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: TS ICET 2020 1st Oct 2020 Shift 1
Subject Name: TS ICET 2020
Creation Date: 2020-10-01 17:14:17
Duration: 150
Number of Questions: 158
Total Marks: 200
Display Marks: No
Share Answer Key With Delivery Engine: Yes
Actual Answer Key: Yes
Calculator: None
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

TS ICET 2020

Group Number: 1
Group Id: 39448419
Group Maximum Duration: 0
Group Minimum Duration: 150
Show Attended Group?: No
Edit Attended Group?: No
Break time: 0
Group Marks: 200
Is this Group for Examiner?: No

Analytical Ability

Section Id: 39448455
Section Number: 1
Section type: Online
Mandatory or Optional: Mandatory
<table>
<thead>
<tr>
<th>Parameter</th>
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<tr>
<td>Number of Questions</td>
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<td>Number of Questions to be attempted</td>
<td>45</td>
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<td>Section Marks</td>
<td>75</td>
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<td>Mark As Answered Required?</td>
<td>Yes</td>
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<td>Sub-Section Number</td>
<td>1</td>
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<td>Sub-Section Id</td>
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<td>Yes</td>
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**Question Id**: 3944843745  **Question Type**: COMPREHENSION  **Sub Question Shuffling Allowed**: Yes  **Group Comprehension Questions**: No  **Question Numbers**: (1 to 20)
Note: In questions numbered 1 to 20, a question is followed by data in the form of two statements labelled as I and II. You must decide whether the data given in the statements are sufficient to answer the questions. Using the data make an appropriate choice from (1) to (4) as per the following guidelines:

(a) Mark choice (1) if the statement I alone is sufficient to answer the question.
(b) Mark choice (2) if the statement II alone is sufficient to answer the question.
(c) Mark choice (3) if both the statements I and II are sufficient to answer the question but neither statement alone is sufficient.
(d) Mark choice (4) if both the statements I and II together are not sufficient to answer the question and additional data is required.

Sub questions

Question Number : 1 Question Id : 3944843746 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Find the values of \( x \) and \( y \).

\[ x, y \in \mathbb{R}, x \neq 0. \]

(I) \[ 2x = 3y \]

(II) \[ 4x^2 + 9y^2 = 12xy \]

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number: 2 Question Id: 3944843747 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Is the triangle \( ABC \) an acute angled triangle?

(తెలుగు విస్తీర్ణం మూడ్తునీ నిర్ధిష్టం యే?)

(I) The sides of the triangle are in the ratio \( 4 : 5 : 7 \).

(సమాధానం ఇది రేటు యే: \( 4 : 5 : 7 \).)

(II) The length of the longer side is 28 cm.

(పొడవు ప్రత్యేక్షణ యే: 28 సెంచి యే.)

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 3 Question Id: 3944843748 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
If \( a \) is an integer, \( 100 < a < 200 \), then what is the value of \( a \)?

\( 100 < a < 200 \) లేదా ఇద్ది సంఖ్య లేదా అదే సంఖ్య ఉంటుంది, \( a \) ఎంత సంఖ్య ఉంటుంది?

(I) \( a \) gives remainder 5 when divided by 10.

\( a \) ఇదే 10 విభాగానికి శాతం 5 ఉంది.

(II) \( a \) is divisible by 11.

11 లీ శాతం ఉంది.

Options:
1. \( * \) 1
2. \( * \) 2
3. \( ✔ \) 3
4. \( * \) 4

Question Number : 4 Question Id : 3944843749 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

How many books were sold this month in your shop?

మీ ప్రదేశాల గ్రామంలో తెలుగు గ్రంథాలు ఎంతం బాగా బాగా బాగా ప్రదానం చేయబడిందా?

(I) Last month 287 books were sold.

ఇదే 287 బాగా తెలుగు గ్రంథాలు ప్రదానం చేయబడిందా.

(II) The number of books sold this month was 2 times that of last month.

ఈ ప్రత్యేక గ్రంథాలు ప్రదానం చేయబడిందా 2 సంఖ్య ప్రదానం చేయబడిందా.

Options:
1. \( * \) 1
2. \( * \) 2
3. \( ✔ \) 3
4. \( * \) 4

Question Number : 5 Question Id : 3944843750 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
What is the height of the mountain?

What is the height of the mountain?

(I) The angle of elevation of the top of the mountain is 60°.

(II) The top of the mountain is seen from a point which is on horizontal line with the base.

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number: 6 Question Id: 3944843751 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

If \(a, b, c\) are in geometric progression, then \(a + b + c = \)

\(a, b, c\) పదాలు సనంతం వేయించిన తోంది, \(a + b + c = \)

(I) \(a = 7\).

(II) The third term of the progression is twice the first term.

తెలియాలే నంతి మరో మద్య పదం, మిగిలిన పదం నంతి రెండు పదం

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number: 7 Question Id: 3944843752 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0
What is the Mode of the frequency distribution?

మధ్యమం ఎంత ఉండాయి?

(I) The arithmetic mean is 58.

అదే అంశం 58 ఉంది.

(II) The total frequency is 100.

మొత్తం సంఖ్య 100 ఉంది.

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 8 Question Id : 3944843753 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

What is the percentage increase in profit of the company X in the year 2016 with respect to that in 2014?

2014 నిలువు 2016 నిలువు రోజున కంపెన్సీ X రాజధాని ఎందుకు శరిపోయేవి?

(I) The profit of the company in 2014 was Rs.1 lakh, which is 10% more than that in 2015.

2014 నిలువు 2015 నిలువు రోజున 1 లక్షల శరిపోయేది. 10% కంపెన్సీ.

(II) Company’s profit in 2016 was Rs.2 lakhs which was Rs.1 lakh more than that in 2014.

2016 నిలువు 2014 నిలువు రోజున 2 లక్షలు శరిపోయేది. 1 లక్షలు కంపెన్సీ.

Options:
1. ✗ 1
2. ✔ 2
Let \( L \) be the set of straight lines in a plane. Is the relation \( S \) defined on \( L \) a reflexive relation?

\( L \) ఎంటర్ బిందువుల సరిహద్దు సేట్ లో ఏ రేఖల సంఖ్య ఉంది. \( L \) లో వర్గించే సంబంధం సరిహద్దు సంబంధం ఉండేదా?

\[(I) \quad l_1, l_2 \in L\]

\[(II) \quad (l_1, l_2) \in S \iff l_1 \perp l_2\]

Options:
1. ❌ 1
2. ✔ 2
3. ❌ 3
4. ✔ 4
How many students are there in the school?

(I) Out of the total number of girls in the school, 25% belong to age group below 10 years and these are 150 in number.

(II) The ratio of girls to boys in the school is $5 : 7$.

Options:
1. 1
2. 2
3. 3
4. 4

What is the average of $x$ and $y$?

(I) $x - y = 6$

(II) $x + y = 16$

Options:
1. 1
2. 2
3. 3
4. 4
Find the area of the rectangular field.

(I) The expenditure incurred in fencing along sides of the rectangle is Rs. 30000.

(II) Cost of fencing per feet is Rs. 500.

Options:
1. 🔴 1
2. 🔴 2
3. 🔴 3
4. ✅ 4

Is the positive integer $m$ divisible by 96?

(I) $m$ is divisible by 12.

(II) $m$ is divisible by 8.

Options:
1. 🔴 1
2. 🔴 2
3. 🔴 3
The arithmetic mean of integers \( r, s, t, u, v \) is 100. Are exactly two of these integers greater than 100?

(\( r, s, t, u, v \) \text{ are the integers whose mean is 100. Are there exactly two integers greater than 100?})

- (I) Three of the integers are less than 50.
- (II) None of these integers is equal to 100.

Options:
1. \( \checkmark \) 1
2. \( \checkmark \) 2
3. \( \checkmark \) 3
4. \( \checkmark \) 4
If \( p, q \) are positive integers, is \( p \) a multiple of \( q \)?

\( p, q \) లు ధాన్యంగా సాధారణాలే, \( q \) రెండు పాంపలు ప్రస్తుతించవచ్చు?

(I) Every distinct prime factor of \( q \) is also a distinct prime factor of \( p \).

(II) Every factor of \( q \) is also a factor of \( p \).

Options:
1. ❌ 1
2. ✔ 2
3. ❌ 3
4. ❌ 4

Question Number : 16 Question Id : 3944843761 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Anil has 3 credit cards A,B and C. He owes balances on all the three cards. Does he owe the greatest balance on the card B?

(i) The sum of the balances on card B and C is Rs.1350 which is 3 times the balance on card A.

\[ B+C = 1350 \text{ and } 3(A) = 1350 \]

(ii) The balance on card B is 4/3 of the balance on card A and 4/5 of the balance on his card C.

\[ \frac{4}{3}A = B \text{ and } \frac{4}{5}C = B \]

Options:
1. ✔ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 17 Question Id : 3944843762 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Is the standard deviation of the ages of students in class A greater than standard deviation of the age of students in class B?

అనుమతి పేరు B పేరు B అనుమతి పేరు A పేరు A

(I) The difference between the ages of any two students in class A is always more than one year.

(II) No student in class B is more than 6 months older than any other student.

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 18 Question Id : 3944843763 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Is \( n \) an even integer?

\( n \) ఒక సమాప్తి సంఖ్య కాదు?

(I) \( 6n \) is even.
\( 6n \) సమాప్తి సంఖ్య.

(II) \( 71n \) is odd.
\( 71n \) విషయ సంఖ్య.

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

If \( Z \) is an integer, what is the units digit of \( Z^3 \)?

\( Z \) ఒక స్థాయి సంఖ్య, \( Z^3 \) లో అంతర అంశానికి ఎంతి మాత్రం?

(I) \( Z \) is a multiple of 5.
\( 5 \) సంఖ్య సాధ్యం తో ఇదే \( Z \).

(II) \( \sqrt{Z} \) is an integer.
\( \sqrt{Z} \) ఒక స్థాయి సంఖ్య.

Options:
1. ✗ 1
2. ✔ 2
What is the ratio of discounted price of an item to its marked price?

(1) The discounted price is Rs. 4 less than the marked price.

(2) Discounted price is 20% less than the marked price.

