if(X.Gender == 'F'){
2     if(not(X.Mathematics < M and X.Physics < P and X.Chemistry < C)){
3         count = count + 1
4     }
5 }
```

6406531287663. ✗

```
1 if(X.Gender == 'F' and (X.Mathematics < M or X.Physics < P or X.Chemistry <
2 C)){
3     count = count + 1
4 }
```

6406531287664. ✗

```
1  if(X.Gender == 'F' and (X.Mathematics > M or X.Physics > P or X.Chemistry >
   C)){
2      count = count + 1
3  }
```

6406531287665. ✓

**Sub-Section Number :** 7  
**Sub-Section Id :** 64065355497  
**Question Shuffling Allowed :** No

**Question Id : 640653387249 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (74 to 75)**

Question Label : Comprehension

Answer the given subquestions.

**Sub questions**

**Question Number : 74 Question Id : 640653387250 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Choice Question

The following pseudocode is executed using the “Olympics” dataset. Procedure **doSomething** accepts a Table of rows which contains rows of same player. Assume that every player has won at least two medals and only one medal in any year. What will **(A-B)** represent at the end of the execution?

```

1 Procedure doSomething(Table T1)
2   A = 0, B = 0
3   while(Table T1 has more rows){
4     Read the first row Z from Table T1
5     if(Z.Year > A){
6       B = A
7       A = Z.Year
8     }
9     if(Z.Year < A and Z.Year > B){
10      B = Z.Year
11    }
12    Move the row Z to Table T2
13  }
14  return((A - B))
15 End doSomething

```

### Options :

- 6406531287666. ✖ Year gap between first and second medal won by a player
- 6406531287667. ✖ Year gap between first and latest medal won by a player
- 6406531287668. ✔ Year gap between latest and second latest medal won by a player
- 6406531287669. ✖ Year gap between first and second latest medal won by a player

**Question Number : 75 Question Id : 640653387251 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 4**

Question Label : Multiple Choice Question

The following pseudocode is executed on the "Olympics" dataset. Use the procedure

**doSomething** in the previous question. What will **count** represent at the end of the execution?

Assume that every player has won at least two medals and only one medal in a year.

```

1  count = 0, max = 0
2  while(Table 1 has more rows){
3      Read the first row X from Table 1
4      Move the row X to Table 2
5      while(Table 1 has more rows){
6          Read the first row Y from Table 1
7          if(X.Name == Y.Name){
8              Move the row Y to Table 2
9          }
10         else{
11             Move the row Y to Table 3
12         }
13     }
14     diff = doSomething(Table 2)
15     if(diff == max){
16         count = count + 1
17     }
18     if(diff > max){
19         max = diff
20         count = 1
21     }
22     Delete all the rows from Table 2
23     Move all the rows from Table 3 to Table 1
24 }

```

### Options :

6406531287670. ✖ Number of players with maximum year gap between first and second medal
6406531287671. ✖ Number of players with minimum year gap between first and second medal
6406531287672. ✔ Number of players with maximum year gap between latest and second latest medal
6406531287673. ✖ Number of players with minimum year gap between latest and second latest medal

## Stats-1

Section Id :	64065323929
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	14

Number of Questions to be attempted :	14
Section Marks :	40
Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065355498
Question Shuffling Allowed :	No

Question Number : 76 Question Id : 640653387252 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "QUALIFIER: STATISTICS FOR DATA SCIENCE 1"  
MANDATORILY YOU HAVE TO ATTEND ALL THE SECTIONS.

Options :

- 6406531287674. ✓ Yes
- 6406531287675. ✗ No

Sub-Section Number :	2
Sub-Section Id :	64065355499
Question Shuffling Allowed :	Yes

Question Number : 77 Question Id : 640653387253 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Select Question

Which of the following statements is/are incorrect?

**Options :**

6406531287676. ✔ Grouping students by favourite subjects in a class is a numerical variable.
6406531287677. ✔ Amount of calories consumed by a person in a day is a categorical variable.
6406531287678. ✖ The amount of time to complete a quiz is a numerical and continuous variable.
