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 QPE 07 Aug 2022

Subject Name: 2022 Aug: IIT M QUALIFIER EXAM QPE

Creation Date : 2022-08-03 15:41:40

Duration: 240

Total Marks: 200

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: Group Id:** 6406538846 **Group Maximum Duration:** 0 **Group Minimum Duration:** 90 **Show Attended Group?:** No **Edit Attended Group?:** No Break time: 0 **Group Marks:** 200 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: 64065322473

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

Yes Clear Response:

Maximum Instruction Time: 0

Sub-Section Number:

Sub-Section Id: 64065352759

Question Shuffling Allowed: No

Question Number: 1 Question Id: 640653361308 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:

6406531196695. **✓** Yes

6406531196696. * No

Question Number: 2 Question Id: 640653361309 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

• Notations:

- R = Set of real numbers.
- Q = Set of rational numbers
- Z = Set of integers.
- $\mathbb{N} = \text{Set of natural numbers}$.
- A^c= Complement of a set A.
- The set of natural numbers includes 0.
- Note: when you are doing calculation, consider a number upto its 2 decimal places. E.g. 1.2345 will be considered as 1.23

Options:

6406531196697. ✓ Useful Data has been mentioned above.

6406531196698. * This data attachment is just for a reference & not for an evaluation.

Sub-Section Number: 2

Sub-Section Id: 64065352760

Question Shuffling Allowed: No

Question Id: 640653361310 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 4)

Question Label: Comprehension

Answer the given subquestions.

Sub questions

Question Number: 3 Question Id: 640653361311 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

If a Cartesian product

$$B \times A = \{(4,5), (4,6), (5,5), (5,6), (6,5), (6,6)\},\$$

then correctly identify the sets A and B from the following:

Options:

6406531196699.
$$A = \{4, 5, 6\}, B = \{5, 6\}$$

6406531196700.
$$\checkmark A = \{5, 6\}, B = \{4, 5, 6\}$$

6406531196701. *
$$A = \{2, 3, 4\}, B = \{5, 6\}$$

6406531196702.
$$A = \{5,6\}, B = \{2,3,4\}$$

Question Number: 4 Question Id: 640653361312 Question Type: MSQ Is Question

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

Time: 0

Correct Marks: 6

Question Label: Multiple Select Question

Consider the sets A, B from the previous question and a third set $C = \{x \mid x \in \mathbb{N}, x \text{ is a prime number less than 10}\}$. Consider the Universe to be $U = \{x \mid x \in \mathbb{N}, x \text{ is less than 10}\}$. Which of the following options are correct?

Options:

6406531196703.
$$(B \times B) \cap (C \times C)$$
 is an empty set

6406531196704.
$$\checkmark$$
 $A \times A$ is a proper subset of $B \times B$

6406531196705. \checkmark Cardinality of $B^c \cup C$ is greater than that of A

6406531196706. * $A \cap C^c$ is an empty set

Sub-Section Number: 3

Sub-Section Id: 64065352761

Question Shuffling Allowed : Yes

Question Number: 5 Question Id: 640653361313 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

A general form of a quadratic function is given by $f(x) = a(x - h)^2 + k$, where $x \in \mathbb{R}$, $a \neq 0$, h, k are real numbers. Codomain of the function is \mathbb{R} . Which of the following options are correct?

Options:

6406531196707. \checkmark The vertex of the parabola is given by the point (h, k)

6406531196708. \divideontimes The vertex of the parabola is given by the point (0,k)

6406531196709. \checkmark The range of the function is given by $\{y \in \mathbb{R} \mid y \geq k\}$, when a > 0

6406531196710. \blacksquare The range of the function is given by $\{y \in \mathbb{R} \mid y \geq k\}$, when a < 0

6406531196711. $\checkmark f$ is not surjective

Question Number: 6 Question Id: 640653361314 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

Let A be the set of all functions from \mathbb{N} to \mathbb{N} . Let us define a relation R on A as follows, $R = \{(f, g) \in A \times A : f(5) = g(5) \text{ or } f(7) = g(7)\}.$

Which of the option(s) is(are) correct?

Options:

6406531196712. \checkmark R is a reflexive relation.

6406531196713. \checkmark R is a symmetric relation.

6406531196714. \approx R is a transitive relation.

6406531196715. \approx R is an equivalence relation.

Question Number: 7 Question Id: 640653361321 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 electron moves in an electric field following the path $x^2 = 12y$. For any point (a, b) on the path, where b = 2a, a signal is received by Amal. For which of the following coordinates will Amal receive a signal?

Options:

6406531196736. * (1, 2)

6406531196737. **(**0, 0)

6406531196738. **4** (24, 48)

6406531196739. * (3, 6)

Sub-Section Number: 4

Sub-Section Id: 64065352762

Question Shuffling Allowed : Yes

Question Number: 8 Question Id: 640653361315 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

Two good friends A and B work in two different retail shops. In addition to a fixed pay of ₹420 per day, A makes ₹240 for every item he sells. In addition to a fixed pay of ₹600 per day, B makes ₹180 for every item she sells. Both A and B sell equal number of items and earn equal amount (in ₹) every day of a month. How many items would each have sold after thirty days?

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:

90

Sub-Section Number: 5

Sub-Section Id: 64065352763

Question Shuffling Allowed: No

Question Id: 640653361316 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 : (9 to 10)

Question Label: Comprehension

Consider the tables 1 and 2 below consisting of mathematical statements / questions (Table 'Statement (S)') and answers (Table 'Answer (A)'). Answer the given subquestions based on the tables.

Statement	Statement (S)
No.	a National Control of the Control of
S1	Three points in the coordinate plane will be
	collinear if the area of the triangle formed by the
	three points is zero
S2	Equation of a straight line passing through a point,
	which is at the intersection of two lines ℓ_1 and ℓ_2 ,
	can be obtained by the algebraic sum of the equa-
	tions of ℓ_1 and ℓ_2
S3	If two quadratic equations, which are given by x^2 –
	$8x + 3k = 0$ and $x^2 - 12x + 7k = 0$, where k is real,
	have exactly one root in common, then what will
	be the value of k ?
S4	Slope of a parabola at its vertex is always 0
S5	(1,2) is equidistant from the lines $x+y-2=0$
	and $7x - y = 0$

Table 1

Answer	
No.	Answer (A)
A1	True
A2	k = 5
A3	False
A4	k = 3

Table 2

Sub questions

Question Number: 9 Question Id: 640653361317 Question Type: MSQ Is Question

 ${\bf Mandatory: No\ Calculator: None\ Response\ Time: N.A\ Think\ Time: N.A\ Minimum\ Instruction}$

Time: 0

Correct Marks:8

Question Label: Multiple Select Question

Consider the possible mapping between the columns 'Statement (S)' and 'Answer (A)'. The labels of each element in S and A are marked by S1-S5 and A1-A4. Which of the following matches are correct?

Options:

6406531196717. S1, S2 and S5 are mapped to A1

6406531196718. * S3 is mapped to A2 while S4 is mapped to A3

6406531196719. ✓ S1, S2 and S4 are mapped to A1

6406531196720. * S3 is mapped to A4 and S5 is mapped to A3

6406531196721. ✓ The mapping from S to A is a function

Question Number: 10 Question Id: 640653361318 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

Consider the possible mapping between the columns 'Statement(s)' and 'Answer(A)'. The labels of each element in S and A are marked by S1-S5 and A1-A4. Which one of the following options is correct?