Options:
1. ✓ 1
2. ✓ 2
3. ✓ 3
4. ✓ 4

Sub-Section Number: 2
Sub-Section Id: 394484380
Question Shuffling Allowed: Yes

Problem Solving

Sequence and Series.
(1) 05040614
(2) 05040613
(3) 05040612
(4) 040030614

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 22 Question Id : 3944843767 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Problem Solving

Sequence and Series

SUWY : LPTX :: PRTV : ___

(1) INRU
(2) INQU
(3) IMRU
(4) IMQU

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
1, 14, 39, ___ , 155

(1) 82
(2) 83
(3) 84
(4) 85

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
A, D, J, P, ____

(1) W
(2) X
(3) Z
(4) Y

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 25 Question Id : 3944843770 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Problem Solving

Sequence and Series

(MR, 31) : (KM, 24) :: (IJ, 19) : (PR, ____)

(1) 34
(2) 35
(3) 36
(4) 37

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving

Sequence and Series

Reading: Knowledge :: _______ : _______

(1) Running : Speed "తెలుగు వేగం" : వేగం

(2) Working : Experience "తొలి వేతించిని" : వాసనలు

(3) Travelling : Pleasure "పరమాణువులు ఉండగా" : పరమాణులు

(4) Swimming : Water "ప్రస్తుత నిర్ధారించా" : నిర్ధారించా

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Square : Cube :: Circle : ______

స్క్రూయాక్షేత్రం : కుప్స్క్రూయా :: ప్రిమర్ : _____

(1) Tangent

ప్రత్యేకించకడం

(2) Chord

మధ్యం

(3) Center

మధ్యం

(4) Sphere

శere

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 28 Question Id : 3944843773 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Problem Solving

సమస్యార్థిత్వ

Sequence and Series

పరిస్థితియోసాస్, పరిసీసోలు

MAN : LNZBMO :: SUN : _____

(1) RTTVMO

(2) RUTVLM

(3) PQTUOP

(4) TUVWOP
Options:
1. ✔ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number: 29 Question Id: 3944843774 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Problem Solving
ప్రశ్నాంశం సిద్ధం
Sequence and Series
శరీరానికి శిల్పం

MOUSE : KPSTC :: LIGHT : _____

(1) MGHFU
(2) MJHIU
(3) JGEFR
(4) JJEIR

Options:
1. ❌ 1
2. ✔ 2
3. ❌ 3
4. ✔ 4

Question Number: 30 Question Id: 3944843775 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Problem Solving
ప్రశ్నాంశం సిద్ధం
Sequence and Series
శాస్త్రానికి శిల్పం
BAND : CUPF :: CARE : ___

(1) DUSB
(2) DUSI
(3) DUSA
(4) DUSC

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number : 3
Sub-Section Id : 394484381
Question Shuffling Allowed : Yes

Question Number : 31 Question Id : 3944843776 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : In questions numbered 31 to 35 pick the odd thing out.

(1) $x^2 - 3x + 2$
(2) $x^2 - 6x + 6$
(3) $x^2 - 7x + 4$
(4) $x^2 - 8x + 16$

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✔ 4

Question Number : 32 Question Id : 3944843777 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
In questions numbered 31 to 35 pick the odd thing out.

(1) Kanchenjunga
(2) Appalachians
(3) Satpura
(4) Vindhyas

Options:
1. ☑
2. ☐
3. ☑
4. ☐

Question Number: 33 Question Id: 3944843778 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

In questions numbered 31 to 35 pick the odd thing out.

(1) DG2
(2) EK5
(3) JR6
(4) RV3

Options:
1. ☐
2. ☑
3. ☑
4. ☐
Question Number : 34 Question Id : 3944843779 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : In questions numbered 31 to 35 pick the odd one out.

1. Gandhinagar
   గంధినాగర్

2. Pune
   పుణే

3. Itanagar
   ఇతనగర్

4. Dibrugarh
   డిబ్రుగేర్

Options :
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 35 Question Id : 3944843780 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : In questions numbered 31 to 35 pick the odd one out.

1. Bus depot
   బస్ డెపొట్

2. Cinema hall
   చినిమా హళ్ళు

3. Railway station
   రైల్వే స్టాషన్

4. Airport
   వైమార్స్ స్టాషన్

Question Number : 36 Question Id : 3944843781 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the
same and fill in the blanks with suitable ones.

0.5, 0.66, 0.75, 0.80, ___.

(1) 0.83
(2) 0.86
(3) 0.90
(4) 1.20

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 37 Question Id : 3944843782 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the
same and fill in the blanks with suitable ones.

0.5, 0.66, 0.75, 0.80, ___.

(1) 0.83
(2) 0.86
(3) 0.90
(4) 1.20

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
2 + \sqrt{5}; 9 + 4\sqrt{5}; \ 38 + 17\sqrt{5}; \ ___

(1) 48 + 24\sqrt{5}
(2) 68 + 32\sqrt{5}
(3) 121 + 48\sqrt{5}
(4) 161 + 72\sqrt{5}

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 38 Question Id : 3944843783 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

D32, W34, ___, L33, H30, E32

(1) P33
(2) Q31
(3) R32
(4) O31

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 39 Question Id : 3944843784 Question Type : MCQ Option Shuffling : No Display Question
Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the
same and fill in the blanks with suitable ones.

-1, 0, 1, 8, 27, ___

1. 64
2. 49
3. 60
4. 24

Options :
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4

Question Number : 40 Question Id : 3944843785 Question Type : MCQ Option Shuffling : No Display Question
Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the
same and fill in the blanks with suitable ones.

8, 4, 4, 8, 32, _____

1. 62
2. 36
3. 242
4. 256
Options:
1. 1
2. 2
3. 3
4. 4

Question Number: 41 Question Id: 3944843786 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Note: Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

165, 195, 255, 285, 345, ____

(1) 435
(2) 375
(3) 420
(4) 390

Options:
1. 1
2. 2
3. 3
4. 4

Question Number: 42 Question Id: 3944843787 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Note: Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

165, 195, 255, 285, 345, ____

(1) 435
(2) 375
(3) 420
(4) 390
WSQ, SQM, QMK, MKG, _____

(1) KGE  
(2) KGC  
(3) KGB  
(4) KGD

Options :
1. ✔ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4

Question Number : 43 Question Id : 3944843788 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

BC, EG, KM, _____

(1) QS  
(2) SQ  
(3) SW  
(4) WS

Options :
1. ✔ 1  
2. ✗ 2
Question Number : 44 Question Id : 3944843789 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

359, ____, 535, 623, ____

(1) 446, 710

(2) 447, 711

(3) 450, 710

(4) 445, 711

Options :
1. ☒️ 1
2. ✔️ 2
3. ☒️ 3
4. ☒️ 4

Question Number : 45 Question Id : 3944843790 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

गणित 36 शिष्य 45 शिष्या गंगा पूर्ण तारा सेल्लेक्ट कर लीजिया नियमात्मक अनुपातमेता. ए नियमात्मक गंगिले होतील नववर्षातील दुवितले जास्तीत.
100, 1001, 11001, 110001, ____

(1) 1100001
(2) 1110001
(3) 1111001
(4) 1111101

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Sub-Section Number : 5
Sub-Section Id : 394484383
Question Shuffling Allowed : Yes

Question Id : 3944843791 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (46 to 48)
The following table gives the classification of 100 students based on the marks obtained by them in Mathematics and Physics in an examination. Based on this information, answer the questions from 46 to 48.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Max. Marks 50</th>
<th>40 and above</th>
<th>30 and above</th>
<th>20 and above</th>
<th>10 and above</th>
<th>0 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>9</td>
<td>33</td>
<td>80</td>
<td>92</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>5</td>
<td>21</td>
<td>66</td>
<td>82</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>7</td>
<td>27</td>
<td>73</td>
<td>87</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Sub questions

Question Number : 46 Question Id : 3944843792 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

The number of students scoring less than 40% marks in aggregate is

(1) 27
(2) 20
(3) 19
(4) 13
The number of students scoring less than 60% marks in aggregate is:

(1) 71
(2) 72
(3) 73
(4) 74
The number of students scoring less than 80% marks, but more than 60% marks in aggregate is:

(1) 24
(2) 20
(3) 16
(4) 14

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 6
Sub-Section Id: 394484384
Question Shuffling Allowed: Yes

Question Id: 3944843795 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (49 to 53)
Based on the following bar diagram, answer the questions from 49-53.

Sub questions

**Question Number : 49**  
**Question Id : 3944843796**  
**Question Type : MCQ**  
**Option Shuffling : No**  
**Display Question Number : Yes**  
**Is Question Mandatory : No**  
**Option Orientation : Vertical**  
**Correct Marks : 1**  
**Wrong Marks : 0**

The ratio of amount of Vitamin C in 500 grams of Cabbage to 500 grams of Cauliflower is

500 grams Cabbage contains 75 mg Vitamin C, 500 grams Cauliflower contains 200 mg Vitamin C

(1) 7 : 20
(2) 8 : 21
(3) 6 : 19
(4) 6 : 17
1. 1
2. 2
3. 3
4. 4

Question Number : 50 Question Id : 3944843797 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

How many grams of Carrots you require to get 900 mgs of Vitamin C ?

900 మి. [విటామిన్ C సాధారణంగా పెట్టడానికి ఎంత కిచ్చేరి కావాలి?]

(1) 950
(2) 900
(3) 1000
(4) 800

Options :
1. 1
2. 2
3. 3
4. 4

Question Number : 51 Question Id : 3944843798 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Which of the following vegetables gives maximum vitamin C ?

పుష్పించనాదిలో ఎవి లాదాదిలో పెంచే దిస్సు ఉంటే కండం?

(1) 250 gms of Spinach 250 గిమ్సు టిప్పుదికి
(2) 150 gms of Cauliflower 150 గిమ్సు సాయిలైని
(3) 250 gms of Carrot 250 గిమ్సు కార్టిట్
(4) 300 gms of Cabbage 300 గిమ్సు కాబేగె
A person consumed 150 gms of Spinach and 150 gms of Tomato on same day. The amount of vitamin C (in m gms) he consumed on that day is

(1) 135  
(2) 130  
(3) 125  
(4) 120
The total amount (in m.gms) of vitamin C available in 500 gms of Pepper and 300 gms of Broccoli is

500 గ్రామాల పే珀ల్లో ఉంది, 300 గ్రామాల బ్రోక్లీం ఉంది ఉండి విత్తనం C మిగిలిను ఉంది.