6406531287679. ✖ The number of attempts to clear an exam is a numerical and discrete variable.

**Question Number : 78 Question Id : 640653387254 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Select Question

Choose the correct statement/s ?

**Options :**

6406531287680. ✖ A nominal scale has the property of labelling the categories and it involves the ranking of data.
6406531287681. ✖ An ordinal scale has all the properties of nominal scale and it does not involve the ranking of data.
6406531287682. ✔ An Interval scale has all the properties of ordinal scale and it does not satisfy the absolute zero property.
6406531287683. ✔ A ratio scale has all the properties of interval scale and it satisfies the absolute zero property.

**Question Number : 79 Question Id : 640653387255 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Select Question

If we have a dataset 45, 42, 28, 95, 23 and 194, then choose the correct option/s?

**Options :**

6406531287684. ✔ Range of the dataset is 171.
6406531287685. ✖ Median of the dataset is 42.



6406531287686. ✓ 75<sup>th</sup> percentile of the dataset is 95.

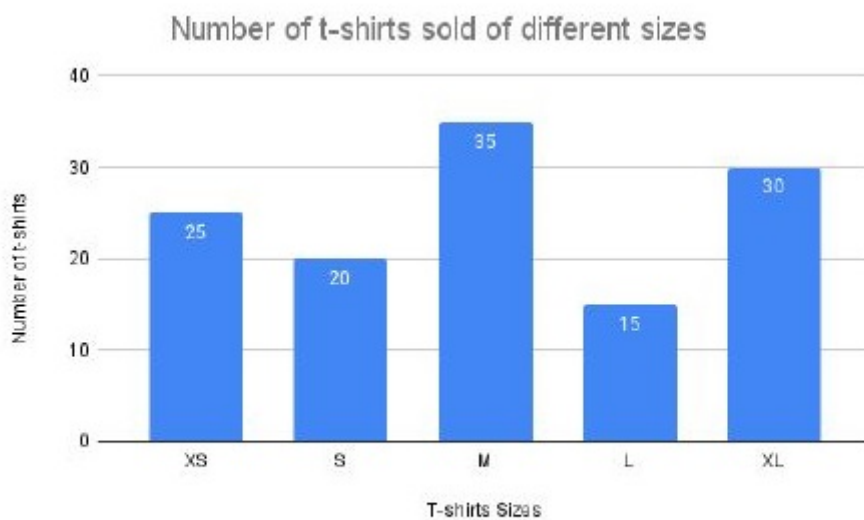
6406531287687. ✗ IQR (Inter-quartile range ) of the dataset is 65.

**Question Number : 80 Question Id : 640653387256 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Select Question

Figure Q.1. represents the data of number of t-shirts sold of different sizes in a shop of clothes.



**Figure Q.1: Sales distribution of t-shirts of different sizes**

Choose the correct statement/s:

**Options :**

6406531287688. ✓ Mode of the dataset is size 'M'.

6406531287689. ✗ Mean of the dataset is 25.

6406531287690. ✗ Population variance of the dataset is 50.

6406531287691. ✗ Median of the dataset is 20.

**Question Number : 81 Question Id : 640653387257 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**



**Correct Marks : 3**

Question Label : Multiple Select Question

The five number summary of a dataset is 5, 10, 15, 20 and 25. Later it is noted that one observation 6 is wrongly noted as 5, then choose the correct option(s):

**Options :**

6406531287692. ✔ The five number summary may remain the same.

6406531287693. ✖ The five number summary will definitely change.

6406531287694. ✖ The minimum value of the dataset will definitely change.

6406531287695. ✖ The five number summary will always change whenever an observation is wrongly noted.

**Question Number : 82 Question Id : 640653387258 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Select Question

Choose the correct option/s:

**Options :**

6406531287696. ✖ If the large values of variable  $X$  tend to be associated with small values of variable  $Y$ , then the correlation between  $X$  and  $Y$  will be positive.

6406531287697. ✖ If the correlation coefficient between two variables is zero, then the variables are independent.

6406531287698. ✔ Correlation coefficient is a unitless measure of association.

6406531287699. ✖ Correlation coefficient always lies between 0 and 1.