Options:

6406531196722. * The functional mapping from S to A is one-one but not onto

6406531196723. * The functional mapping from S to A is onto but not one-one

6406531196724. * The functional mapping from S to A is bijective

6406531196725. ✓ The functional mapping from S to A is neither one-one nor onto

6406531196726. None of these: The mapping from S to A is not a function

Sub-Section Number: 6

Sub-Section Id: 64065352764

Question Shuffling Allowed : Yes

Question Number: 11 Question Id: 640653361319 Question Type: MCQ Is Question

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

Time: 0

Correct Marks: 5

Question Label: Multiple Choice Question

3 toys are kept on ground in such a way that their coordinates M(-2,5), N(4,-2) and P(-3,3) form $\triangle MNP$. Bimal moves the toys in a way such that all 3 sides of the triangle move 1 unit inwards to form $\triangle QRS$. Now consider three lines, l_1 (the line which passes through the points S and Q), l_2 (passing through the points S and S) and S0 and S1 and S2 and S3 (passing through the points S3 and S3 and S4. Which of the following options give the equation of the line (among S2, S3 that is at the maximum distance from the origin S3.

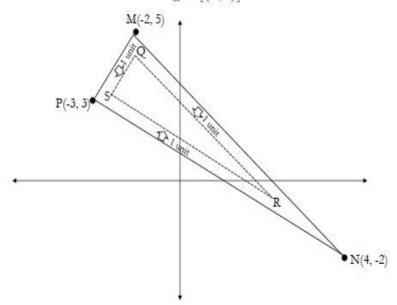


Figure 1: Here MN is parallel to QR, PN is parallel to SR and MP is parallel to QS.

Options:

6406531196727. ***** 3y + 5x - 7 = 0

6406531196728. * 7x + 6y - 16 = 0

6406531196729. $\checkmark y - 2x - 6.76 = 0$

6406531196730. * y - 2x - 9.5 = 0

Sub-Section Number: 7

Sub-Section Id: 64065352765

Question Shuffling Allowed: Yes

Question Number : 12 Question Id : 640653361320 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

Value of a quadratic function f(x) decreases over the interval $(-\infty, -1)$ and increases over the interval $(-1, \infty)$. Also, f(0) = f(-2) = 10. Which of the following statements about f(x) can be true?

Options:

6406531196731. * f(x) is an injective function.

f(x) is a surjective function where the domain and co-domain both are 6406531196732. ** the sets of real numbers: $\mathbb R$.

6406531196733.
$$\checkmark f(x) = ax^2 + (2a)x + 10$$
, when $a > 0$

6406531196734.
$$\checkmark f(x)$$
 can be $x^2 + 2x + 10$

6406531196735. *
$$f(x)$$
 can be $(x+1)^2 + 12$

Sub-Section Number: 8

Sub-Section Id: 64065352766

Question Shuffling Allowed : Yes

Question Number: 13 Question Id: 640653361322 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

Find the value of the constant m for which a particle travelling along the curve $y = 2x^2 - 6x + m$ touches the X-axis only once.

Options:

6406531196741. * 1.5

6406531196742. * 2.5

6406531196743. * 3.5

Sub-Section Number: 9

Sub-Section Id: 64065352767

Question Shuffling Allowed : Yes

Question Number: 14 Question Id: 640653361323 Question Type: MSQ Is Question

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

Time: 0

Correct Marks: 6

Question Label: Multiple Select Question

Consider Table 3 shown below consisting of research data relating two variables x and y. Use SSE method to fit a straight line mapping between the two variables of the form: y = mx + c where m, c are real constants. Consider the following three straight line fits:

Fit1: y = x + 2

Fit2: y = 1.5x + 8

Fit3: y = 0.6x + 8

Which of the following options is/are correct?

\boldsymbol{x}	y
-2	5
-5	3
1	7
3	10

Table 3:

Options:

6406531196744. * Fit1 has the lowest SSE

6406531196745. Fit2 is a better fit compared to Fit3

6406531196746. ✓ Fit3 is a better fit compared to Fit2

6406531196747. Fit1 is better than Fit2 and Fit3 is better than Fit1

6406531196748. V Fit3 is the best fit

English 1

•	
Section Id :	64065322474
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	19
Number of Questions to be attempted :	19
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 :	64065352768
Question Shuffling Allowed :	No
Question Number : 15 Question Id : 640653361324 Mandatory : No Calculator : None Response Time : Time : 0	
Correct Marks : 0	
Question Label: Multiple Choice Question THIS IS QUESTION PAPER FOR THE SUBJECT "QUALIFIER: E MANDATORILY YOU HAVE TO ATTEND ALL THE SECTIONS.	
Options :	
6406531196749. ✓ Yes	
6406531196750. * No	
Sub-Section Number :	2

64065352769

Sub-Section Id:

Question Shuffling Allowed:

No

Question Id: 640653361325 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: (16 to 20)

Question Label: Comprehension

Read the passage and answer the given subquestions

Chronic Traumatic Encephalopathy Concussions are brain injuries that occur when a person receives a blow to the head, face, or neck. Although most people who suffer a concussion experience initial bouts of dizziness, nausea, and drowsiness, these symptoms often disappear after a few days. The long-term effects of concussions, however, are less understood and far more severe. Recent studies suggest that people who suffer multiple concussions are at significant risk for developing chronic traumatic encephalopathy (CTE), a degenerative brain disorder that causes a variety of dangerous mental and emotional problems to arise weeks, months, or even years after the initial injury. These psychological problems can include depression, anxiety, memory loss, inability to concentrate, and aggression. In extreme cases, people suffering from CTE have even committed suicide or homicide. The majority of people who develop these issues are athletes who participate in popular high-impact sports, especially football. Although both new sports regulations and improvements in helmet technology can help protect players, the sports media and fans alike bear some of the responsibility for reducing the incidence of these devastating injuries. Improvements in diagnostic technology have provided substantial evidence to link severe-and often fatalpsychological disorders to the head injuries players receive while on the field. Recent autopsies performed on the brains of football players who have committed suicide have shown advanced cases of CTE in every single victim. In response to the growing understanding of this danger, the National Football League (NFL) has revised its safety regulations. Players who have suffered a head injury on the field must undergo a "concussion sideline assessment"—a series of mental and physical fitness tests—before being allowed back in the game. In an effort to diminish the amount of head and neck injuries on the field, NFL officials have begun enforcing stricter penalty calls for helmet-to-helmet contact. leading with the head, and hitting a defenceless player. Furthermore, as of 2010, if a player's helmet is accidentally wrenched from his head during play, the ball is immediately whistled dead. There is hope that these new regulations, coupled with advances in helmet design, will reduce the number of concussions player endure and thus curb the number of CTE cases. Efforts by the NFL and other professional sports leagues are certainly laudable; indeed, we should commend every attempt to protect the mental and physical health of players. However, new regulations at the professional level cannot protect amateur players, especially young people. Fatal cases of CTE have been reported in victims as young as 21. With appropriate equipment and form, tackling need not be dangerous. Proper tackling formusing the arms and shoulders to aim for a player's midsection rather than leading with the top of the head-should be taught at an early age. Youth, high school, and college leagues should also adopt safety rules even more stringent than the NFL's. Furthermore, at an early age, athletes should be educated about the serious dangers of head injuries. Perhaps the most important factor in reducing the number of traumatic brain injuries, however, lies not with the players, the coaches, or the administrators, but with the media and fans. Sports media producers have become accustomed to showcasing the most aggressive tackles and the most intense plays. NFL broadcasts often replay especially violent collisions, while the commentators marvel at the physical prowess of the players involved. Some sports programs even feature weekly countdowns of the hardest hits. When the media exalts such hazardous behavior, professionals are rewarded for injuring each other on the field, and amateurs become more likely to try to imitate their favorite NFL athletes. Announcers, commentators, television producers, and sportswriters should engage in a collective effort to cease glorifying brutal plays. In turn, fans should stop expecting their favorite players to put their lives on the line for the purposes of entertainment. Players must stop being encouraged to trade their careers, health, happiness, and their lives for the sake of a game.

