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 30th Sept 2020 Shift 1
Subject Name: TS ICET 2020
Creation Date: 2020-09-30 16:25:13
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: 39448416
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: 39448446
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>
<td>45</td>
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<tr>
<td>Number of Questions to be attempted</td>
<td>45</td>
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<tr>
<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>
<td>394484316</td>
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<td>Question Shuffling Allowed</td>
<td>Yes</td>
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Question Id: 3944843121  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 : 3944843122 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 positive integer \( n \) even?

\( n \) ఏందూప ఉన్నా? 

(I) \( 12n \) is an even integer.
\( 12n \) ఇద్దరుప ఉన్నా.

(II) \( 11n \) is an odd integer.
\( 11n \) ఇద్దరుప ఉన్నా.

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 2 Question Id : 3944843123 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Among \( A, B, C, D \) and \( E \), who is the heaviest?

\( A, B, C, D, E \) మాలు దండక ఎలాంటి మాత్రము ఉండతుంది?

(I) \( C \) is heavier than only \( A \).
\( C \) మాలు మాత్రము \( A \) దండకం

(II) \( D \) is lighter than \( B \), but heavier than \( C \) and \( E \).
\( C, E \) మాలు మాత్రము \( B \)పై ఉన్నా, తానా దండకం, మాత్రము \( D \) పై ఉన్నా.

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 3 Question Id : 3944843124 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 perimeter of the equilateral triangle?

(I) All the sides are equal.

(II) The area of the triangle is \( \frac{\sqrt{3}}{4} \) Sq. units.

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Find the value of \( x \)?

\( x \) ఈ పునఃపు విలువు ఎంతా? 

(I) \( x \) is divisible by 2.

(II) \( x \) is divisible by 7.

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
If \( a_1, a_2, \ldots, a_{40} \) are in arithmetic progression, then the common difference is
\[ a_1, a_2, \ldots, a_{40} \text{ అంకేయ రేఖాంశం యొక్క సాధారణ పరిమితి } \]

(I) \( a_{36} - a_{10} = 52 \)

(II) \( a_{40} = 83 \)

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 6 Question Id : 3944843127 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Which train is moving with a greater speed?

(ప్రతి రైల్యాలు శ్రేష్ఠంగా వేగాను వేసే రైల్యాలు ఎవి?)

(I) A train of length 300m crosses a man in 18 seconds.

300మీ. దైర్ఘ్యం ఉన్న రైళాంతు 18 సెకన్స్ సమయంలో ప్రతిరోజు చేస్తుంది.

(II) Another train of length 250m crosses a bridge of length 350m in 20 seconds.

250మీ. దైర్ఘ్యం ఉన్న రైళాంతు 350మీ. దైర్ఘ్యం ఉన్న ట్రిక్కొత్త ప్రతిరోజు 20 సెకన్స్ సమయంలో ప్రతిరోజు చేస్తుంది.

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

Question Number : 7 Question Id : 3944843128 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 value of \( \frac{x^2 + 3x^2y + y^2}{4xy^2} \)?

(I) \( x = 43 \)

(II) \( x : y = 7 : 9 \)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 8 Question Id : 3944843129 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 relative speed of the boat?

What is relative speed of the boat?

(I) Speed of boat in still water is 2 kmph.

(II) The boat is moving against the current.

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 9 Question Id : 3944843130 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
Is \( n \) a prime number?

\( n \) (Writes a prime number?)

(I) The sum of positive divisors of \( n \) is \( n + 1 \).

\( \sum \text{divisors of } n = n + 1 \)

(II) \( n \) is a positive integer.

\( n \) (Positive integer)

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

Question Number : 10 Question Id : 3944843131 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

If \( a, b \) are positive integers such that \( ab = 84 \), what is the value of \( a \)?

\( a, b \) (Positive integers), \( ab = 84 \) What is the value of \( a \)?

(I) \( a > b \)

(II) \( 9 < \frac{a}{b} < 10 \)

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

Question Number : 11 Question Id : 3944843132 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 average of $x, y, z$ and $t$?

$x, y, z, t \in \text{ integers}$?

(I) The average of $x$ and $t$ is 5 and the average of $y$ and $z$ is also 5.