(1) 1350
(2) 1400
(3) 1450
(4) 1500

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number: 7
Sub-Section Id: 394484385
Question Shuffling Allowed: Yes

Question Id: 3944843801 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (54 to 55)

Using the following Venn diagram, answer the questions 54 and 55.

A : Post graduates
B : Govt sector employees
C : Contract employees

Sub questions

Question Number : 54 Question Id : 3944843802 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
The area that represents contract employees who work in government sector but not post graduates is

(1) a
(2) b
(3) c
(4) d

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

The region that represents employees in the government sector who are also post graduates is

(1) a ∪ b
(2) b ∪ c
(3) a ∪ b ∪ c
(4) c ∪ b ∪ d

Options:
1. ✗ 1
2. ✗ 2
In a code language, DISTANCE is written as IDTUBECECN and DOCUMENT is written as ODDVNTNE. How is THURSDAY written in that language?

(1) DTVSTEYA
(2) HTIQRYAD
(3) HTVSTYAD
(4) HTVQTYAD

Options:
1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4
In a certain code, MONKEY is written as XDJMNAL. How is TIGER written in that code?

మొక్కలు ఎల్లో, MONKEY అనే XDJMNAL ను ఎల్లో. TIGER అనే ఎల్లో?

(1) QDFHS
(2) SDFHS
(3) SHFDQ
(4) UJHFS

Options:
1. ☑ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 58 Question Id : 3944843807 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If GOLD is coded as HOME, COME is coded as DONE, how would you code SONS?

GOLD అనే HOME ను, COME అనే DONE ను ఎల్లో, SONS ఎల్లో?

(1) TPOT
(2) TOOT
(3) TOOS
(4) TONT
If CENTURY is coded as AGLVSTW, then the code for SACHIN is:

CENTURY செந்தூர் செந்தூர் AGLVSTW சேசன் SACHIN செந்தூர் செந்தூர் சேசன் ?

1. UCAJGP
2. UCEFGL
3. QCAJGP
4. QCAFKL

Options:
1. 1
2. 2
3. 3
4. 4

Question Number : 60 Question Id : 3944843809 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
If DIAMOND is coded as VQYMKLV, how is FEMALE coded?

DIAMOND ඒ VQYMKLV ප රාකා කීය, FEMALE පාරිහාසික කීය එකමානයි?

1. TUMYNU
2. UVNZOV
3. UVNYNV
4. TUMZOU

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 9
Sub-Section Id: 394484387
Question Shuffling Allowed: Yes

Question Number: 61 Question Id: 3944843810 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
In a certain code the word PHONE is coded as DMNGO, then BUILT is coded as

(1) UMJVC
(2) SKHTA
(3) UKHTC
(4) SMJVA

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 62 Question Id : 3944843811 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In a certain code, MASTER is coded as QISREL, then STUDENT is coded as

(1) SLHBASR
(2) SNJDASR
(3) SMICASR
(4) SMJDASR

Options :
1. ✗ 1
2. ✓ 2
In a certain code language the word PRINCE is coded as 144 and the word KING is coded as 91, then in the same language MINISTER is coded as

(1) 107
(2) 237
(3) 214
(4) 298

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
In a certain code language, the words ENGINEER and DOCTOR are coded respectively as 29 and 15 then in the same language TEACHER is coded as

(1) 38  
(2) 39  
(3) 40  
(4) 41

Options :
1. ✔ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4

Question Number : 65 Question Id : 3944843814 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If the word BANKER is coded as LISCEP, then in PENCIL is coded as

(1) GIPDOM  
(2) DONRIP  
(3) DOMQIP  
(4) RIPOND

Options :
1. ✗ 1  
2. ✔ 2
If a person takes birth on 14th April, 1992, which was a Sunday, then on which day of the week does his birthday fall in 1993?

(1) Monday  (1) రుణాంతరం
(2) Tuesday  (2) రెండవది
(3) Wednesday  (3) మంగళవారం
(4) Friday  (4) శుక్రవారం

Options:
1. ✔ 1
2. ✘ 2
3. ✗ 3
4. ✗ 4

Question Number : 67 Question Id : 3944843816 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
The angle between the minute hand and the hour hand of a clock at 3 hours 40 minutes is

(1) 20°
(2) 70°
(3) 90°
(4) 130°

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number: 68 Question Id: 3944843817 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

Date, Time & Arrangement Problems:

సా. నిజానికి, అంశం నిలిచడం
The smaller angle between the two hands of a clock at 3:49 pm, in degrees is

3:49 అంతరాముల వచ్చు సాధ్యం ఉంది. కనుక సమాధానాన్ని సంపాదించండి.

(1) 165 \frac{1}{2}
(2) 169 \frac{1}{2}
(3) 175 \frac{1}{2}
(4) 179 \frac{1}{2}

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 69 Question Id : 3944843818 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Date, Time & Arrangement Problems:
అంతరాముల వచ్చు సాధ్యం ఉంది.
A woman pointing a man tells that his mother is the only daughter of my father. How is the man related to woman?

(1) Uncle  
(2) Grand son  
(3) Son  
(4) Nephew

Options:
1. ✗ 1  
2. ✗ 2  
3. ✔ 3  
4. ✗ 4

Question Number : 70 Question Id : 3944843819 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Date, Time & Arrangement Problem:
A bus $B_1$ arrives at a station $S$, 50 minutes late, but it arrives 30 minutes before another bus $B_2$ which reaches the station $S$ 20 minutes early than its scheduled time 3.40 pm.

Then the scheduled time of arrival of bus $B_1$ and station $S$ is

(1) 3.10 pm
(2) 3.20 pm
(3) 3.30 pm
(4) 3.40 pm

Options:
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4

Question Number : 71 Question Id : 3944843820 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Date, Time & Arrangement Problems:

సమయం, తరువాతం సమాఖ్య ప్రశ్నలు
A person starts from his house and walks 80 meters towards West, then he walks 60 meters towards his left, then 80 meters towards West and then 40 meters towards South, finally, he turns right and walks 50 meters. What is the horizontal distance covered by him from his house? (in meters)

(1) 140
(2) 180
(3) 130
(4) 210

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 72 Question Id : 3944843821 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Date, Time & Arrangement Problems:

అమెరికా అప్సారాత్ల సమయం
Four persons A, B, C and D live in different towns which are located as

అవిని నిలిచిన నిలవరు శాస్త్ర శాస్త్రాన్ని జీవించారు.

i) B is to the South West of A;
   A లోకు న్యాయముగా బ్రహ్మస్త్ర బ్రహ్మస్త్ర బ్రహ్మస్త్ర బ్రహ్మస్త్ర.

ii) C is to the East of B and is also to the South East of A;
    A లో సమీపంలోకు, B లో సమీపంలోకు C సమీపంలోకు.

iii) D is to the North of C in line with B and A;
     C లో విశేషంగా బ్రహ్మస్త్ర బ్రహ్మస్త్ర బ్రహ్మస్త్ర బ్రహ్మస్త్ర D సమీపంలోకు.

What is the direction of A relative to D?

D లో నిలిచినంటకు ఈ దిశగా ఉండాలి?

(1) North
(2) East
(3) South West
(4) North East

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 73 Question Id : 3944843822 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Date, Time & Arrangement Problems:

సంధక, కాలమేధా నిబంధనలు
If \( a \ast b = ab + \frac{1}{ab} + a + \frac{1}{b} \) then \((-1) \ast (2 \ast 1) = \)

\[ a \ast b = ab + \frac{1}{ab} + a + \frac{1}{b} \]

\((-1) \ast (2 \ast 1) = \)

(1) \( -5 \frac{1}{2} \)

(2) \(-5 \)

(3) \(-6 \)

(4) \(-6 \frac{1}{2} \)

Options:
1. \( \square \) 1
2. \( \square \) 2
3. \( \square \) 3
4. \( \checkmark \) 4

Question Number : 74 Question Id : 3944843823 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Date, Time & Arrangement Problems

இந்த ஆண்டுத் தோற்றம் பார்க்கவும்
If \( a \Delta b = \frac{a}{b} + \frac{b}{a} \) and \( a \ast b = ab + \frac{1}{ab} \) then \((1 \Delta 2) \ast 4 = \)

\[ a \Delta b = \frac{a}{b} + \frac{b}{a} \quad a \ast b = ab + \frac{1}{ab} \]

\((1 \Delta 2) \ast 4 = \)

(1) \(10^{\frac{1}{5}}\)

(2) \(9^{\frac{1}{9}}\)

(3) \(10^{\frac{1}{10}}\)

(4) \(10^{\frac{1}{2}}\)

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 75 Question Id : 3944843824 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Date, Time & Arrangement Problems

మాత్రమే, సంకేతాలపాల పనిచేసండి
If \( a \oplus b = a^2 + b^2 \), \( a \ominus b = a^2 - b^2 \) then \((2 \oplus 3) \ominus 13 = \)

\( a \oplus b = a^2 + b^2 \), \( a \ominus b = a^2 - b^2 \) \( (2 \oplus 3) \ominus 13 = \)

(1) 1
(2) 2
(3) 3
(4) 0

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

**Mathematical Ability**

- Section Id : 39448456
- Section Number : 2
- Section type : Online
- Mandatory or Optional : Mandatory
- Number of Questions : 75
- Number of Questions to be attempted : 75
- Section Marks : 75
- Mark As Answered Required? : Yes
- Sub-Section Number : 1
- Sub-Section Id : 394484389
- Question Shuffling Allowed : Yes

**Arithmetical Ability**

‌
If \( a(\sqrt[3]{x^2}) + a(\sqrt{x}) + c = 0 \), then \( a^2x^2 + b^2x + c^2 = \)

\[ a(\sqrt[3]{x^2}) + a(\sqrt{x}) + c = 0 \]

\(a^2x^2 + b^3x + c^3 = \)

\((1) \ 3 \ abcx\)

\((2) \ 3 \ abc\)

\((3) \ a+b+c\)

\((4) \ 3abcx^3\)

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 77 Question Id : 3944843826 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability

If \( s, t \) are rational numbers such that \( (3^{s-2})^5 \times (2^{s+2})^3 = 432 \),
then \( 4t - 5s = \)

\((3^{s-2})^5 \times (2^{s+2})^3 = 432 \)

\(4t - 5s = \)

\((1) \ 153\)

\((2) \ \frac{281}{15}\)

\((3) \ \frac{154}{15}\)

\((4) \ 280\)

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
Question Number: 78 Question Id: 3944843827 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

**Arithmetical Ability**

A bag contains the coins of denomination of Rs.5, Rs.2, and Rs.1 in the ratio of 2 : 3 : 5 respectively. If total value of the money in the bag is Rs.2100, then how many Rs.5 coins are there in the bag?