Sub questions

Question Number: 16 Question Id: 640653361326 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 odd one out:
Options:
6406531196751. ✔ Homicide
6406531196752. ** Nausea
6406531196753. * Dizziness
6406531196754. * Drowsiness
Question Number : 17 Question Id : 640653361327 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
The act of intentionally causing one's own death is
Options:
6406531196755. ✔ Suicide
6406531196756. * Homicide
6406531196757. ** Both Suicide and Homicide
Question Number : 18 Question Id : 640653361328 Question Type : MCQ Is Question
$lem:mandatory:No-Calculator:None Response Time:N.A Think Time:N.A Minimum Instruction \\ Time:0$
Correct Marks : 2
Question Label : Multiple Choice Question
The word that means "a post-mortem examination to discover the cause of death or the extent of
disease" is
Options:
6406531196758. * Degenerative
6406531196759. ✔ Autopsy
6406531196760. * Concussion
6406531196761 * Wrench

Question Number: 19 Question Id: 640653361329 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

The antonym of the word amateur is ______.

Options:

6406531196762. * Young

6406531196763. * Old

6406531196764. **Expert**

6406531196765. Wunprofessional

Question Number: 20 Question Id: 640653361330 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

Which among the following statements is false?

Options:

6406531196766. Concussions (at times) could be fatal.

6406531196767. * The usual victims of CTE are athletes involved in high impact sport.

6406531196768. ✓ NFL broadcasts should glorify the violent collisions to bring respect and inspiration among the public towards the athletes.

6406531196769. * Concussions may lead to psychological problems.

Sub-Section Number: 3

Sub-Section Id: 64065352770

Question Shuffling Allowed: No

Question Id: 640653361331 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: (21 to 25)

Question Label: Comprehension

[Listen to the audio sample and answer the given subquestions. You need no background information to answer these questions.]



885_640653_0_1984128_hs1001qu1e1s1au.mp3

Sub questions

Question Number: 21 Question Id: 640653361332 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

The earliest form of English spoken in the Middle ages is called Anglo-Saxon English.

Options:

6406531196770. ✓ TRUE

6406531196771. * FALSE

Question Number: 22 Question Id: 640653361333 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

Anglo-Saxon English is the Standard British English that we speak today.

Options:

6406531196772. * TRUE

6406531196773. V FALSE

Question Number: 23 Question Id: 640653361334 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	
Many words in English are from Latin and Greek.	
Options :	
6406531196774. ✔ TRUE	
6406531196775. * FALSE	
Question Number : 24 Question Id : 640653361335 (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	
Romans, Viking and Germanic Saxons have invaded Bi	ritain in the past.
Options :	
6406531196776. ✔ TRUE	
6406531196777. * FALSE	
Question Number : 25 Question Id : 640653361336 C	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	
Old English comprises more than 80% of the written E	nglish language that we use today.
Options :	
6406531196778. * TRUE	
6406531196779. ✔ FALSE	
Sub-Section Number :	4
Sub-Section Id :	64065352771

No

Question Shuffling Allowed:

Question Id: 640653361337 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: (26 to 40)

Question Label : Comprehension

Fill in the blanks from the options given below in the given subquestions.

Australia's role 1	(in/on/at/ from) the Firs	t World War, or th	e Great War a	s it was known
2 (until/ unti	ll/ unless/ for)1939, is centra	l to the developme	ent of modern	Australia's
vision of itself in the wo	orld. It has served to create v	vhat is in some wa	ys a second fo	ounding of the
nation in the Gallipoli c	ampaign and on the battlefi	elds of France and	Belgium. The	influence of
the war experience in t	he First and Second World W	/ar 3 (is/	/ are) evident i	n how ANZAC
day is, perhaps even m	ore than Australia day, the c	ountry's national c	day. When the	war broke 4.
(into/out/on/	/up) in 1914, it was a certaint	ty that, because of	longstanding	economic,
family and defence ties	, Australia, along with New 2	'ealand, would sta	nd alongside l	Britain. The 5.
(after/then/b	eforehand) Prime Minister A	ndrew Fisher was	quick to pledg	je the country's
support to "the last ma	n, the last shilling". This was	no idle promise, a	and Australia p	aid a high
price for their loyalty to	their colonizers.			
Most of the ANZAC ford	ce was 6 (send/ser	nt) to Europe, but t	he Australian	Light Horse
remained to fight Turki	sh forces in Palestine and Sy	ria. They 7	(defeated/	'defended) the
Suez Canal and advanc	ed through Palestine and Sy	ria. They also took	part in what w	was one of the
world's last great caval	ry charges at Beersheba. The	e main ANZAC forc	e arrived in Eu	urope in 1916.
The ANZAC experience	was similar to that of the otl	ner participants in	the war; a hig	h death toll
and little gain to be sho	own for it. Australian forces w	vere present at all	the major bat	tles of the war
and sustained some ter	rrible casualties. For example	e, in 24 hours near	Pozieres the	5th Division
suffered 5,000 casualtie	es. At the battle of Bullecort,	of the 3,000 men	8 (v	vho/whom)
advanced, 2339 were k	illed, wounded or captured.	By 1917 most of th	ne officers wer	e not
professional soldiers. T	he most prominent example	e was General Sir Jo	ohn Monash, v	who was 9.
(a/ an)engine	er by training. He 10	(command/cor	nmands/comi	manded) the
allied forces at the batt	le of Hamel so well that the	general staff publi	shed the battl	e reports as a
model.				

At home, the war had a significant 11 (affect/ effect) on the economy. Adverse effects
included the end of British investment, the closure of many shipping lanes and the stockpiling of
Australia's main export, wool. However, the isolation that resulted from the war meant that
Australia had to make some things that had previously been imported. This led to the
development of new industries. In addition, the BHP smelting company, which is now a 12.
(larger/major) Australian company, saw a great increase in demand for iron and steel.
The needs of the war were a stimulus for the beginning of full industrialization in Australia.At the
signing of the treaty of Versailles, 13 (who/ which) marked the end of the war, Australia
signed as a separate country. This reflected the fact that, at the cost of 60,000 dead, Australia had
finally emerged 14 (into/from) the shadow of Britain. The Great War was, perhaps, the
15 (beginning/end) of modern Australian history.
Sub questions
Question Number : 26 Question Id : 640653361338 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 your answer for Blank 1.
Options :
6406531196780. ✓ in
6406531196781. ** on
6406531196782. ** at
6406531196783. * from
Question Number : 27 Question Id : 640653361339 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 your answer for **Blank 2.**

6406531196784. ✓ until 6406531196785. ☀ untill

6406531196786. * unless

6406531196787. * for

Question Number: 28 Question Id: 640653361340 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 your answer for **Blank 3.** _____

Options:

6406531196788. V is

6406531196789. ** are

Question Number: 29 Question Id: 640653361341 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 your answer for **Blank 4.** _____

Options:

6406531196790. ** into

6406531196791. V out

6406531196792. ** on

6406531196793. ** up

Question Number: 30 Question Id: 640653361342 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 your answer for Blank 5.
Options:
6406531196794. * after
6406531196795. ✓ then
6406531196796. * beforehand
Question Number : 31 Question Id : 640653361343 Question Type : MCQ Is Question
${\bf Mandatory: No\ Calculator: None\ Response\ Time: N.A\ Think\ Time: N.A\ Minimum\ Instruction}$
Time: 0
Correct Marks: 1
Question Label : Multiple Choice Question
Select your answer for Blank 6.
Options:
6406531196797. ** send
6406531196798. ✓ sent
Question Number : 32 Question Id : 640653361344 Question Type : MCQ Is Question
${\bf Mandatory: No\ Calculator: None\ Response\ Time: N.A\ Think\ Time: N.A\ Minimum\ Instruction}$
Time: 0
Correct Marks : 1
Question Label : Multiple Choice Question
Select your answer for Blank 7.
Options:
6406531196799. * defeated
6406531196800. ✓ defended

Question Number : 33 Question Id : 640653361345 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 your answer for Blank 8. _____

Options:

6406531196801. ✓ who

Question Number: 34 Question Id: 640653361346 Question Type: MCQ Is Question

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

Time: 0

Correct Marks: 1

6406531196802. * whom

Question Label: Multiple Choice Question

Select your answer for **Blank 9.** _____

Options:

6406531196803. ** a

6406531196804. **v** an

Question Number: 35 Question Id: 640653361347 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 your answer for **Blank 10.** _____

Options:

6406531196805. * command

6406531196806. ***** commands

6406531196807. commanded

Question Number: 36 Question Id: 640653361348 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 your answer for Blank 11.
Options :
6406531196808. * affect
6406531196809. ✓ effect

Question Number: 37 Question Id: 640653361349 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 your answer for **Blank 12.**

Options:

6406531196810. **¾** larger 6406531196811. **✓** major

Question Number: 38 Question Id: 640653361350 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 your answer for **Blank 13.** _____

Options:

6406531196812. * who

6406531196813. V which

Question Number: 39 Question Id: 640653361351 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	e Question		
Select your answer for Blank 1 4	ı		
Options :			
6406531196814. ** into			
6406531196815. 🗸 from			
Question Number : 40 Questic	on Id : 6406533613!	52 Question Type : MCQ Is	s Question
Mandatory : No Calculator : N	one Response Tim	e: N.A Think Time: N.A M	linimum Instruction
Time: 0			
Correct Marks : 1			
Question Label : Multiple Choice	e Question		
Select your answer for Blank 15	j		
Options :			
6406531196816. 🗸 beginning			
6406531196817. ** end			
Sub-Section Number :		5	
Sub-Section Id :		64065352772	
Question Shuffling Allowed :		Yes	
Question Number : 41 Question	on Id : 6406533613!	53 Question Type : MCQ Is	s Question
Mandatory : No Calculator : N	one Response Tim	e: N.A Think Time: N.A M	linimum Instruction
Time: 0			
Correct Marks : 1			
Question Label : Multiple Choice	e Question		
The word <i>flywheel</i> has	syllables.		
Options :			
6406531196818. * 1			
6406531196819. 🗸 2			
6406531196820. * 3			

Question Number: 42 Question Id: 640653361354 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

/p/,/t/,/k/ are known as _____ sounds.

Options:

6406531196821. * dental

6406531196822. V stop

Question Number: 43 Question Id: 640653361355 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 does **NOT** carry the sound /p/?

Options:

6406531196823. ** Pneumonia

6406531196824. * Psychology

6406531196825. * Photon

6406531196826. All of these

Question Number: 44 Question Id: 640653361356 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

/p/ in the word 'peach' is an aspirated sound.

Options:

6406531196827. **✓** TRUE

6406531196828. * FALSE

Question Number: 45 Question Id: 640653361357 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

My telephone number is 9748790045. Which among the following is the wrong way to read out the

number?

Options:

6406531196829. * 97/48/79/00/45//

6406531196830. * 974/879/00/45//

6406531196831. * 9748/790/045//

6406531196832. 9748790045//

Question Number: 46 Question Id: 640653361358 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 plural markers for the words *roots, roofs,* and *roses* are _____

Options:

6406531196833. ✓ /s/, /z/, and /z/ respectively

6406531196834. * /z/, /z/, and /s/ respectively

6406531196835. * /s/, /s/, and /s/ respectively

Question Number: 47 Question Id: 640653361359 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 26 alphabets in English do not capture all the sounds in English.

6406531196836. V TRUE

6406531196837. * FALSE

Question Number: 48 Question Id: 640653361360 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 word 'shout' is monosyllabic.

Options:

6406531196838. V TRUE

6406531196839. * FALSE

Question Number: 49 Question Id: 640653361361 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 vowel sound present in the words "groom" is /uu/ and "look" is /u/.

Options:

6406531196840. V TRUE

6406531196841. * FALSE

Question Number: 50 Question Id: 640653361362 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

Devansh like ice-creams.

6406531196842. * do not

6406531196843. V does not

Question Number: 51 Question Id: 640653361363 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

During a telephonic conversation, the speaker's voice re-surfaces. Her voice is _____

Options:

6406531196844. * Jarring

6406531196845. **Choing**

Question Number: 52 Question Id: 640653361364 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 expression "hang up" (in the context of telephonic conversations) means

Options:

6406531196846. ✓ End a phone conversation by cutting the connection.

6406531196847. * Ask a person to hold for sometime.

Question Number: 53 Question Id: 640653361365 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 from the following sentences where 'board' functions as a NOUN.

6406531196848. When should I board the flight?

6406531196849. ✓ Yuvan slipped and fell after he stepped on a loose board.

6406531196850. * Did she board with you?

Question Number: 54 Question Id: 640653361366 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

In the sentence, 'Baasma loves to dance', identify the verb.

Options:

6406531196851. V Loves

6406531196852. * Dance

Question Number: 55 Question Id: 640653361367 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

In the word 'scheme', the sound /k/ is aspirated.

Options:

6406531196853. * TRUE

6406531196854. V FALSE

CT

Section Id: 64065322475

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

Yes Clear Response:

Maximum Instruction Time: 0

Sub-Section Number: 1

Sub-Section Id: 64065352773

Question Shuffling Allowed: No

Question Number: 56 Question Id: 640653361368 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:

6406531196855. VYes

6406531196856. * No

Question Number: 57 Question Id: 640653361369 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

		S	core	es			
Name	Gender	DateOfBirth	CityTown	Mathematics	Physics	Chemistry	Total
Bhuvanesh	М	7 Nov	Erode	68	64	78	210
-			Name Gender DateOfBirth	Name Gender DateOfBirth CityTown	Name Gender DateOfBirth CityTown Mathematics	Name Gender DateOfBirth CityTown Mathematics Physics	Name Gender DateOfBirth CityTown Mathematics Physics Chemistry

Words								
RowNo	Word	PartOfSpeech	LetterCount					
0	It	Pronoun	2					
0			LetterCour 2					
	•							
64	cane.	Noun	4					

	Drary	Pages	Publisher	Year
Nonfiction			D .	2002
1	Genre	3 3		3 3

Olympics									
Seq. No.	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		

6406531196857. ✓ Useful Data has been mentioned above.

6406531196858. * This data attachment is just for a reference & not for an evaluation.