$x, t \in \text{ integers } 5 \quad \text{and} \quad y, z \in \text{ integers } \quad 5.$

(II) $x, y, z$ and $t$ are integers $\geq 1$.

$x, y, z, t \in \text{ integers } \geq 1.$

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 12 Question Id : 3944843133 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 interest earned in one financial year on a term deposit in a bank?

$2.5 \text{ lakhs}\text{ is deposited for} 1 \text{ year}\text{ at} \quad 6.5\% \quad \text{per annum.}$

$I$?

(I) The amount of deposit is Rs.10000.

$1\text{ lakh} \quad \text{or} \quad \text{Rs.} \quad 10000.$

(II) The rate of interest is 6.5% per annum.

$6.5\% \quad \text{per annum.}$

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 13 Question Id : 3944843134 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Does the set $A$ contain primes?

(I) $A$ has 99 elements in it.

$A = \{ \text{99 consecutive numbers} \}$

(II) $A = \{ 100! + 2, 100! + 3, \ldots, 100! + 100 \}$

Options:
1. $\times$ 1
2. $\checkmark$ 2
3. $\times$ 3
4. $\times$ 4

Question Number: 14 Question Id: 3944843135 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0

Is $n$ a perfect square of an integer?

$n$ ఒక పూర్తి విభాగాన్ని అంశం వట్టం చేయవచ్చు?

(I) $n$ leaves remainder 2 when $n$ is divided by 4.

$4 \equiv n \equiv 2$ మాత్రమే ఇది నిలించేది.

(II) $n$ leaves remainder 1 when $n$ is divided by 8.

$8 \equiv n \equiv 1$ నిలించేది.

Options:
1. $\checkmark$ 1
2. $\times$ 2
3. $\times$ 3
4. $\times$ 4

Question Number: 15 Question Id: 3944843136 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 number of vertices of the regular polygon?

What is the number of vertices of the regular polygon?

(I) The sum of the angles subtended by the sides at the centre of the polygon is $2\pi$.

(II) The number of diagonals of the polygon is 170.

Options:
1. $\Box$ 1
2. $\checkmark$ 2
3. $\Box$ 3
4. $\checkmark$ 4

Find the value of $\sin^2\theta + \sin\theta \cos\theta + \cos^2\theta$.

$I)$ $\theta \in \left(0, \frac{\pi}{2}\right)$

$\text{II)$ $\sin\theta = \cos\theta$}

Options:
1. $\Box$ 1
2. $\checkmark$ 2
3. $\checkmark$ 3
4. $\Box$ 4
What is the least value of $\theta$?

(I) The matrix \[
\begin{bmatrix}
tan\theta & 0 & 0 \\
0 & 1 & 1 \\
0 & 1 & 1
\end{bmatrix}
\] is singular.

(II) $0 < \theta < \pi/4$

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 18
Question Id: 3944843139
Question Type: MCQ
Option Shuffling: No
Display Question Number: Yes
Is Question Mandatory: No
Option Orientation: Vertical
Correct Marks: 1
Wrong Marks: 0

What are the co-ordinates of the point $P$?

(I) $P$ lies on the line of $y = x$.

(II) $P$ is at a distance of $\sqrt{18}$ units from the origin.

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number: 19
Question Id: 3944843140
Question Type: MCQ
Option Shuffling: No
Display Question Number: Yes
Is Question Mandatory: No
Option Orientation: Vertical
Correct Marks: 1
Wrong Marks: 0
Is \( g : \mathbb{R} \rightarrow \mathbb{R} \) an even function?

\( g : \mathbb{R} \rightarrow \mathbb{R} \) ఎన్నిక చిహ్నాలు ఉపాధ్యాయం?

(I) \( g(x) = ax^8 + bx^6 + cx^4 + x \)

(II) \( a, b, c \) are integers

\( a, b, c \) అంటుందే 0 ఉపాధ్యాయం

Options:

1. ✔ 1
2. × 2
3. × 3
4. × 4

Question Number: 20 Question Id: 3944843141 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 distance between the towns A and C ?

A, C నగింది నగింది వ్యాసాంతి?

(I) It takes 60 minutes to go from A to B.