2 : 3 : 5 గుణాంకాలతో 5, 2 మరియు 1 రూ.సమాంతరుగా ఉన్నాం. రూ. 2100 ఆయు రూ.5 గణానూ ఉండాం?

(1) 500
(2) 400
(3) 300
(4) 200

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

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Question Number: 79 Question Id: 3944843828 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

**Arithmetical Ability**

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The shares of two persons P and Q in a company are in the ratio 3 : 7. The company gave each of them 20 additional shares, as a result of which, the ratio got altered to 1 : 2. How many shares of company does Q now hold?

(1) 140  
(2) 160  
(3) 200  
(4) 180

Options:
1. ✗ 1  
2. ✔ 2  
3. ✗ 3  
4. ✗ 4

Question Number: 80 Question Id: 3944843829 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Arithmetical Ability
అంధకార ఆధార
If \( x = \sqrt{p + \sqrt{p^2 + q^2}} + \sqrt{p - \sqrt{p^2 + q^2}} \), then \( x^3 + 3qx - 2p = \)

\[
x = \sqrt{p + \sqrt{p^2 + q^2}} + \sqrt{p - \sqrt{p^2 + q^2}} \Rightarrow \Box \Box \Box, x^3 + 3qx - 2p =
\]

(1) 0  
(2) 1  
(3) 2  
(4) 3

Options :
1. ✅ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4

Question Number : 81 Question Id : 3944843830 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability

If \( x = \sqrt{3} + \sqrt{2} \), then \( x^3 + \frac{1}{x^3} = \)

\[
x = \sqrt{3} + \sqrt{2} \Rightarrow \Box \Box \Box, x^3 + \frac{1}{x^3} =
\]

(1) \(18\sqrt{3}\)  
(2) \(15\sqrt{3}\)  
(3) \(9\sqrt{3}\)  
(4) \(8\sqrt{3}\) 

Options :
The least values of $x$ and $y$, respectively, so that $7x342y$ is divisible by 88 are

1. $1, 4$
2. $2, 4$
3. $4, 4$
4. $5, 4$

Options:
1. $1$
2. $2$
3. $3$
4. $4$

The least values of $x$ and $y$, respectively, so that $7x342y$ is divisible by 88 are

1. $1, 4$
2. $2, 4$
3. $4, 4$
4. $5, 4$
A natural number \( m \) is multiplied by 11 and then 22 is added to the product. The result is a multiple of 17. Then the smallest value of \( m \) is

(1) 11
(2) 15
(3) 17
(4) 22

**Options:**

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

**Question Number:** 84  
**Question Id:** 3944843833  
**Question Type:** MCQ Option Shuffling: No  
**Display Question Number:** Yes  
**Is Question Mandatory:** No  
**Orientation:** Vertical  
**Correct Marks:** 1  
**Wrong Marks:** 0

**Arithmetical Ability**

The smallest positive integer which is perfect square and is also divisible by 15, 18 and 25 is

15, 18, 25 వాటా సంఖ్యలు నిష్పమైన పట్టిక లేదు సంఖ్య

(1) 450
(2) 600
(3) 900
(4) 625

**Options:**

1. ✗ 1
2. ✗ 2
The smallest positive integer which when subtracted from 3000 is divisible by 7, 11 and 13.

3000 3000 నుంచి 7, 11, 13 లోని అతిపెద్ద సంఖ్య నుంచి పగడం తీవ్రం 7, 11, 13

(1) 1001
(2) 998
(3) 996
(4) 984

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
If \( 3.812 = \frac{p}{q} \) where \( p, q \) are positive integers with no common factors, except 1.

then \( 2q + p = \)

1. 959
2. 794
3. 564
4. 389

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 87 Question Id: 3944843836 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Arithmetical Ability

If the reciprocal of the sum of the reciprocals of \( \frac{3}{5}, \frac{5}{7}, \frac{4}{9} \) is \( \frac{p}{q} \) when \( p, q \) are positive integers with GCD 1, then \( 3q - 5p = \)

\( p, q \) యొక్క సమాధానాన్ని నమోదు చేసి గ.యె.ఒం 1. \( \frac{3}{5}, \frac{5}{7}, \frac{4}{9} \) యొక్క సమాధానాన్ని

మొత్తం విభజనము దృష్టిగా \( \frac{p}{q} \) ఎద్దులు, \( 3q - 5p = \)

1. 97
2. -1415
3. 657
4. -1825

Options:
Question Number : 88 Question Id : 3944843837 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Arithmetical Ability
అరిధమెటికాల శుంఖుల

The biggest number among the following is

(అంతా సంఖ్యలు మధ్య అత్యంత ఎదురు)

\[
\sqrt{10} - 3, \sqrt{13} - 2\sqrt{3}, \sqrt{5} - 2, 3 - 2\sqrt{2}
\]

(1) \(\sqrt{5} - 2\)

(2) \(\sqrt{13} - 2\sqrt{3}\)

(3) \(\sqrt{5} - 2\)

(4) \(3 - 2\sqrt{2}\)

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 89 Question Id : 3944843838 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Arithmetical Ability
అరిధమెటికాల శుంఖుల
\[
\frac{(1.73)^2-(1.73)(1.27)+(1.27)^2}{(1.73)^3+(1.27)^3}
\]

(1) \(\frac{1}{3}\)
(2) 3
(3) \(\frac{1}{2}\)
(4) 1

Options:
1. ✔ 1
2. ❌ 2
3. ❌ 3
4. ❌ 4

**Question Number : 90**
**Question Id : 3944843839**
**Question Type : MCQ**
**Option Shuffling : No**
**Display Question Number : Yes**
**Is Question Mandatory : No**
**Option Orientation : Vertical**

**Correct Marks : 1**
**Wrong Marks : 0**

**Arithmetical Ability**

If p% of 96 is equal to q% of 21, then \(\frac{1}{3p}\) of 5q is equal to

96 में p% का हिस्सा 21 में q% का हिस्सा हैं तो \(\frac{1}{3p}\) का 5q हिस्सा क्या है?

(1) \(\frac{4}{105}\)
(2) \(\frac{8}{105}\)
(3) \(\frac{16}{105}\)
(4) \(\frac{32}{105}\)

Options:
1. ✔ 1
2. ✔ 2
When numerator of a fraction is increased by 15%, and denominator is decreased by 8%, the fraction becomes $\frac{15}{16}$. What is the original fraction?

(1) $\frac{3}{4}$

(2) $\frac{4}{5}$

(3) $\frac{6}{7}$

(4) $\frac{7}{11}$
A merchant purchases 11 bags for Rs.900 and sells 9 for Rs.1100. Then profit percent he gets in this business is

అండా చేతులు 11 సంఖ్యలు మంచి రూ. 900 లేదా, 9 సంఖ్యలు మంచి రూ. 1100 లేదా అంధకారం.

ఈ అవసరం యొక్క లభ్యతను ఎలిచ్చారు?

1. \( \frac{4000}{81} \)
2. \( \frac{4000}{91} \)
3. \( \frac{4000}{71} \)
4. \( \frac{4000}{71} \)

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Arithmetical Ability
అరిథ్మెటికల్ ఆబిలిటీ
A person buys an article for a discount of 10% on its marked price Rs.1200. If, in turn, he sells it for Rs.1200, then profit percent is

(1) 11
(2) \(11\frac{1}{9}\)
(3) \(10\frac{1}{9}\)
(4) 10

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 94 Question Id : 3944843843 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
అరథమెటిసల్ కౌన్సిల్
A person started a business with Rs.15 lakhs. After 2 months, B joined A as a partner and after 4 more months C joined A and B as a partner. At the end of the year, they shared the profits in the ratio 9 : 8 : 5. Then the ratio of the capitals of B and C was

Options:
1. 17 : 13
2. 21 : 23
3. 24 : 25
4. 27 : 24

Question Number : 95 Question Id : 3944843844 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
అరిథ్మెటికల్ అధికారి
The initial capitals of two persons A and B in a partnership business are Rs.40 lakhs and Rs.60 lakhs, respectively. After 4 months each of them invested Rs.10 lakhs. If the profit at the end of the year is Rs.13.6 lakhs, then the difference in their profits in lakhs of Rupees is

(1) 3.2
(2) 3.0
(3) 2.8
(4) 2.4

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
Two pipes A and B can fill an empty cistern in 6 hours and 8 hours, respectively.

After opening both the pipes simultaneously, pipe B is closed after X hours and A
filled the rest of the tank in 4 hours. Then X =

\[ \frac{8}{12} \]

(1) \( \frac{8}{12} \)

(2) \( \frac{8}{7} \)

(3) \( \frac{8}{6} \)

(4) \( \frac{8}{3} \)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 97 Question Id : 3944843846 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
Two pipes $P_1$ and $P_2$ can fill a tank in 15 minutes and 20 minutes respectively. Both the pipes are opened simultaneously, but after 4 minutes, pipe $P_1$ is turned off. What is the total time required to fill the tank?