Sub-Section Number: 2

Sub-Section Id: 64065352774

Question Shuffling Allowed : Yes

Question Number: 58 Question Id: 640653361370 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 **A** represent at the end of execution?

```
 \begin{aligned} \mathbf{A} &= 0 \\ \text{while (Table 1 has more rows) } \{ \\ \text{Read the first row } \mathbf{X} \text{ in Table 1} \\ \text{if } (\mathbf{X}.PartOfSpeech == "Noun" and } \mathbf{X}.LetterCount > 6) \{ \\ \mathbf{A} &= \mathbf{A} + 1 \\ \} \\ \text{Move } \mathbf{X} \text{ to Table 2} \\ \} \end{aligned}
```

Options:

6406531196859. * Number of words which have more than 6 letters

6406531196860. ✓ Number of nouns which have more than 6 letters

6406531196861. Number of nouns which have less than 6 letters

6406531196862. Number of words which have less than 6 letters

Question Number: 59 Question Id: 640653361373 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 "Olympics" dataset. Assume that no player won more than one medal. What will **A** represent at the end of execution?

```
 \begin{aligned} \mathbf{A} &= 0 \\ \text{while (Pile 1 has more cards) } \{ \\ \text{Read the first row } \mathbf{X} \text{ in Table 1} \\ \text{Move } \mathbf{X} \text{ to Pile 2} \\ \text{while (Pile 1 has more cards) } \{ \\ \text{Read the first row } \mathbf{Y} \text{ in Table 1} \\ \text{Move } \mathbf{Y} \text{ to Pile 3} \\ \text{if } (\mathbf{X}.Nationality == \mathbf{Y}.Nationality \text{ and } \mathbf{X}.Gender \neq \mathbf{Y}.Gender) } \{ \\ \mathbf{A} &= \mathbf{A} + 1 \\ \} \\ \} \\ \text{Move all cards from Pile 3 to Pile 1}
```

6406531196871. Number of pairs of players having different nationality but same gender 6406531196872. Number of pairs of players having either same nationality or same gender 6406531196873. Number of pairs of players having same nationality but different gender 6406531196874. Number of pairs of players having same nationality and same gender

Sub-Section Number: 3

Sub-Section Id: 64065352775

Question Shuffling Allowed : Yes

Question Number: 60 Question Id: 640653361371 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 following pseudocode is executed using the "Scores" dataset. What will **Count** represent at the end of execution? It is a Multiple Select Question (MSQ).

```
Count = 0
while (Table 1 has more rows) {
    Read the first row X in Table 1
    Move X to Table 2
    if (X.Mathematics == X.Physics or X.Gender == 'M') {
        Count = Count + 1
    }
}
```

6406531196863. Number of male students whose Mathematics and Physics marks are same 6406531196864. Number of male students + Number of students whose Mathematics and Physics marks are same

6406531196865. ✓ Number of male students + Number of female students whose Mathematics and Physics marks are same

6406531196866. ✓ Number of students whose Mathematics and Physics marks are same + Number of male students whose Mathematics and Physics marks are not same

Question Number: 61 Question Id: 640653361372 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 following pseudocode is executed using the "Olympics" dataset. **Count** represents the number of pairs of distinct players who won the same medal but not in the same sport. Assume that no player won more than one medal. Choose the correct code fragment to complete the pseudocode. It is a Multiple Select Question (MSQ).

```
if (X.Medal == Y.Medal \text{ and } X.Sport \neq Y.Sport) {
                        Count = Count + 1
6406531196867. **
                   if (X.Name \neq Y.Name \text{ and } X.Medal == Y.Medal \text{ and } X.Sport \neq Y.Sport) {
                       Count = Count + 1
6406531196868
                   if (X.Name \neq Y.Name) {
                        if (X.Medal == Y.Medal) {
                            if (X.Sport \neq Y.Sport) {
                                 Count = Count + 1
                        }
6406531196869.
                   if (X.Name \neq Y.Name) {
                        if (X.Medal == Y.Medal \text{ and } X.Sport \neq Y.Sport) {
                             Count = Count + 1
6406531196870.
```

Sub-Section Number:

4

Sub-Section Id:

64065352776

Question Shuffling Allowed:

No

Question Id: 640653361374 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: (62 to 63)

Question Label: Comprehension

The following pseudocode is executed using the "Words" dataset.

```
CountA = 0, CountB = 0
while (Table 1 has more rows) {
   Read the first row X in Table 1
   i = X.LetterCount
   A = first letter of X.Word
   B = i<sup>th</sup> letter of X.Word
   if (A == B) {
      if (B is a vowel) {
          CountA = CountA + 1
      }
      CountB = CountB + 1
   }
   Move X to Table 2
}
```

Based on the above data, answer the given subquestions.

Sub questions

Question Number: 62 Question Id: 640653361375 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 will **CountB** represent at the end of execution?

Options:

6406531196875. * Number of duplicate words

6406531196876. Number of words which start and end with vowels

6406531196877. Number of words which start and end with the same vowel

6406531196878. V Number of words which start and end with the same letter

Question Number: 63 Question Id: 640653361376 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 will **CountA** represent at the end of execution?

Options:

6406531196879. * Number of duplicate words

6406531196880. Number of words which start and end with vowels

6406531196881. ✓ Number of words which start and end with the same vowel

6406531196882. * Number of words which start and end with the same letter

Sub-Section Number: 5

Sub-Section Id: 64065352777

Question Shuffling Allowed : Yes

Question Number: 64 Question Id: 640653361377 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

A palindrome is a sequence of characters which reads the same backward as forward, for example *level* and *noon*. The following pseudocode that counts palindromes is executed using the "Words" dataset. Choose the correct code fragment to complete the pseudocode.

```
A = 0
while (Table 1 has more rows) {
    Read the first row X in Table 1
    i = 1
    j = X.LetterCount
    Flag = True
    while (i < j and Flag) {
        **************

    * Fill the code *
        **********

    i = i + 1
        j = j - 1
    }
    if (Flag) {
        A = A + 1
    }
    Move X to Table 2
}</pre>
```

```
if (\mathbf{i}^{th} letter of \mathbf{X}. Word \neq \mathbf{j}^{th} letter of \mathbf{X}. Word) {
Flag = False

if (\mathbf{i}^{th} letter of \mathbf{X}. Word \neq \mathbf{j}^{th} letter of \mathbf{X}. Word) {
Flag = True

if (\mathbf{i}^{th} letter of \mathbf{X}. Word == \mathbf{j}^{th} letter of \mathbf{X}. Word) {
Flag = True

if (\mathbf{i}^{th} letter of \mathbf{X}. Word == \mathbf{j}^{th} letter of \mathbf{X}. Word) {
Flag = True

if (\mathbf{i}^{th} letter of \mathbf{X}. Word == \mathbf{j}^{th} letter of \mathbf{X}. Word) {
Flag = False

6406531196886. *
```

Question Number : 65 Question Id : 640653361378 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 execution?

```
Count = 0
while (Table 1 has more rows) {
    Read the first row X in Table 1
    Move the row X to Table 2
    while (Table 1 has more rows) {
        Read the first row Y in Table 1
        Count = Count + compareSomething(X. Total, Y. Total)
        Count = Count + compareSomething(Y. Total, X. Total)
        Move the row Y to Table 3
    Move all rows from Table 3 to Table 1
Procedure compareSomething(A, B)
    if (A \leq B) {
        return (1)
    else {
        return (-1)
End compareSomething
```

Options:

```
6406531196887. ¾ It is always zero
6406531196888. ¾ Number of pairs of students who have different total marks
6406531196889. ¾ Number of pairs of students who have same total marks
6406531196890. ¾ Twice the number of pairs of students who have different total marks
6406531196891. ✓ Twice the number of pairs of students who have same total marks
```

Question Number : 66 Question Id : 640653361379 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. At the end of execution, **B** captures the minimum Mathematics marks of a student whose

- (i) Total marks is more than the average total marks
- (ii) Mathematics marks is more than Physics and Chemistry marks

Assume that the variable **Avg** holds the value of the average total marks. Choose the correct code fragment to complete the pseudocode.

```
while (Table 1 has more rows) {
    Read the first row X in Table 1
    **************

* Fill the code *
    **************

}
B = 101
while (Table 3 has more rows) {
    Read the first row X in Table 3
    if (X.Total > Avg and X.Mathematics < B) {
        B = X.Mathematics
    }
    Move X to Table 2
}</pre>
```