A నుంచి B వరకు 60 మినుట్సులో గోదావరి.

(II) It takes 90 minutes to go from B to C.

B నుంచి C వరకు 90 మినుట్సులో గోదావరి.

Options:

1. × 1
2. × 2
3. × 3
4. ✔ 4

Sub-Section Number: 2
Sub-Section Id: 394484317
Question Shuffling Allowed: Yes

Question Number: 21 Question Id: 3944843142 Question Type: MCQ Option Shuffling: No Display Question
DOG : 071504 :: ____ : 200103

(1) CAB
(2) CAT
(3) CAR
(4) CAN

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

VERB : 22051802 :: NOUN : ____

(1) 14152216
(2) 14221415
(3) 14221514
(4) 14152214

Options :
1. ✗ 1
BEYOND : ____ :: WOULD : TLRIA

(1) YCUKLA
(2) YBVLKA
(3) ZCVMLB
(4) ZDUNMC

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
How many $i$'s are preceded by vowels in this sequence?

$f o i e i f i o w e i h i u m p i e a g h i a$

(1) 6  
(2) 5  
(3) 4  
(4) 7

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 25 Question Id : 3944843146 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

28, ___, 344, 120, ___

(1) 24, 2198
(2) 24, 2194
(3) 26, 2198
(4) 26, 2194

Options:
1. ✔ 1
2. √ 2
3. ✗ 3
4. ✗ 4

Question Number : 26 Question Id : 3944843147 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

BCR : L :: ___ : ___

(1) CDN : O
(2) DET : P
(3) FPN : T
(4) FGQ : H

Options :
1. √ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 27 Question Id : 3944843148 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

BCR : L :: ___ : ___

(1) CDN : O
(2) DET : P
(3) FPN : T
(4) FGQ : H
QOMK : IGEC :: XVTR : ___

1. QMKS
2. PNLJ
3. PMOI
4. OPSM

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 28 Question Id : 3944843149 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

Sequence and Series
శృణుతులు

LAKE : PEOI :: MEAT : ___

1. S IM X
2. R EO X
3. Q IE X
4. Q E I X

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 29 Question Id : 3944843150 Question Type : MCQ Option Shuffling : No Display Question
RSuv : Stvw :: Tuvw : _____

1. Uvwx
2. uVYZ
3. uVXY
4. Uvxy

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

LAMP : ETFI :: BAND : _____

1. VURX
2. UTGW
3. NBST
4. UTHX

Options:
1. 1
2. 2
3. 3
The number that does not fit in the following sequence is

7, 13, 21, 31, 45, 57, 73

(1) 31

(2) 45

(3) 57

(4) 73

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 32 Question Id : 3944843153 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.

విషయాలు : 31 నుండి 35 వరకు ఎదిగి చేయండి.
13, 21, 31, 43, 77

(1)  31
(2)  43
(3)  77
(4)  13

Options:
1. ☒ 1
2. ✗ 2
3. ☐ 3
4. ✗ 4

Question Number : 33 Question Id : 3944843154 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.

24, 35, 48, 63, 80, 99, 122

(1)  63
(2)  80
(3)  99
(4)  122

Options:
1. ✗ 1
2. ✗ 2
3. ☐ 3
4. ☒ 4

Question Number : 34 Question Id : 3944843155 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.

80, 150, 252, 392, 576, 812

(1) 812
(2) 392
(3) 252
(4) 80

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 35 Question Id: 3944843156 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.

120, 210, 336, 504, 720, 990, 1332

(1) 120
(2) 210
(3) 336
(4) 1332

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Sub-Section Number: 4
Sub-Section Id: 394484319
Question Shuffling Allowed: Yes
Question Number : 36 Question Id : 3944843157 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.

ca ron__ar__na crona_a on car

(1) a, o, n, a
(2) a, o, c, a
(3) a, c, o, a
(4) a, n, o, a

Options :
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4

Question Number : 37 Question Id : 3944843158 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, 4.5, 12.5, 24.5, 40.5, 60.5, _____

(1) 67.5
(2) 71.5
(3) 79.5
(4) 84.5

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 38 Question Id : 3944843159 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.

7, 14, ____, 36, ____, 66

(1) 23, 49
(2) 21, 49
(3) 21, 42
(4) 23, 42

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 39 Question Id : 3944843160 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.