(1) 10 minutes 20 seconds  
(2) 11 minutes 45 seconds  
(3) 12 minutes 30 seconds  
(4) 14 minutes 40 seconds  

Options:
1. ✗ 1  
2. ✗ 2  
3. ✗ 3  
4. ✔ 4

Question Number : 98  Question Id : 3944843847  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Is Question Mandatory : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Arithmetical Ability
హట్టింగ్ గణాధారణా
Walking at \( \frac{2}{3} \) rd of my normal speed, I am an hour late to office. Then the normal
time I take in travelling to office is

\[ \text{Options:} \]
1. 1 \( \frac{1}{2} \) hours
2. 2 hours
3. 1 \( \frac{3}{4} \) hours
4. Indeterminate

Question Number : 99 Question Id : 3944843848 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
Arithmetical Ability
The circumference of a cart wheel is $4 \frac{2}{7}$ meters and it makes 7 revolutions in 4 seconds. Then the speed of the cart (in kmph) is

(1) 27
(2) 30
(3) 32
(4) 40

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 100 Question Id : 3944843849 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
అంధరాల విశ్లేషణ
There are three workers Ram, Tom and Jill who take 3 hours, 2 hours and 4 hours respectively, for manufacturing a toy by themselves. How long would it take if all three workers worked together. (in hours)

(1) \(\frac{12}{12}\)

(2) \(\frac{12}{13}\)

(3) \(\frac{12}{11}\)

(4) \(\frac{4}{3}\)

Options:
1. ✒️ 1
2. ✔️ 2
3. ✒️ 3
4. ✒️ 4

Question Number : 101 Question Id : 3944843850 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
అరిథ్మటికల్ అబిలిటీ
Three persons A, B and C working alone, can complete a piece of work in 10, 15, and 40 days respectively. A and C started working together, after 5 days, C quits and is replaced by B. The number of days required to complete the work is

(1) $6 \frac{1}{2}$

(2) $8 \frac{2}{3}$

(3) 10

(4) $7 \frac{1}{4}$

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number: 102 Question Id: 3944843851 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

Arithmetical Ability
అంకేంతెల సమస్యలు
The smallest side of a right angled triangle is 7 cm less than the side of square of perimeter 52 cm. The second largest side of that triangle is equal to the length of the rectangle of area 72 sq cm., whose breadth is 8 cm. The length of the largest side of the right angled triangle is (in cms)

\[ \text{(1)} \sqrt{105} \]
\[ \text{(2)} \sqrt{110} \]
\[ \text{(3)} \sqrt{117} \]
\[ \text{(4)} \sqrt{124} \]

Options :
1. \* 1
2. \* 2
3. \checkmark 3
4. \* 4

Question Number : 103 Question Id : 3944843852 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
అంశానికి క్రమంలో
The area of the four walls of a room is 128 sq.m. If the length, the breadth are equal and the height of the wall is equal to 4 meters, the area of the floor of the room (in sq.m) is

(1) 64  
(2) 72  
(3) 81  
(4) 100

Options:
1. ✔ 1
2. × 2
3. × 3
4. × 4

The diagonal of a cube is $6\sqrt{3}$ meters. Its volume is (in cubic meters)

(1) 225  
(2) 216  
(3) 206  
(4) 196

Options:
1. ✔ 1
If curved surface area of the cylinder with 5 meters height is 220 sq.mts. Its volume (in cu mts) is

(1) 770
(2) 760
(3) 740
(4) 780

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 106 Question Id : 3944843855 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
ಕೊರ್ತೆರೇಬುಲ್ ಶಾಖೆಗಳು

If curved surface area of the cylinder with 5 meters height is 220 sq.mts. Its volume (in cu mts) is

(1) 770
(2) 760
(3) 740
(4) 780

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
The ratio of diameter to height of a right circular cylinder is 6 : 5. If the diameter gets reduced by 25%, then its total surface area is reduced by 338.25 sq. meters. Then the circumference of the base of original cylinder is

(1) $8\sqrt{2}\pi$
(2) $6\sqrt{7}\pi$
(3) $4\sqrt{5}\pi$
(4) $7\sqrt{5}\pi$

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 107 Question Id : 3944843856 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability
విభాగాన్ని నిర్ధిష్ఠం చేయండి
A circular tent with a cone on top is to be constructed as shown in the given diagram.

The canvas (in sq.m) required to erect the tent is

\[ 2 \times \pi \times 4 \times 5 = 40 \pi \]

(1) 44 \pi
(2) 48 \pi
(3) 40 \pi
(4) 52 \pi

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 108 Question Id : 3944843857 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability

ఎండికి సాధనాలు
193 m³ of water is poured in a tank having a square base. The water reaches a level that is three times the length of the base. Then area of the base is (in m²)

(1) 9
(2) 16
(3) 25
(4) 36

Note: For this question, discrepancy is found in question/answer. So, this question is ignored for all candidates.

Options:
1. 1
2. 2
3. 3
4. 4

Question Number : 109 Question Id : 3944843858 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Arithmetical Ability

యుగ్మాల సాధనాలు
Convert \((102)_7\) into decimal representation.

\((102)_7\) ని దక్షిణాన్ని నందు మార్పించండి.

1. 53
2. 52
3. 51
4. 50

Options:
1. 1
2. 2
3. 3
4. 4

Question Number: 110 Question Id: 3944843859 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

Arithmetical Ability
అగ్స్టులు రామణం

If \(|x| \leq 2\), which one of the following has the largest (greatest) possible absolute value?

\(|x| \leq 2\) చే నండి నింది మార్పించండి.

1. \(3x - 1\)
2. \(x^2 + 1\)
3. \(3 - x\)
4. \(x^2 - x\)

Options:
1. 1
2. 2
3. 3
4. 4

Sub-Section Number: 2
Sub-Section Id: 394484390
Question Shuffling Allowed: Yes
The converse of the following statement is

‘If a triangle is equilateral then it is isosceles’

(1) If a triangle is isosceles then it is equilateral.

(2) If a triangle is not isosceles then it is not equilateral.

(3) If a triangle is equilateral then it is isosceles.

(4) If a triangle is not equilateral then it is isosceles.

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Which one of the following statements is true?

$(1) \ 3 \times 5 = 8 \land 1 \times 3 = 6$

$(2) \ 3 + 5 = 8 \land 1 \times 0 = 10$

$(3) \ 3 + 5 = 8 \land 1 + 2 = 3$

$(4) \ 2 + 4 = 6 \land 4 + 2 = 3$

Options:
1. ✗ 1
2. ✗ 2
3. ☑ 3
4. ✗ 4

Question Number: 113 Question Id: 3944843862 Question Type: MCQ Option Shuffling: No Display

If $A, B, C$ are sets, then $(A - B) - (B - C) =$

$A, B, C \subseteq S \Rightarrow (A - B) - (B - C) =$

$(1) \ A - (B \cup C)$

$(2) \ A - (B \cap C)$

$(3) \ A - C$

$(4) \ A - B$

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ☑ 4

Question Number: 114 Question Id: 3944843863 Question Type: MCQ Option Shuffling: No Display
For $x \neq -1$, define $f(x) = \frac{x-1}{x+1}$, then \[
\frac{f(x)-f(y)}{1+f(x)f(y)} = \]

$f(x) = \frac{x-1}{x+1}, \quad x \neq -1 \quad \forall x \in \mathbb{R}$, \[
\frac{f(x)-f(y)}{1+f(x)f(y)} = \]

(1) $\frac{x+y}{1-xy}$

(2) $\frac{x-y}{1+xy}$

(3) $\frac{x+y}{x-y}$

(4) 1

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4
If \( f : \mathbb{R} \to \mathbb{R} \) and \( g : \mathbb{R} \to \mathbb{R} \) are functions defined by \( f(x) = 3x - 2 \) and \\
g(x) = x^2 + 1 \) then \((gof)^{-1}(2) = \)

\[
\begin{align*}
(1) & \frac{25}{9} \\
(2) & \frac{22}{9} \\
(3) & \frac{17}{9} \\
(4) & \frac{16}{5}
\end{align*}
\]

Options :
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4

Question Number : 116 Question Id : 3944843865 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability

The equation of a line perpendicular to \( y = 3x + 1 \) and passing through \((1, 1)\) is

\[
\begin{align*}
(1) & \quad 3y + x = 12 \\
(2) & \quad y + 3x = 4 \\
(3) & \quad 3y + x = 4 \\
(4) & \quad 3y = x + 2
\end{align*}
\]

Options :
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4
A line makes intercepts $a$ and $b$ on the coordinate axes such that $a+b = 5$ and $ab = 6$

The equation of such a line is

$$a + b = 5 \quad \text{and} \quad ab = 6 \quad \text{implies} \quad a, b \in \mathbb{R}$$

(1) $3x - 2y + 6 = 0$

(2) $3x + 2y + 6 = 0$

(3) $3x - 2y - 6 = 0$

(4) $3x + 2y - 6 = 0$

Options:
1. [ ] 1
2. [ ] 2
3. [x] 3
4. [ ] 4

\[ \text{Cot} (-840^\circ) + \text{Cosec} (330^\circ) + \text{Sec} (1020^\circ) - \text{Sin} (-1320^\circ) = \]

(1) $\frac{1}{2\sqrt{3}}$

(2) $2\sqrt{3}$

(3) $-2\sqrt{3}$

(4) $\frac{-1}{2\sqrt{3}}$

Options:
Question Number : 119 Question Id : 3944843868 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability

\[
\tan \frac{2\pi}{3} + \cot \frac{2\pi}{4} = \sec \frac{2\pi}{6} + 8 \cos^2 \frac{\pi}{6} =
\]

(1) 0
(2) 1
(3) 6
(4) 8

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✔ 4

Question Number : 120 Question Id : 3944843869 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability

\[\tan \frac{2\pi}{3} + \cot \frac{2\pi}{4} = \sec \frac{2\pi}{6} + 8 \cos^2 \frac{\pi}{6} =\]
If $A + B = \frac{\pi}{4}$, then $(1 + \tan A) (1 + \tan B) = \\
A + B = \frac{\pi}{4} \implies (1 + \tan A) (1 + \tan B) = \\

(1) 0 \\
(2) -1 \\
(3) 1 \\
(4) 2 \\

Options :
1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4

Question Number : 121 Question Id : 3944843870 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability
A man walking away from the foot of a cliff 150 meters high observes that it takes 2 minutes to change the angle of elevation of the top of the cliff from 60° to 45°. His walking speed in kmph is

Options:
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4

Question Number : 122 Question Id : 3944843871 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability
If \( \alpha \) and \( \beta \) are two roots of the equation \( ax^2 + bx + c = 0 \), then \( \alpha + \beta \) and \( \alpha \beta \) are respectively

\[ ax^2 + bx + c = 0 \quad \Rightarrow \quad \alpha, \beta \quad \text{are roots,} \quad \alpha + \beta \quad \text{and} \quad \alpha \beta \quad \text{are} \]