Options:

Question Number: 67 Question Id: 640653361380 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" dataset. What will **A** represent at the end of execution?

```
 \begin{aligned} \mathbf{A} &= 0, \, \mathbf{B} = 0, \, \mathbf{C} = 0 \\ \text{while (Table 1 has more rows) } \left\{ \\ \text{Read the first row } \mathbf{X} \text{ in Table 1} \\ \text{Move } \mathbf{X} \text{ to Table 2} \\ \text{if } (\mathbf{X}.PartOfSpeech == \text{``Adjective''}) \left\{ \\ \mathbf{B} &= \mathbf{B} + 1 \\ \right\} \\ \text{if } (\mathbf{X}.PartOfSpeech == \text{``Verb''}) \left\{ \\ \mathbf{C} &= \mathbf{C} + 1 \\ \right\} \\ \text{if } (\mathbf{X}.Word \text{ ends with a full stop) } \left\{ \\ \text{if } (\mathbf{B} \geq 1 \text{ and } \mathbf{C} \leq 2) \left\{ \\ \mathbf{A} &= \mathbf{A} + 1 \\ \right\} \\ \mathbf{B} &= 0, \, \mathbf{C} = 0 \\ \right\} \\ \end{aligned}
```

```
6406531196896. Number of sentences with at most two adjectives and one verb 6406531196897. Number of sentences with two adjectives and at least one verb 6406531196898. Number of sentences with at least one verb and at most two adjectives 6406531196899. ✓ Number of sentences with at least one adjective and at most two verbs
```

Question Number: 68 Question Id: 640653361382 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 **A** represent at the end of execution?

```
\mathbf{A} = 0
while (Table 1 has more rows) {
     Read the first row X in Table 1
     Move X to Table 2
     \mathbf{B} = \text{True}
     while (Table 1 has more rows) {
          Read the first row Y in Table 1
         if (X.Physics == Y.Physics) {
              B = False
              Move Y to Table 2
          }
          else {
              Move Y to Table 3
    if (B) {
          \mathbf{A} = \mathbf{A} + 1
     Move all rows from Table 3 to Table 1
}
```

Options:

6406531196908. Number of pairs of students who have the same Physics marks 6406531196909. ✓ Number of students with unique Physics marks

6406531196910. Number of students who do not have unique Physics marks
6406531196911. Twice the number of pairs of students who have the same Physics marks

Question Number: 69 Question Id: 640653361383 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 (**A** - **B**) represent at the end of execution?

```
A = 0, B = 0
while (Pile 1 has more cards) {
    Read the first row X in Table 1
    Move X to Pile 2
    while (Pile 1 has more cards) {
        Read the first row Y in Table 1
        Move Y to Pile 3
        if (X.Gender == Y.Gender or X.CityTown == Y.CityTown) {
            A = A + 1
        }
        if (X.Gender == Y.Gender and X.CityTown == Y.CityTown) {
            B = B + 1
        }
    }
    Move all cards from Pile 3 to Pile 1
}
```

Options:

6406531196912. **※** Number of pairs of students having same gender but from different City/Town 6406531196913. **※** Number of pairs of students having same gender and from same City/Town 6406531196914. ✓ Number of pairs of students having either same gender or from same City/Town but not both

6406531196915. Number of pairs of students having neither same gender nor from same City/Town

Sub-Section Id: 64065352778

Question Shuffling Allowed:

Yes

Question Number: 70 Question Id: 640653361381 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

A sentence is said to be balanced if there are equal numbers of vowels and consonants in it. The following pseudocode is executed using the "Words" dataset. At the end of execution, **Bcount** counts the number of balanced sentences. But the pseudocode may have mistakes. Identify all such mistakes (if any). It is a Multiple Select Question (MSQ).

```
Bcount = 0
1
2
     CountV = 0, CountC = 0
     while (Table 1 has more rows) {
3
4
         Read the first row X in Table 1
5
         CountV, CountC = countSomething(X, CountV, CountC)
6
         if (X. Word ends with a full stop) {
7
              if (CountV \neq CountC) {
8
                   Bcount = Bcount + 1
9
              }
10
         CountV = 0, CountC = 0
11
         Move the row X to Table 2
12
13
     }
     Procedure countSomething(Y, A, B)
14
15
         i = 0
         while (i \le Y.LetterCount) {
16
              if (i<sup>th</sup> letter of Y. Word is vowel) {
17
                   \mathbf{A} = \mathbf{A} + 1
18
              }
19
              else {
20
21
                   \mathbf{B} = \mathbf{B} + 1
22
23
              \mathbf{i} = \mathbf{i} + 1
24
         return ([A, B])
25
26
     End countSomething
```

Options:

6406531196900. Line 2, incorrect initialization of CountV and CountC

6406531196901. **✓** Line 7, incorrect if condition

6406531196902. **Line 8**, invalid update of **Bcount**

6406531196903. ✓ Line 11, misplaced re-initialization of CountV and CountC

6406531196904. ✓ Line 15, incorrect initialization of i

6406531196905. * Line 21, incorrect increment of **B**

6406531196906. * Line 25, incorrect return value

6406531196907. ** No error

Question Number: 71 Question Id: 640653361384 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

The following pseudocode is executed using the "Olympics" dataset. It counts the number of pairs of players who have the same medal but different nationality. Assume that no player has won more than one medal. But the pseudocode may have mistakes in one or more lines. Identify all such lines (if any). It is a Multiple Select Question (MSQ).

```
1
     while (Table 1 has more rows) {
 2
         Read the first row X in Table 1
         if (X.Medal == Gold) {
 3
              Move X to Table G
 4
 5
         if (X.Medal == "Silver") {
 6
 7
             Move X to Table S
 8
         if (X.Medal == "Bronze") {
 9
             Move X to Table B
10
11
12
13
     count = common(Table G) + common(Table S) + common(Table B)
14
     Procedure common(Table T1)
15
         A = 1
16
         while (Table T1 has more rows) {
             Read the first row X in Table T1
17
             Move X to Table T2
18
             while (Table T2 has more rows) {
19
20
                  Read the first row Y in Table T1
                  Move Y to Table T3
21
                  if (X.Nationality == Y.Nationality) {
22
23
                      \mathbf{A} = \mathbf{A} + 1
24
25
             Move all rows from Table T3 to Table T2
26
27
28
         return(A)
29
     End common
```

```
6406531196916. Line 3, incorrect if condition
6406531196917. Line 13, incorrect update of count
6406531196918. Line 15, incorrect initialization of A
6406531196919. Line 19, incorrect while condition
6406531196920. Line 22, incorrect if condition
6406531196921. Line 23, incorrect increment of A
6406531196922. Line 26, moved to incorrect table
```

Section Id :	64065322476
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	16
Number of Questions to be attempted :	16
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 :	64065352779
Question Shuffling Allowed :	No
Question Number : 72 Question Id : 640653361385 (Mandatory : No Calculator : None Response Time : Time : 0	•
Correct Marks : 0	
Question Label: Multiple Choice Question THIS IS QUESTION PAPER FOR THE SUBJECT "QUALIFIER: STATISTI MANDATORILY YOU HAVE TO ATTEND ALL THE SECTIONS.	CS FOR DATA SCIENCE 1"
Options:	
6406531196923. ✓ Yes	
6406531196924. * No	
Sub-Section Number :	2
Sub-Section Id :	64065352780

Question Number: 73 Question Id: 640653361389 Question Type: MCQ Is Question

Yes

Question Shuffling Allowed :

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

Time: 0

Correct Marks: 2

Question Label: Multiple Choice Question

The age of the participants in a dance competition are plotted in a stem and leaf plot as shown in Figure 1.2.Q.