17, 37, 65, 82, ____

(1) 101
(2) 122
(3) 170
(4) 197

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

Question Number : 40 Question Id : 3944843161 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.

17, 37, 65, 82, ____
(1) 311, 319, 341
(2) 311, 317, 337
(3) 310, 318, 337
(4) 309, 319, 337

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

Question Number: 41 Question Id: 3944843162 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.

GOD, ___, LTI, ___, UCR

(1) KQE, QXM
(2) IQF, PXM
(3) JQE, QYM
(4) KPF, PYN

Options:
1. 1
2. 2
3. 3
Question Number : 42 Question Id : 3944843163 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.

MODI, ___, QKHE, SLJC, ____

(1) ONEH, UGLA
(2) OMFG, VHLA
(3) OMEI, UHLA
(4) OMFG, UGLA

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 43 Question Id : 3944843164 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.

MODI, ___, QKHE, SLJC, ____

(1) ONEH, UGLA
(2) OMFG, VHLA
(3) OMEI, UHLA
(4) OMFG, UGLA

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
BY, CX, EV, GT, ____.

(1) IR
(2) IQ
(3) KP
(4) MN

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 44 Question Id : 3944843165 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.

10, 4.5, 3.5, 3.75, ____, 11.25

(1) 5.25
(2) 5.5
(3) 4.25
(4) 6.75

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
TRUMP, PTRUM, ______, UMPTR, RUMPT

(1) RMPTU
(2) MPTRU
(3) MPTUR
(4) MTRUP

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 5
Sub-Section Id: 394484320
Question Shuffling Allowed: Yes
Consider the following table that gives the production of different crops A, B, C, D, E by a state from 2010 to 2015 in million tonnes. Based on this information, answer questions 46 to 48.

<table>
<thead>
<tr>
<th>Year</th>
<th>Crops</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td>412</td>
<td>371</td>
<td>510</td>
<td>621</td>
<td>435</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>436</td>
<td>396</td>
<td>522</td>
<td>609</td>
<td>453</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td>472</td>
<td>404</td>
<td>512</td>
<td>637</td>
<td>471</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td>514</td>
<td>400</td>
<td>540</td>
<td>662</td>
<td>458</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>504</td>
<td>422</td>
<td>561</td>
<td>694</td>
<td>482</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>532</td>
<td>453</td>
<td>587</td>
<td>721</td>
<td>504</td>
</tr>
</tbody>
</table>

Sub questions

Question Number : 46 Question Id : 3944843168 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

In which year, crop ‘C’ has registered highest percent of production over its previous year?

(1) 2011
(2) 2013
(3) 2014
(4) 2015
In the year 2014, which crop has registered highest percent of production over that of the year 2012?

2012 లో వింతి, 2014 లో గొప్పత్తులు ఉన్న చెట్టు విషయంలో రాకయి?

(1) A
(2) B
(3) C
(4) D

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 48 Question Id : 3944843170 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
The percentage increase in production of crop ‘A’ over the entire period 2010 to 2015 is

1. \(\frac{3000}{103}\)
2. \(\frac{3000}{515}\)
3. \(\frac{3000}{104}\)
4. \(\frac{3000}{107}\)

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 6
Sub-Section Id: 394484321
Question Shuffling Allowed: Yes

Question Id: 3944843171 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group
Comprehension Questions: No
Question Numbers: (49 to 53)
The expenditure under five heads of account, A, B, C, D, E of a company is shown in the following Pie chart. Based on this data, answer the questions from 49-53.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>$13 \frac{1}{2}$%</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>$16 \frac{2}{3}$%</td>
<td></td>
</tr>
</tbody>
</table>

Sub questions

**Question Number : 49**
**Question Id : 3944843172**
**Question Type : MCQ**
**Shuffling : No**
**Display Question Number : Yes**
**Is Question Mandatory : No**
**Option Orientation : Vertical**
**Correct Marks : 1**
**Wrong Marks : 0**

The difference in the sectorial angles of expenditure between the heads of accounts under C and D is