**Question Number : 83 Question Id : 640653387259 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Multiple Select Question

An analyst did a survey to know the willingness of graduate and post graduate students of India to

go abroad for higher studies. He collected the data from a college for the survey and the results are given in Table 1.1.Q.

Education	Willingness to go	
	Yes	No
Graduate	14	6
Post-graduate	18	12

Table 1.1.Q

Choose the correct option/s?

**Options :**

6406531287700. ✓ Of all the graduate students, there are 30% who does not want to go for higher studies.

6406531287701. ✗ Of all the post-graduate students, there are 56.25% who wants to go for higher studies.

6406531287702. ✓ If all row relative frequencies are similar within each column then, it implies that all column relative frequencies will also be similar within each row.

6406531287703. ✗ If all column relative frequencies are similar within each row then, it does not imply that all row relative frequencies will also be similar within each column.

6406531287704. ✗ There is no association between Education and Willingness to go for higher studies.

6406531287705. ✓ There is an association between Education and Willingness to go for higher studies.

**Sub-Section Number :** 3

**Sub-Section Id :** 64065355500

**Question Shuffling Allowed :** Yes

**Question Number : 84 Question Id : 640653387260 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

**Question Label : Short Answer Question**

Figure Q.2 represents the distribution of runs scored by Suresh in matches of a cricket tournament.

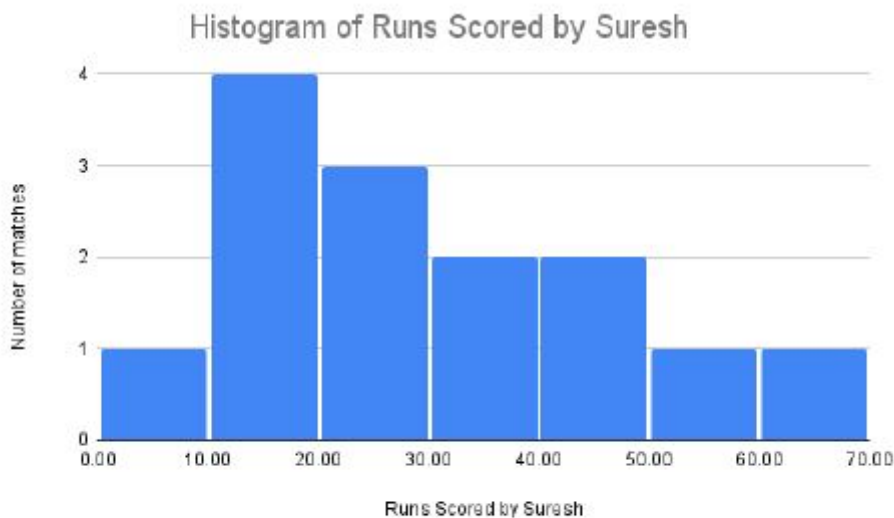


Figure Q.2: Runs scored by Suresh in a cricket tournament

What is the average runs scored by Suresh?

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

29.5 to 30.5

**Question Number :** 85 **Question Id :** 640653387262 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

**Correct Marks :** 2

**Question Label :** Short Answer Question

The dataset consists of three distinct observations, say  $a$ ,  $b$  and  $c$ , and the sum of their frequencies is 100 and relative frequencies corresponding to  $a$  and  $c$  are 25% and 35% respectively. Find the cumulative frequency of  $b$  and  $c$ .

**Response Type :** Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

75

Sub-Section Number : 4

Sub-Section Id : 64065355501

Question Shuffling Allowed : Yes

Question Number : 86 Question Id : 640653387261 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

If the population variance of a dataset of 6 observations is 50, then what is the sample variance if each observation in the dataset is increased by 5?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

60

Sub-Section Number : 5

Sub-Section Id : 64065355502

Question Shuffling Allowed : Yes

Question Number : 87 Question Id : 640653387263 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Short Answer Question

The data of the weight (in kg) and age (in years) is recorded of 5 different persons in a hospital and tabulated in Table 1.2.Q.