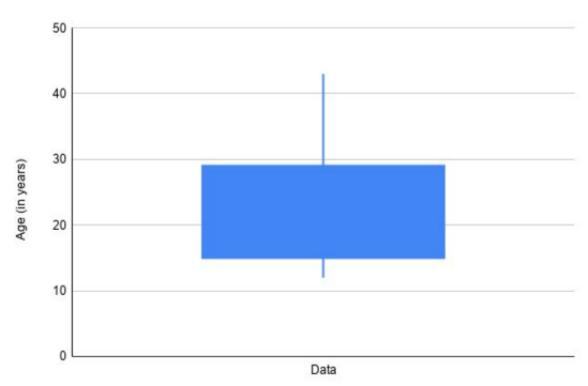
Stem	Le	eaf			
1	2	4	5		-
2	2	7			
3	1	5	6	7	
4	3				

Here 2 | 3 represents 23 years.

Figure 1.2.Q: Age of participants

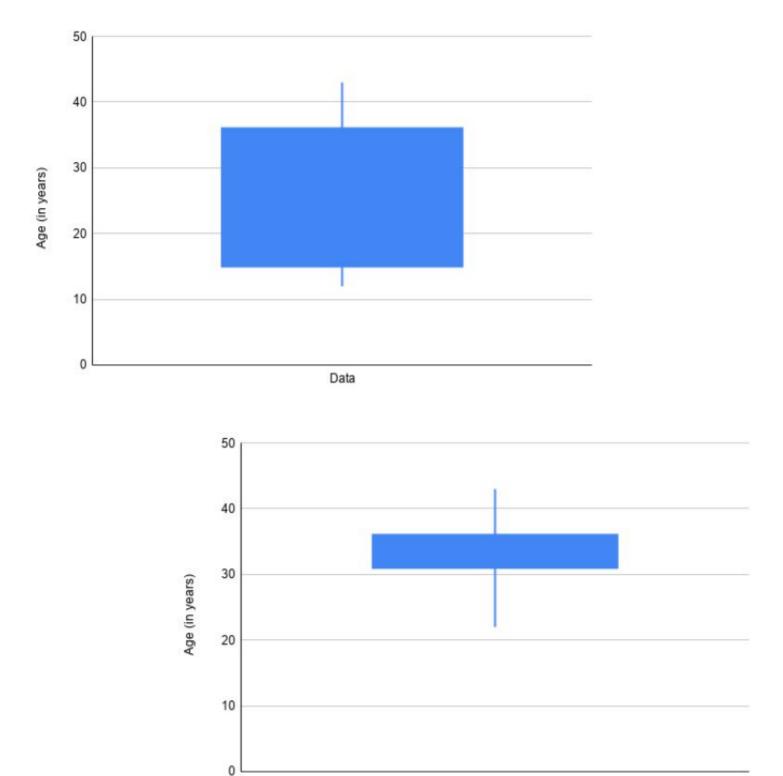
Choose the correct box plot representation of the data given in Figure 1.2.Q.

Options:



6406531196934. **

6406531196935.



Data

6406531196937. ☀ Box plot can not be plotted for the given data.

Sub-Section Number: 3

6406531196936. **

Sub-Section Id: 64065352781

Question Shuffling Allowed: Yes

Question Number: 74 Question Id: 640653361390 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

What is the value of population standard deviation of the first 2n natural numbers, i.e. 1, 2, 3, ...,

2n - 2, 2n - 1, 2n?

Hint:

Sum of *n* natural numbers = $\frac{n(n+1)}{2}$

Sum of squares of n natural numbers = $\frac{n(n+1)(2n+1)}{6}$

Options:

$$6406531196938. \checkmark \sqrt{\frac{4n^2 - 1}{12}}$$

6406531196939. *
$$\sqrt{\frac{n^2-1}{12}}$$

$$6406531196940. * \sqrt{\frac{4n^2-1}{6}}$$

6406531196941. *
$$\sqrt{\frac{n^2-1}{6}}$$

Question Number: 75 Question Id: 640653361398 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

In the last 5 innings of a school cricket tournament, Manish scored 2, 4, 10, 12, and 14 runs. The population mean and the population variance of the scores of his last 7 innings are 8 and 16 respectively. What are the remaining two scores?

6406531196961. * 7 and 7

6406531196962. * 10 and 4

6406531196963. 46 and 8

6406531196964. * 9 and 5

Sub-Section Number: 4

Sub-Section Id: 64065352782

Question Shuffling Allowed : Yes

Question Number: 76 Question Id: 640653361397 Question Type: MCQ Is Question

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

Time: 0

Correct Marks: 5

Question Label: Multiple Choice Question

A free mega health checkup is conducted by a clinic at Olympia society. The systolic blood pressure (in mm Hg) of participants is listed in Table 1.1.Q. Calculate the approximate mean value of systolic blood pressure.

Systolic blood pressure (in mm Hg)	Frequency	Relative frequency
100-110	4	0.1
110-120	x	0.125
120-130	y	0.2
130-140	z	m
140-150	7	0.175
150-160	3	0.075

Table 1.1.Q: Systolic blood pressure of participants.

Options:

6406531196957. **1**30.75

6406531196958. * 130.25

6406531196959. * 130

6406531196960. * 120.25

Sub-Section Number: 5

Sub-Section Id: 64065352783

Question Shuffling Allowed:

Yes

Question Number: 77 Question Id: 640653361399 Question Type: MSQ Is Question

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

Time: 0

Correct Marks: 2

Question Label: Multiple Select Question

Consider various variables that describe the specifications of mobile phones in a store. These variables include the brands, internal storage (in GB), display size (in inches), price (in rupees), support (3G, 4G, 5G), and sim slots (single, dual). The specifications for different mobile phones are listed in a table. Based on the given information, choose the correct statement(s) from the following:

Options:

6406531196965. ✓ Display size (in inches), internal storage (in GB), and price (in rupees) are numerical variables.

6406531196966. * Brands of mobile phones have the ordinal scale of measurement and internal storage (in GB) have the ratio scale of measurement.

6406531196967. ✓ Brands of mobile phones have the nominal scale of measurement and internal storage (in GB) have the ratio scale of measurement.

6406531196968. ✓ Support (3G, 4G, 5G), brands, sim slots (single, dual) are categorical variables.

Sub-Section Number:

Sub-Section Id: 64065352784

Question Shuffling Allowed : Yes

Question Number: 78 Question Id: 640653361386 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 mean, median, and mode of a numerical variable is the same, then:

Options:

6406531196925. * All observations must have the same value as mean.

6406531196926. The standard deviation of the numerical variable must be zero.

6406531196927. ✓ All observations need not have the same value as mean.

6406531196928. ✓ The standard deviation of the numerical variable need not be zero.

Question Number: 79 Question Id: 640653361388 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 options represent(s) cross-sectional data? (More than one option could be correct.)

Options:

6406531196930. * The profit of a company per year from the year 2008 to 2020.

6406531196931. * The electricity bill of a household for each month of 2020.

6406531196932. \checkmark The price of petrol at different cities of India on 1st of April 2020.

6406531196933. * The prices of stocks of a company recorded at the end of each month in the year 2020.

Question Number: 80 Question Id: 640653361400 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 tax paid by 100 employees of a company is given in a dataset. If the tax details of 200 more employees are added to the same dataset, then which among the following about the range will hold true? (More than one option could be correct)

Options:

6406531196969. ✓ The value of the range of the new dataset can never be smaller than the value of the range of the previous dataset.