C, D పై ప్రశ్నోత్తరాలు, వాటాను, ప్రశ్నాంశాలను శాతాల ఆంగ్లం చేత శాతాలు

1. $48^\circ$
2. $64^\circ$
3. $96^\circ$
4. $104^\circ$

**Options :**
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
If Rs. 120 lakhs is the total expenditure in a year, then the ratio of the expenditures under the heads B and E to that of C is as is

120 करोड़ का व्यय, B.E के औसत समस्त में का का अनुपात है

C और D के औसत समस्त में का का अनुपात है

(1) 3 : 4
(2) 5 : 7
(3) 9 : 11
(4) 11 : 12

Options:
1. ❌ 1
2. ❌ 2
3. ❌ 3
4. ✔ 4
In a particular year, the company decided to cut down the expenditure under the head C to the extent of 5% and wanted to increase 2% in A and 3% in D. If the annual expenditure during that year is 96 lakhs, then the total expenditure towards the heads A and D (in lakhs of rupees) is

\[ \text{Total Expenditure} = 96 \text{ lakhs} \]

1. 27.2
2. 72.2
3. 22.7
4. 23.7

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

Question Number: 52 Question Id: 39444843175 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
The average expenditure under various heads of the company is equal to the expenditure under which of the following heads of account?

(1) C alone
(2) B alone
(3) D and E
(4) A and B

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 53 Question Id: 3944843176 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 particular year, if the expenditure under D is Rs. 16 lakhs, then the expenditure under B is (in lakhs of rupees)

(1) 18
(2) 21
(3) 24
(4) 25

Options:
1. ✗ 1
In a class of 30 students, 15 can speak Marathi, 17 can speak Hindi and 13 can speak English. 5 students can speak both English and Marathi and two out of these can also speak Hindi. 6 students speak only English and 7 speak only Hindi. Based on this information answer the following questions 54 and 55.

Sub questions

Question Number : 54 Question Id : 3944843178 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Number of students who can speak English and Hindi only

(1) 2
(2) 3
(3) 4
(4) 5
How many students can speak only Marathi?

(1) 7
(2) 6
(3) 5
(4) 4

Question Number : 55 Question Id : 3944843179 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
Answer the questions 56 to 60 based on the following table, and the rules stated below:

56 రాతరి 60 రాతరి తో సంబంధం ఉండటం తామ్యం విశేషాలు వినిలించడానికి సాధనా అవగాహనం

i) If the first and last letters of a word are consonants then codes are interchanged;

ii) If the first and last letters of a word are vowels, and they are replaced by the symbol $\beta$;

iii) If two vowels come together in a word then they are replaced by the symbols that come next to the vowel in the chart

<table>
<thead>
<tr>
<th>Letter</th>
<th>D</th>
<th>F</th>
<th>H</th>
<th>J</th>
<th>L</th>
<th>N</th>
<th>P</th>
<th>R</th>
<th>S</th>
<th>T</th>
<th>W</th>
<th>O</th>
<th>I</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>*</td>
<td>@</td>
<td>%</td>
<td>$</td>
<td>$</td>
<td>&amp;</td>
</tr>
</tbody>
</table>

Sub questions

Question Number : 56 Question Id : 3944843181 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The code for JOINT is

JOINT $\subseteq$ జంటా

(1) @£&64
(2) 4£6&@
(3) £@4&6
(4) 6%*@4
The code for FLOWS is

FLOWS $S^5 S^5 S^5$

(1) 25%$S$

(2) 58%$S$

(3) $S^5 52$

(4) 52%£$

The code for WOODS is

WOODS $S S^5 S^5 S^5$

(1) $S S^5 2$

(2) 1%£&$S$

(3) $S 1%£$

(4) £$45
The code for ORTHO is

ORTHØ ØØØØ

(1) β83αβ
(2) $8α3$
(3) β3α8β
(4) β8α3β

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✓ 4

The code for SPORTS is

SPORTØ ØØØØ

(1) *7$8@[+
(2) $8@$7
(3) 8@$£%$8
(4) £@4*%£

Options:
1. ✓ 1
If TRACE is coded as USBDF then the code word for ARSON is

TRACE ☞ USBDF ☞ त्रेक्स ☞ एसबीडीएफ ☞ ARSON ☞ एरसन ☞ एरसन

(1) BSTPO
(2) BTUQP
(3) BUURS
(4) BVWST

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
If REPLEH is coded as HELPER the code for COMBINE is