(1) \( \frac{b}{a}, \frac{c}{a} \)
(2) \( \frac{b}{a}, -\frac{c}{a} \)
(3) \( -\frac{b}{a}, -\frac{c}{a} \)
(4) \( -\frac{b}{a}, \frac{c}{a} \)

Options :
1. \( \checkmark \) 1
2. \( \checkmark \) 2
3. \( \checkmark \) 3
4. \( \checkmark \) 4

Question Number : 123 Question Id : 3944843872 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability గణితానికి, రాతిసాధన సాధనాత్మకతा
If \(a, \beta, \gamma\) are zeros the polynomial of \(ax^2 + bx^2 + cx + d\), then the polynomial
whose zero are \(\frac{1}{a}, \frac{1}{\beta}, \frac{1}{\gamma}\)

\[ax^3 + bx^2 + cx + d\text{  has roots  } \alpha, \beta, \gamma\text{  then  } \frac{1}{\alpha}, \frac{1}{\beta}, \frac{1}{\gamma}

Options:

1. \(bx^2 + cx^2 + dx + a\)
2. \(cx^2 + dx^2 + ax + b\)
3. \(dx^2 + ax^2 + bx + c\)
4. \(dx^2 + cx^2 + bx + a\)

Question Number : 124  Question Id : 3944843873  Question Type : MCQ  Option Shuffling : No Display
Question Number : Yes  Is Question Mandatory : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0

Algebraic and Geometrical Ability
The remainder when \( f(x) = 4x^3 - 3x + 9 \) is divided by \( 3x - 2 \) is

\[ f(x) = 4x^3 - 3x + 9 \]

\[ 3x - 2 \]

Options:

1. \( f \left( \frac{2}{3} \right) \)
2. \( f \left( \frac{3}{2} \right) \)
3. \( f \left( \frac{2}{3} \right) \)
4. \( f \left( -\frac{2}{3} \right) \)

Question Number: 125 Question Id: 3944843874 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

Algebra and Geometrical Ability

\[ \text{బిందుస్థలం, రేఖాశాఖలు సమరూపాలు} \]
If \( px^2 + qx + 17 \) leaves remainder \(-5, 13\) when divided by \( x - 5, x + 7 \), respectively. Then \( 3p - q = \) 

\( px^2 + qx + 17 \) \& \( x - 5, x + 7 \) \\( \text{and} \) \( -5, 13 \) \( \Rightarrow \) \( 3p - q = \) 

\begin{align*}
(1) \quad \frac{35}{38} \\
(2) \quad \frac{47}{42} \\
(3) \quad \frac{20}{35} \\
(4) \quad \frac{42}{47}
\end{align*}

Options:
1. \( \star \) 1
2. \( \star \) 2
3. \( \checkmark \) 3
4. \( \star \) 4

Question Number : 126 Question Id : 3944843875 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability

\( \text{శాస్త్రం, సిద్ధాంతాలు సిద్ధాంతాలు} \)
Vishal’s age is at present four times the age of Jahnavi. After 8 years, Vishal’s age will be 2.5 times Jahnavi’s age. In another eight years, how many times will be Vishal’s age as compared to Jahnavi’s age?

(పిషాల వయస్సు ఎన్నిక, జహనవి వయస్సు ఎన్నిక 4గంటా ఈసు వయస్సు. 8 ఎన్నికలు మీద పిషాల వయస్సు ఎన్నిక, జహనవి వయస్సు ఎన్నిక 2.5గంటా ఈసు వయస్సు. 8 ఎన్నికలు మీద పిషాల వయస్సు ఎన్నిక, జహనవి వయస్సు ఎన్నిక ఎన్ని గంటల ఈసు వయస్సు?

1. 1.5
2. 2
3. 2.5
4. 3.25

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
A rational number becomes $\frac{1}{4}$ when 7 is subtracted from the numerator and 3 is added to the denominator. The same number becomes 2 when 1 is added to the numerator and 7 is subtracted from the denominator. The number is

(1) $\frac{2}{5}$

(2) $\frac{7}{9}$

(3) $\frac{9}{11}$

(4) $\frac{11}{13}$

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 128 Question Id : 3944843877 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability
సమాధానం కోల్స్ట్రం సాధారణ
The sum of eight terms of an A.P. is 316 and the difference between the first and the eighth terms is 91. What is its first term?

(1) 85  
(2) 74  
(3) 69  
(4) 48

Options:
1. ✓ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4

If 5 times the 5th term of an A.P. is equal to 13 times of its 13th term, then the 18th term of the A.P. is

(1) 36  
(2) 18  
(3) 9  
(4) 0
What is the number of terms in the expansion of \((a^2 + 2ab + b^2)^{10}\)?

\[(a^2 + 2ab + b^2)^{10}\]

(1) 21
(2) 22
(3) 19
(4) 20
The coefficient of $x^{-3}$ in the expansion of \((2x^2 + \frac{1}{x})^{12}\) is

\[(2x^2 + \frac{1}{x})^{12} \text{ అంకపయం } x^{-3} \text{ తెలియండి} \]

(1) 1862
(2) 1952
(3) 1830
(4) 1760

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 132 Question Id : 3944843881 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability

If \[A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}\] and \(|A| = 5\), then the determinant of \[\begin{bmatrix} 4a & 4b \\ 3c & 3d \end{bmatrix}\] is

\[A = \begin{bmatrix} a & b \\ c & d \end{bmatrix} \text{ అంకపయం } |A| = 5 \text{ తెలియండి}, \quad \begin{bmatrix} 4a & 4b \\ 3c & 3d \end{bmatrix} \text{ అంకపయం}

(1) 15
(2) 20
(3) 24
(4) 60

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
If \( A = \begin{bmatrix} 0 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{bmatrix} \) and \( B = \begin{bmatrix} -1 & 0 & 0 \\ 0 & -1 & 0 \\ 0 & 0 & -1 \end{bmatrix} \), then \( A^{99}B^{100} + B^{99}A^{100} = \)

\[ A = \begin{bmatrix} 0 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{bmatrix} \quad \text{and} \quad B = \begin{bmatrix} -1 & 0 & 0 \\ 0 & -1 & 0 \\ 0 & 0 & -1 \end{bmatrix} \]

(1) \( AB + BA \)
(2) \( A^2 + B^2 \)
(3) \( A + B \)
(4) \( A + B + 1 \)

Options:
1. \( \checkmark \) 1
2. \( \checkmark \) 2
3. \( \checkmark \) 3
4. \( \checkmark \) 4
\[
\lim_{x \to 1} \frac{x^2 - \sqrt{x}}{\sqrt{x} - 1} = \]

(1) 1
(2) 2
(3) 3
(4) 4

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 135 Question Id : 3944843884 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability
యూనియన్ అధ్యాపకుడు

The derivative of \( f(x) = \frac{x^2 + 3}{x-1} \) is

\[ f(x) = \frac{x^2 + 3}{x-1} \]

(1) \( \frac{(x-1)x - (x^2+3)}{(x-1)^2} \)
(2) \( \frac{(x-1)2x - (x^2+3)}{(x-1)^2} \)
(3) \( \frac{(x+1)x - (x^2+2)}{(x-1)^2} \)
(4) \( \frac{(x-1)2x - (x^2-3)}{(x-1)^2} \)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
In the adjacent figure AD is the bisector of \( \angle A \). \( AC = \)

\[ \frac{3}{5} \]

\[ \frac{5}{7} \]

\[ \frac{4}{9} \]

\[ \frac{1}{3} \]

Options:

1. ⬗ 1
2. ⬗ 2
3. ⬗ 3
4. ✔ 4
In the quadrilateral $\triangle LMNP$ shown below, $PN = 8$, $MQ \perp LN$ and $MQ = 6$. If the area of $\triangle LNP = 32$, then the area of $\triangle LMN =$

\[24\sqrt{2}\]

(1) $24\sqrt{2}$

(2) $24\sqrt{3}$

(3) 32

(4) 24

Options :
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 138 Question Id : 3944843887 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability
సాంయాధికులు సాంఘాతికులు
In the adjacent figure, the length of the tangent PT given that OA = 15 cm and AP = 10 cm (in cm) is:

(1) 25  
(2) 22  
(3) 20  
(4) 18

Options:
1. % 1
2. % 2
3. ✔ 3
4. % 4

Question Number: 139  Question Id: 3944843888  Question Type: MCQ  Option Shuffling: No Display  Question Number: Yes  Is Question Mandatory: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0

Algebraic and Geometrical Ability  అంశాంశ మేధాయక సాధనాలు
If the point (1, 4) is the centroid of a triangle ABC with vertices A(4, -8), B(-9, 7), then the distance AC in units is

(1) $\sqrt{286}$

(2) $\sqrt{326}$

(3) $\sqrt{368}$

(4) $\sqrt{457}$

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 140 Question Id : 3944843889 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Algebraic and Geometrical Ability

The points A (2, -3), B(6, 5), C (-2,1) and D(-6, -7) form

A (2, -3), B(6, 5), C (-2,1) క్రి వ్యాస లో పరిమితి పాత్రత్వం

(1) Square
(2) Rectangle
(3) Parallelogram
(4) Rhombus

Options:
1. ✗ 1
If the arithmetic mean of $a$, $b$, 7 is 13, then the arithmetic mean of $a + 3$, $b - 5$ and 6 is

(1) 9

(2) 10

(3) 12

(4) 16
Median of the data 14, 2, 8, 5, 12, 4, 1, 16, 3 is

అంకెలు 14, 2, 8, 5, 12, 4, 1, 16, 3 మధ్యక మంచు తెగిను కలుగా

(1) 5
(2) 8
(3) 11.5
(4) 12

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 143 Question Id: 3944843892 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Statistical Ability
సంఖ్యాగ్రహం

What is the Mode of the following data?

మధ్యాంకం ఎంతవరకు ఎంతపై ఇంటే ఎంతపై?