6406531196970. * The range of the new dataset can be smaller than the range of the previous

dataset.

6406531196971. * The range of the new dataset will never exceed the range of the previous dataset.

6406531196972. * There will always be some effect on the value of the range after adding the data of 200 more employees in the dataset.

Sub-Section Number: 7

Sub-Section Id: 64065352785

Question Shuffling Allowed: Yes

Question Number: 81 Question Id: 640653361391 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

If the population standard deviation of the first 2n natural numbers (excluding zero) is s_1 , the population standard deviation of the next 2n natural numbers is s_2 , and the population standard deviation of the first 4n natural numbers (excluding zero) is s_3 , then which of the following statements is/are true?

Options:

6406531196942. $\frac{1}{5}$ $s_1 > s_2$

 $6406531196943. \checkmark s_2 = s_1$

6406531196944. **✓** s₂ < s₃

6406531196945. **✓** *s*₁ < *s*₃

6406531196946. * $s_1 = s_2 > s_3$

Sub-Section Number: 8

Sub-Section Id: 64065352786

Question Shuffling Allowed : Yes

Question Number: 82 Question Id: 640653361395 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 there are two variables x and y, each having n data points, where each data point is obtained by $x_i = i$, $y_i = n - i$, what is the correlation coefficient of x and y?

Response Type: Numeric

Evaluation Required For SA: Yes

Show Word Count: Yes

Answers Type: Equal

Text Areas : PlainText

Possible Answers:

-1

Sub-Section Number: 9

Sub-Section Id: 64065352787

Question Shuffling Allowed : Yes

Question Number: 83 Question Id: 640653361387 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

The stem and leaf plot of the weights of 10 wrestlers is shown in Figure 1.1.Q.

Stem	Leaf			
5	6	7		
6	2	8	9	
7	2	6	9	
8	3	4		

Here 6 | 2 represents 62 kg.

Figure 1.1.Q: Weights of wrestlers

What is the mean weight (in kg) of the data given in Figure 1.1.Q? (Enter the answer correct to 2 decimal accuracy.)

Response Type: Numeric

Evaluation Required For SA: Yes

Show Word Count: Yes

Answers Type: Range

Text Areas: PlainText

Possible Answers:

70.57 to 70.63

Question Number: 84 Question Id: 640653361396 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 an organization, the manager wants to find out the relation between gender and salary earned. He calculated the absolute value of point bi-serial correlation coefficient and found it to be equal to 0.7. In the next quarter, the salary of every employee is tripled. What will be the absolute value of point bi-serial correlation coefficient after the salary is tripled? (Correct up to 1 decimal point accuracy.)

Response Type: Numeric

Evaluation Required For SA: Yes

Show Word Count: Yes

Answers Type: Equal

Text Areas: PlainText

Possible Answers:

0.7

Question Number: 85 Question Id: 640653361404 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

The histogram in Figure 1.4.Q represents the marks distribution of 50 students of college *XYZ* in their Statistics quiz.

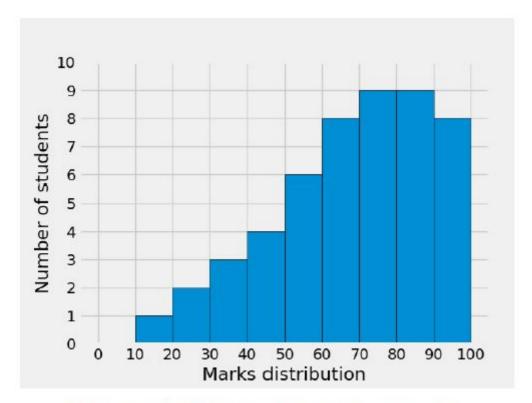


Figure 1.4.Q: Marks distribution in Statistics quiz

Find the approximate value of mean of the marks scored by students.

Response Type: Numeric

Evaluation Required For SA: Yes

Show Word Count: Yes

Answers Type: Range

Text Areas: PlainText

Possible Answers:

67.97 to 68.03

Sub-Section Number: 10

Sub-Section Id: 64065352788

Question Shuffling Allowed: No

Question Id: 640653361392 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 : (86 to 87)

Question Label: Comprehension

In a college, the gender distribution of college faculty is given as stacked bar chart in Figure 1.3.Q. There are three designation for faculty: assistant professor, associate professor, and professor. The total number of assistant professors, associate professors and professors are 250, 100, and 50 respectively. Based on this information, answer the subquestions.

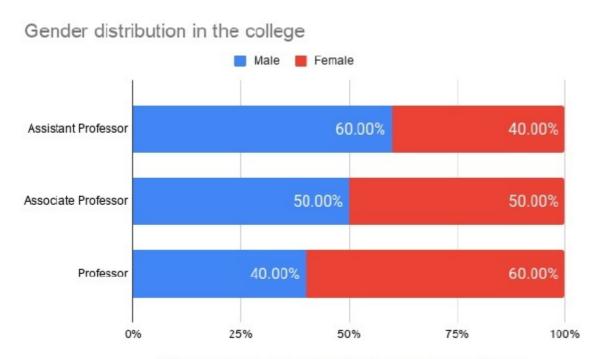


Figure 1.3.Q: Gender distribution in a college.

Sub questions

Question Number: 86 Question Id: 640653361393 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 the median of faculty designation?

Options:

6406531196947. * Associate Professor

6406531196948. **✓** Assistant Professor

6406531196949. ** Professor

6406531196950. Median is not defined for the faculty designation.

Question Number: 87 Question Id: 640653361394 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) from the following statements about the dataset given in Figure 1.3.Q.

Options:

6406531196951. ✓ Gender is associated with the faculty designation.

6406531196952. * Gender is not associated with faculty designation.

6406531196953. Percentage of overall male faculty in the college is 65.

6406531196954. ✓ There is a total of 220 male faculty in the college.

Question Id: 640653361401 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 online retailer shop uses 4 different types of delivery services (A, B, C, and D) to deliver the products to their customers. The contingency table 1.2.Q shows the number of items that were received damaged when shipped by 4 different delivery services.

Damage	Delivery services				Delivery service		
	A	B	C	D			
Yes	40	20	35	10			
No	60	100	95	90			

Table 1.2.Q: Delivery services

Based on the given data, answer the subquestions.

Sub questions

Question Number: 88 Question Id: 640653361402 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

On the basis of the information given in Table 1.2.Q, select the correct statement(s) from the following:

Options:

6406531196973. ✓ Receiving the damaged item is associated with the type of delivery services used.

6406531196974. Receiving the damaged item is not associated with the type of delivery services used.

6406531196975. ✓ If the manager of the retailing shop wants to reduce the number of complaints regarding the damaged items received, he should prefer delivery service of type *D*.

6406531196976. * If the manager of the retailing shop wants to reduce the number of complaints regarding the damaged items received, he should prefer delivery service of type *B*.

Question Number: 89 Question Id: 640653361403 Question Type: MCQ Is Question

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

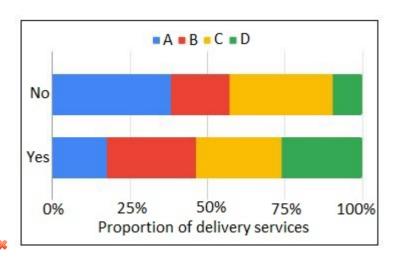
Time: 0

Correct Marks: 2

Question Label: Multiple Choice Question

Identify the correct stack bar chart representing the row relative frequencies of the type of delivery services from Table 1.2.Q.

Options:



6406531196977. **