Weight (in kg)	80	75	85	70	65
Age (in years)	85	70	80	95	70

Table 1.2.Q

What is the correlation coefficient between the weight and age of persons ?(Enter the answer correct to 3 decimal accuracy)

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

0.144 to 0.154

**Sub-Section Number :** 6

**Sub-Section Id :** 64065355503

**Question Shuffling Allowed :** No

**Question Id : 640653387264 Question Type : COMPREHENSION Sub Question Shuffling**

**Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A**

**Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (88 to 89)**

Question Label : Comprehension

An inspection officer wants to test the tensile strength of threaded rods produced by a factory. Based on the information ,answer the given subquestions .

**Sub questions**

**Question Number : 88 Question Id : 640653387265 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

If he selects 70 threaded rods at random from those that produced in the month of May 2022 at the factory. Identify the sample and population.

**Options :**

6406531287710. ✖ The population is all threaded rods ever produced at the factory and the sample is all the threaded rods produced in the month of May 2022.

6406531287711. ✔ The population is all threaded rods ever produced at the factory and the sample is the 70 selected threaded rods.

6406531287712. ✖ The population is all threaded rods produced in the year 2022 and the sample is the threaded rods produced in the month of May 2022.

6406531287713. ✖ None of these.

**Question Number : 89 Question Id : 640653387266 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

If the inspection officer is interested to test the tensile strength of threaded rods produced by the factory in different months of year 2022 and collected the data for the same, then choose the correct option:

**Options :**

6406531287714. ✔ It is time-series data.

6406531287715. ✖ It is cross-sectional data.

**Question Id : 640653387267 Question Type : COMPREHENSION Sub Question Shuffling**

**Allowed : No Group Comprehension Questions : No Calculator : None Response Time : N.A**

**Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (90 to 91)**

Question Label : Comprehension

Figure Q.3 represents the distribution of sales of 4 different items in a mobile shop last month. Based on this information, answer the given subquestions .

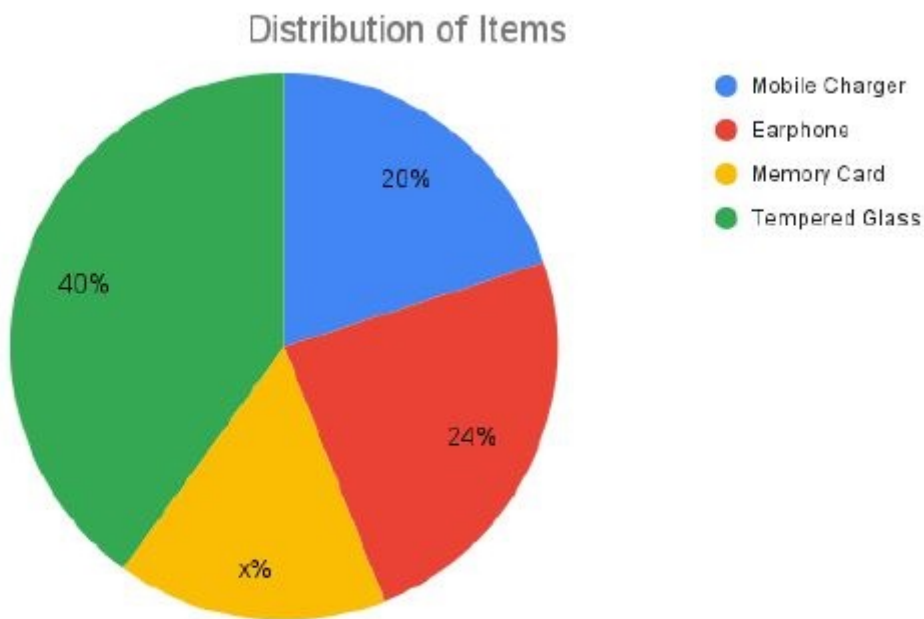


Figure Q.3: Sales distribution of 4 different items

### Sub questions

Question Number : 90 Question Id : 640653387268 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

What is the value of x?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

**Question Number : 91 Question Id : 640653387269 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

If the total number of items sold in last month is 300, then find the number of earphones sold in the last month?

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

72