<table>
<thead>
<tr>
<th>Observations</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>4</td>
<td>9</td>
<td>16</td>
<td>25</td>
<td>22</td>
<td>15</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

(1) 4
(2) 5
(3) 3
(4) 6

Options:
The standard Deviation of the following 13 observations is

73, 74, 75, ..., 85

(1) 17
(2) 14
(3) \sqrt{17}
(4) \sqrt{14}
If \( \sigma \) is the standard deviation of the observations \( x_1, x_2, \ldots, x_n \), then the standard deviation of \( 12x_1 + 13, 12x_2 + 13, \ldots, 12x_n + 13 \) is 

\[ 12x_1 + 13, 12x_2 + 13, \ldots, 12x_n + 13 \]

\( \sigma \) and \( 12 \sigma \) are correct.

Options:
1. \( \times \) 1
2. \( \times \) 2
3. \( \times \) 3
4. \( \checkmark \) 4

Question Number : 146 Question Id : 3944843895 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Statistical Ability
A computer, while calculating the correlation coefficient between two variables X and Y, obtained the following results:

\[ N = 25, \ \sum x = 125, \ \sum y = 100, \ \sum x^2 = 650, \ \sum y^2 = 460 \quad \text{and} \quad \sum xy = 508 \]

At the time of checking, it is found that it copied two pairs of observations as \( \begin{array}{cc} 6 & 14 \\ 8 & 6 \end{array} \) in the place of correct pairs \( \begin{array}{cc} 8 & 12 \\ 6 & 8 \end{array} \). The correct value of the coefficient of correlation \( r \) is

\[ r = \frac{96}{13} \]

\[ \begin{array}{cc} x & y \\ 8 & 12 \\ 6 & 8 \end{array} \]

\[ N = 25, \ \sum x = 125, \ \sum y = 100, \ \sum x^2 = 650, \ \sum y^2 = 460, \ \sum xy = 508 \]

The options are:

1. 0.56
2. 0.62
3. 0.67
4. 0.72

**Options:**

1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4

**Question Number:** 147  **Question Id:** 3944843896  **Question Type:** MCQ  **Option Shuffling:** No Display  **Question Number:** Yes  **Is Question Mandatory:** No  **Option Orientation:** Vertical  **Correct Marks:** 1  **Wrong Marks:** 0

**Statistical Ability**

సంఖ్యాశాస్త్ర శైలిలో పచ్చి విషయాలు
A and B are two events such that \( P(A) = \frac{2}{3} \), \( P(\overline{A} \cap B) = \frac{1}{6} \) and \( P(A \cap B) = \frac{1}{2} \).

then \( P(A \cup B) = \)

\[
P(A) = \frac{2}{3}, \ P(\overline{A} \cap B) = \frac{1}{6}, \ P(A \cap B) = \frac{1}{2}
\]

\[\implies P(A \cup B) =
\]

(1) \( \frac{1}{6} \)

(2) \( \frac{1}{2} \)

(3) \( \frac{2}{3} \)

(4) \( \frac{3}{4} \)

Options:

1. ✗ 1
2. ✗ 2
3. ☑ 3
4. ✗ 4

Question Number : 148 Question Id : 3944843897 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Statistical Ability

Three dice are rolled. What is the probability of getting a total of 5

(1) \( \frac{1}{6} \)

(2) \( \frac{1}{36} \)

(3) \( \frac{5}{216} \)

(4) \( \frac{1}{216} \)

Options:
If \( P(A) = 0.7, P(B) = 0.45 \) and \( P(\overline{A} \cup \overline{B}) = 0.6 \), then \( P(A \cup B) = \)

\[
P(A) = 0.7, P(B) = 0.45 \quad \text{and} \quad P(\overline{A} \cup \overline{B}) = 0.6 \quad \Rightarrow \quad P(A \cup B) = \]

(1) 0.75  
(2) 0.85  
(3) 0.40  
(4) 0.60

Options:
1.  ✔  1
2. ✔  2
3.  ✗  3
4.  ✗  4

Question Number: 150 Question Id: 3944843899 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
A box has 5 white and 2 red balls. Another box has 3 white and 4 red balls. One ball is randomly selected from the first box and it is transferred to second box. Then one ball is randomly drawn from the second box. The probability that it is red is

\[
\begin{align*}
(1) & \quad \frac{15}{20} \\
(2) & \quad \frac{9}{16} \\
(3) & \quad \frac{5}{14} \\
(4) & \quad \frac{5}{28}
\end{align*}
\]

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

**Communication Ability**

Section Id : 39448457
Section Number : 3
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 38
Number of Questions to be attempted : 38
Section Marks : 50
Mark As Answered Required? : Yes
Sub-Section Number : 1
Sub-Section Id : 394484392
Question Shuffling Allowed : Yes

Question Number : 151 Question Id : 3944843900 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase /Verb /Preposition

Ordal
(1) Deal
(2) Task
(3) Order
(4) Offer

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 152 Question Id : 3944843901 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase /Verb /Preposition

Acumen
(1) Dullness
(2) Hesitancy
(3) Lethargy
(4) Sharpness

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 153 Question Id : 3944843902 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase /Verb /Preposition
Novice

(1) Writer
(2) Poet
(3) Expert
(4) Beginner

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number: 154 Question Id: 3944843903 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase /Verb /Proposition

Timorous

(1) Fearful
(2) Fearsome
(3) Fiercely
(4) Violent

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 155 Question Id: 3944843904 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase /Verb /Proposition

Tacit

(1) Sober
(2) Sluggish
(3) Silently understood
(4) Spurious
Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Burly
(1) Puuy
(2) Well-built
(3) Small
(4) Huge

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 2
Sub-Section Id: 394484393
Question Shuffling Allowed: Yes

Question Number: 157 Question Id: 3944843906 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word/Phrase/Verb/Preposition

_____ in the idea of democracy is the notion of individual liberty
(1) Impassive
(2) Indolent
(3) Implicit
(4) Incarnate

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. **4**

**Question Number : 158 Question Id : 3944843907 Question Type : MCQ Option Shuffling : No Display**
**Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical**
**Correct Marks : 1 Wrong Marks : 0**

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word/Phrase/Verb/Preposition

After retiring from the army, he missed the ____ of fellow soldiers.

(1) Friendship
(2) Consanguinity
(3) Conservancy
(4) Curtain

**Options :**
1. ✔️ 1
2. ❌ 2
3. ❌ 3
4. ❌ 4

**Question Number : 159 Question Id : 3944843908 Question Type : MCQ Option Shuffling : No Display**
**Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical**
**Correct Marks : 1 Wrong Marks : 0**

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word/Phrase/Verb/Preposition

The Judge told the convicted man that he would come to ____ his decision to commit the crime.

(1) Rue
(2) Venerate
(3) Appease
(4) Allay

**Options :**
1. ✔️ 1
2. ❌ 2
3. ❌ 3
4. ❌ 4

**Question Number : 160 Question Id : 3944843909 Question Type : MCQ Option Shuffling : No Display**
**Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical**
**Correct Marks : 1 Wrong Marks : 0**
An unexpected piece of good fortune is ____.

(1) Downfall  
(2) Windfall  
(3) Rainfall  
(4) Fortuitous

Options:
1. ☑ 1  
2. ☑ 2  
3. ☑ 3  
4. ☑ 4

Sub-Section Number: 3  
Sub-Section Id: 394484394  
Question Shuffling Allowed: Yes

Question Number: 161  
Question Id: 3944843910  
Question Type: MCQ  
Option Shuffling: No Display  
Question Number: Yes  
Is Question Mandatory: No  
Option Orientation: Vertical  
Correct Marks: 1  
Wrong Marks: 0

Decrease in value of an asset over a period of time is called ____.

(1) Loss  
(2) Demand  
(3) Depreciation  
(4) Appreciation

Options:
1. ☑ 1  
2. ☑ 2  
3. ☑ 3  
4. ☑ 4

Question Number: 162  
Question Id: 3944843911  
Question Type: MCQ  
Option Shuffling: No Display  
Question Number: Yes  
Is Question Mandatory: No  
Option Orientation: Vertical  
Correct Marks: 1  
Wrong Marks: 0
The speed of a supercomputer is measured in ___.

(1) GIPS
(2) Mhz
(3) Ghz
(4) FLOPS

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

A computer program that performs tasks that the user wishes to perform is known as ___:

(1) Animation
(2) Application software
(3) Antivirus software
(4) Affiliate

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
The list of events to be discussed or done at a meeting or business event is called

(1) Agenda
(2) Minutes
(3) Deed
(4) Document

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 165 Question Id : 39444843914 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition

A type of computer that can be carried easily and which has no physical keyboard or track pad is known as ___.

(1) Personal computer
(2) Gnome
(3) Desktop
(4) Tablet

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 166 Question Id : 39444843915 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition
A reduction in expenditure is known as _____.

(1) Cutback
(2) Cutdown
(3) Cut price
(4) Cut out

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 167 Question Id : 3944843916 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase /Verb /Proposition

The four Ps of Marketing are expanded as ____________:

(1) Product, Price, Place, Promotion
(2) Person, Performance, Public, Position
(3) Port, People, Product, Persuasion
(4) Plant, Production, Promotion, Plan

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 168 Question Id : 3944843917 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase /Verb /Proposition
Language designed specifically for scientific computing is ________.

(1) PASCAL
(2) COBOL
(3) FORTRAN
(4) C++

Options :
1. ⬜ 1
2. ⬜ 2
3. ✔ 3
4. ⬜ 4

Question Number : 169 Question Id : 3944843918 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb /
Proposition

Classical organization theory looks at an organization__________.

(1) As a liberal system
(2) As a machine
(3) As a tall structure
(4) As a production process

Options :
1. ⬜ 1
2. ✔ 2
3. ⬜ 3
4. ⬜ 4

Question Number : 170 Question Id : 3944843919 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb /
Proposition
The process of motivating employees to retire from the service prematurely by paying them substantial cash is called giving ______

(1) Pink Slip
(2) Grand Send-off
(3) Gratuity
(4) Golden Handshake

Options:
1. ☒ 1
2. ❌ 2
3. ❌ 3
4. ☒ 4

Sub-Section Number: 4
Sub-Section Id: 394484395
Question Shuffling Allowed: Yes

Correct Marks: 1 Wrong Marks: 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition

A person whose abilities are not fully known

(1) A damp squib
(2) An eyesore
(3) A dark horse
(4) A black sheep

Options:
1. ☒ 1
2. ❌ 2
3. ☒ 3
4. ❌ 4

Question Number: 172 Question Id: 3944843921 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition
A: “The curtains look faded. Should we change them?”