REPLEH ∈ HELPER ∈ COMBINE ∈ COMBINE

(1) EMBINPD
(2) ENIBMOC
(3) EOCDNQR
(4) EPQRODC

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 63 Question Id : 3944843188 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If CUPBOARD is coded as DROABPCU then code word for PRACTICE is:

CUPBOARD ∈ DROABPCU ∈ PRACTICE ∈ PRACTICE

(1) ETCIPRA
(2) ERPTIAC
(3) ECTICAPR
(4) EPRATIC

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 64 Question Id : 3944843189 Question Type : MCQ Option Shuffling : No Display Question
If ENGLAND is coded as 1234526 and FRANCE is coded as 785291 then the code for 381191 is

ENGLAND ☐ 1234526 FRANCE ☐ 785291 ☐ 381191

(1) CYPRUS
(2) TURKEY
(3) CANADA
(4) GREECE

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4
In a certain code 716 means SWEET AND HOT 537 means COFFEE IS SWEET and 236 means TEA IS HOT. Then 536 means

(1) COFFEE IS HOT
(2) COFFEE IS SWEET
(3) TEA IS SWEET
(4) SWEET IS HOT

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 10
Sub-Section Id: 394484325
Question Shuffling Allowed: Yes

Question Number: 66 Question Id: 3944843191 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:

సాధారణంగా, అందరికీ లభిస్తాదు.
Today is Friday. The day after 302 days will be ___

ప్రతి రోజు వినుండి. 302 రోజు మొత్తం రోజు ఉంటుంది __

1. Saturday  
2. Friday  
3. Monday  
4. Sunday

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

---

How many times the hour and minute hands of a clock will be at right angle in a day of 24 hours?

అంటే, 24 గంటలలో అడుగు మత్తు కొని, కాలం అడుగు మత్తు కాలం ఎంతమంది కాలం ఉంటే ఎంతమంది సమయం ఉంటే?

1. 44
2. 40
3. 22
4. 20

Options :
At what time between 5.30 and 6.00 will the hours hand and minutes hand of a clock will be at right angle?

5.30 నాలుగు సంవత్తాలు వున్నంతట్టే కాలంలో సంకోచ రోతి ఉంది, భ్రమను

మాత్రమే ఈ సమయంలో రోతి ఉండాలి.

1. $5.43 \frac{5}{11}$
2. $5.43 \frac{7}{11}$
3. 5.40
4. 5.45

Options:
1. ✔ 1
2. ✔ 2
3. ☒ 3
4. ☒ 4
If A’s father is B, C is the father of B and D is A’s mother, then how is C related to D?

A మాత్రమే బాలకంటే B, B తండ్రి C మాత్రమే A మాత్రమే నిచ్చి D మాత్రమే దక్షిణ సాథీ C మాత్రమే నంతిలా ప్రత్యేక వైపు కమ్మును?

(1) Father
(2) Nephew
(3) Father-in-law
(4) Uncle

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 70 Question Id : 3944843195 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Mr. P left home for the bus stop 30 minutes earlier than usual. It takes 18 minutes for P to reach the bus stop. If P reaches the bus stop at 9.00 am, then at what time does P usually leave home for the bus stop?

P left the bus stop 30 minutes earlier than usual. It takes 18 minutes for P to reach the bus stop. If P reaches the bus stop at 9.00 am, then at what time does P usually leave home for the bus stop?

(1) 9.08 am
(2) 9.10 am
(3) 9.12 am
(4) 9.13 am

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 71 Question Id : 3944843196 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:
An express train departs from station X at 5.00 am with maximum allocated speed 120 kmph. The train is scheduled to arrive at station Z and return to station Y to halt at night. At what time the train will reach station Y, if the total waiting time between the stations of boarding is 45 minutes?