B: “Money doesn’t grow on trees.”

“B” is

(1) Agreeable
(2) Thrifty
(3) Lazy
(4) Indifferent

Options:
1. ☒ 1
2. × 2
3. × 3
4. × 4

Question Number: 173 Question Id: 3944843922 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word/Phrase/Verb/Proposition

Switch on the computer. (Change the voice)

(1) Computer is switched on.
(2) Computer was switched on.
(3) Let the computer be switched on.
(4) He let the computer to switch on.

Options:
1. × 1
2. × 2
3. ✔ 3
4. × 4

Question Number: 174 Question Id: 3944843923 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word/Phrase/Verb/Proposition
A: ‘Have you taken up your new job?’
B: ‘Not yet. I am made to cool my heels as my boss is undecided about my assignment.’

In this conversation ‘B’ implies that he

(1) Is prevented to take up new job
(2) Is kept waiting
(3) Is made to relax
(4) Is made to repent for his mistakes

Options :
1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4

Question Number : 175 Question Id : 3944843924 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb /Preposition

A: Naveen looks quite happy these days
B: Why wouldn’t he be! His marriage is on the cards.

‘B’ implies that Naveen’s

(1) Marriage is likely to happen
(2) Marriage is predicted by an astrologer
(3) Marriage has been celebrated recently
(4) Marriage proposal is likely to crop up.

Options :
1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4

Question Number : 176 Question Id : 3944843925 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition
After retirement, Mr Mishra is thinking of resting on his oats.

The underlined expression means

1. Depend on his savings
2. Rest after hard work
3. Cashing on his vast experience
4. Settle in a foreign location

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

This has to be done by next week. We must get our act together before it is too late.

The underlined expression means

1. Be more organised
2. Be punctual
3. Work hard
4. Put a play together

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Every now and then she would _____ a remark.

(1) Put out  
(2) Put up  
(3) Put off  
(4) Put in

Options :
1. ✗ 1  
2. ✗ 2  
3. ✗ 3  
4. ✔ 4

Question Number : 179 Question Id : 3944843928 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition

My daughter along with her children _____ to watch a movie about animals and their habitats

(1) Is going  
(2) Be going  
(3) Will going  
(4) Are going

Options :
1. ✔ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4

Question Number : 180 Question Id : 3944843929 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition
The old man climbed five floors hardly with _______ at all.

(1) No effort
(2) Any effort
(3) Every effort
(4) All effort

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 181 Question Id : 3944843930 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition

All the passengers ___ COVID-19 screening before they move to the departure gates.

(1) Requested to go for
(2) Are requested for going to
(3) Are requested to go for
(4) Have requested for going to

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 182 Question Id : 3944843931 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition

Switzerland is known for its ___ environment

(1) Lugubrious
(2) Salubrious
(3) Vituperative
(4) Unpleasant
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition

Question Number : 183 Question Id : 3944843932 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Sometimes a student’s intelligence is not fully appreciated _____ he/she gets an opportunity to show it.

(1) If
(2) Whether
(3) Later
(4) Unless

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✔ 4

Question Number : 184 Question Id : 3944843933 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Preposition

Child labour is one of the critical socio-economic _____ urgent attention in India.

(1) Issue that need
(2) Issue what need
(3) Issues that need
(4) Issues what needs

Options :
1. ✗ 1
2. ✔ 2
3. ✔ 3
4. ✗ 4
Rajni was always ahead of Ramesh in studies. However, Ramesh worked hard and ___ with Rajni.

(1) Caught out
(2) Caught up
(3) Caught on
(4) Caught in

Options:
1. ☒ 1
2. ☐ 2
3. ☒ 3
4. ☐ 4

Sub-Section Number: 6
Sub-Section Id: 394484397
Question Shuffling Allowed: Yes

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Read the following passage and answer questions
We often worry about lying awake in the middle of the night – but it could be good for you. A growing body of evidence from both science and history suggest that the eight-hour sleep may be unnatural.

In the early 1990s, psychiatrist Wehr conducted an experiment in which a group of people were plunged into darkness for 14 hours every day for a month. It took some time for their sleep to regulate but by the fourth week the subjects had settled into a very distinct sleeping pattern. They slept first for four hours, then woke for one or two hours before falling into a second four-hour sleep. Though sleep scientists were impressed by the study, among the general public the idea that we must sleep for eight consecutive hours persists.

In 2001, historian Roger Ekirch of Virginia Tech published a seminal paper, drawn from 16 years of research, revealing a wealth of historical evidence that humans used to sleep in two distinct chunks. Roger Ekirch says a 1595 engraving by Jan Saenredam is evidence of activity at night. His book “At Day’s Close: Night in Times Past,” published four years later unearths more than 500 references to a segmented sleep pattern in diaries, court records, medical books and literature, from Homer’s Odyssey to an anthropological account of modern tribes in Nigeria.

Ekirch found that references to the first and second sleep started to disappear during the late 17th century. This started among the urban upper classes in northern Europe and over the course of the next 200 years filtered down to the rest of western society. By the 1920s the idea of a first and second sleep had receded entirely from our social consciousness. He attributes the initial shift to improvements in street lighting, domestic lighting and a surge in coffee houses – which were sometimes open all night. As the night became a place for legitimate activity and as that activity increased the length of time people could dedicate to rest dwindled.

Sub questions

Question Number : 186 Question Id : 3944843936 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Which of the following assumptions is the writer questioning here?

(1) Everyone needs eight hours of continuous sleep
(2) Everyone needs to sleep in darkened rooms
(3) Everyone sleeps well after dusk but wakes up by dawn
(4) Everyone can get good sleep after a tiring day.

Options :
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 187 Question Id : 3944843937 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Who conducted sixteen years of research on sleep patterns of people?

(1) Saeur decad
(2) Ekirch
(3) Wehr
(4) Homer

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

What reasons did Ekirch give to explain reduced periods of rest?

(1) More electricity in public and private places and more coffee houses.
(2) Greater opportunities to go out anywhere at any time
(3) Offices extending working through the day and night
(4) Better and safer streets in cities.

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

In Wehr’s experiment how long did the people take to adjust to the new sleeping pattern?

(1) Fourteen hours
(2) Two weeks
(3) Four weeks
(4) Four hours

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Which word in the passage means the same as “hold responsible for”?

1. Persist
2. Attribute
3. Recede
4. Regulate

Options:
1. ✅
2. ☑
3. ✗
4. ✗

Sub-Section Number: 7
Sub-Section Id: 394484398
Question Shuffling Allowed: Yes

The United States and Canadian governments are mounting a defence against Russian invasion. No, the clock has not been turned back. These invaders are Asian gypsy moths, foliage-chomping insects that can cause billions of dollars in damage. Experts believe they entered North America from Russia last year in egg masses attached to grain vessels. The larger Asian gypsy moth is more voracious feeder than the common North American strain and can feed on pacific northwest tree species. Unlike the flightless North American female, an Asian female can fly 20 miles between mating and egg-laying. The United States Health Inspection Service is barring from west coast ports ships found carrying egg masses. The Tacoma and Portland areas, as well as Vancouver, British Columbia has been sprayed with a bio-pesticide.

Sub questions

The word ‘strain’ in the passage means

1. A tendency in person’s character
2. An injury
3. A distinct breed of an organism
4. A species

Options:
Which of the following words refers to the eating habits of Asian moths?

(1) Voracious
(2) Foliage
(3) Species
(4) Biopesticide

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

The author calls the increase in Asian gypsy moths as ‘Russian invasion’

(1) To remind reader of Russian invasion
(2) To show dislike for Russia
(3) To make light of serious situation
(4) To emphasize the severity of the problem

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Which of the following statements is not given in the passage?

(1) Asian gypsy moth came from Russia
(2) Asian gypsy moth can’t fly
(3) Asian gypsy moth is capable of feeding on North American trees
(4) North American moth can’t fly

Options:
The idiom “clocks haven’t turned back” in the context of the passage means

1. It is an impending future event
2. It is not an impending future event
3. It is a repetition of past events
4. It is not a repetition of past events.

Read the following passage and answer questions

Most investigators concur that certain facial expressions suggest the same emotions to all people. Moreover, people in diverse cultures recognise the emotions manifested by the facial expressions. In classic research Paul Ekman took photographs of people exhibiting the emotions of anger, disgust, fear, happiness and sadness. He then asked people around the world to indicate what emotions were being depicted in them. Those queried ranged from European college students to members of the Fore, a tribe that dwells in the New Guinea highlands. All groups, including the Fore, who had almost no contact with Western culture, agreed on the portrayed emotions. The Fore also displayed familiar facial expressions when asked how they would respond if they were the characters in the stories that called for basic emotional responses. Ekman and his colleagues more recently obtained similar results in a study of ten cultures in which participants were permitted to report that multiple emotions were shown by facial expressions. The participants generally agreed on which two emotions were being shown and on which emotion was more intense.

Sub questions
What does the word ‘concur’ in the passage refer to?

(1) Estimate
(2) Agree
(3) Expect
(4) Understand

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

What was the purpose of the experiment?

(1) To explore the range of human emotions
(2) To investigate the nature of tribal emotions
(3) To underscore the commonality in facial expressions for basic emotional responses across cultures
(4) To analyse emotions in Western cultures

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Who are members of Fore?

(1) A group of European college students
(2) A group of professional photographers
(3) A group of investigators
(4) Members of tribe belonging to New Guinea

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
Question Number : 199 Question Id : 3944843951 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What was the group of people on whom subsequent researches were conducted to obtain similar results as earlier?

(1) People from ten cultures  
(2) People from Europe and New Guinea  
(3) Ekman’s research colleagues  
(4) Members of Fore

Options :
1. ✔ 1  
2. ✗ 2  
3. ✗ 3  
4. ✔ 4

Question Number : 200 Question Id : 3944843952 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What was the additional outcome of subsequent investigation by Ekman?

(1) Validation of the earlier research  
(2) Preparation of documentary report  
(3) Approval by participants  
(4) Agreement on facial expressions reflecting level of intensity of emotion

Options :
1. ✗ 1  
2. ✗ 2  
3. ✗ 3  
4. ✔ 4