(1) 2.45 pm

(2) 3.50 pm

(3) 4.15 pm

(4) 5.20 pm

Options:
1. ✗ 1
2. ☑ 2
3. ✗ 3
4. ✗ 4

Question Number : 72 Question Id : 3944843197 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:

ప్రపంచం, సమయం అని రాసంపెట్లే వాటికే చేసిన ప్రశ్నలను చేసేవారు అంటే అంటే

ప్రపంచం, సమయం అని రాసంపెట్లే వాటికే చేసిన ప్రశ్నలను చేసేవారు అంటే అంటే
Eight persons A, B, C, D, E, F, G and H are sitting in a straight line facing North but not necessarily in the same order. F sits fifth to the right of A. D sits fifth to the right of E. E sits to the immediate right of A. H sits towards the left of D. B sits third to the right of G. G is an immediate neighbour of A. Which of the following is definitely true?

(1) C is second to the left of D
   D is third to the left of C

(2) A is second to the right of H
   H is third to the right of A

(3) C is to the immediate right of B
   B is fourth on the left of C

(4) E is to the immediate left of C
   C is third on the left of E

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 73 Question Id : 3944843198 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:
Let $x = 5x - 7$ and \( \frac{3y}{z} = \frac{2y}{z} \). If $P = 7 \cdot 15$, then $P = \frac{3y}{z} \cdot \frac{3y}{z} = 7 \cdot 15$. Which of the following is true?

1. 0
2. 2
3. 15
4. 28

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 74 Question Id: 3944843199 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:

 дополнительно, дополнительно включено
If $a \cdot b = (a + b) + (a - b)^2$ and $a \Delta b = (a + b)^2 - (a - b)$ then $(3 \Delta 5) : (3 \cdot 5) =

(1) \quad 11 : \sqrt{2}

(2) \quad 11 : \sqrt{3}

(3) \quad 11 : 2

(4) \quad 11 : 3

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 75 Question Id : 3944843200 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:

 verm.  "రైతు ఆర్థిక కాల్పనలు"
For real numbers $x, y$, define two binary operations $\circ$ and $\oplus$ by
\[ x \circ y = x^2 + y^2 + 3xy - 5 \]
\[ x \oplus y = 3x + 4y + 5xy + 6 \text{ then} \]
\[ (1 \circ 2) \oplus (2 \circ 3) = \]

\[ x, y \text{ రాణిగా ఎక్కడు ఉంటే} \circ, \oplus \text{ ఎన్నో భూమికలను} \\
\text{పంచేంద్రియం}
\]
\[ x \circ y = x^2 + y^2 + 3xy - 5 \]
\[ x \oplus y = 3x + 4y + 5xy + 6 \text{ ఎందుకును} \]
\[ (1 \circ 2) \oplus (2 \circ 3) = \]

(1) 2238  
(2) 894  
(3) 908  
(4) 364

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

---

**Mathematical Ability**

- **Section Id**: 39448447  
- **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**: 394484326  
- **Question Shuffling Allowed**: Yes
The value of \( \frac{37 \times 37 \times 37 + 8 \times 8 \times 8}{37 \times 37 - 296 + 64} \)

(1) 29
(2) 45
(3) \( \frac{13}{17} \)
(4) \( \frac{11}{19} \)

Options:
1. × 1
2. ✔ 2
3. × 3
4. × 4
\[3 \times 2^x + 2^{x+2} + 2^{x+3}\] is always divisible by

\[3 \times 2^x + 2^{x+2} + 2^{x+3}\] యొక్క సాధారణ కంప్యూటర్ లేదా

(1) 7
(2) 18
(3) 15
(4) 16

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 78 Question Id : 3944843203 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
అనంత సంఖ్యలు

If \(x : y = 3 : 4\), then \((2x + 3y) : (3y - 2x) = \)

\(x : y = 3 : 4\) అనంత సంఖ్యలు

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

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
Question Number : 79 Question Id : 3944843204 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
అగ్రపాతిక సంఖ్యా శాస్త్రం

Three persons A, B and C invested their annual savings in a bank at 20% rate of simple interest per annum. If each of them gets an equal amount after 10, 15 and 20 years, respectively. Then the ratio of their initial investments is

20% నాణా శాస్త్రం లో నాలుగు వేల మామూలు వచ్చింది A, B, C ద్వారా మొత్తం శాస్త్రం. లేదు వచ్చి లేదు మందభాగం 10, 15, 20 వేలలో ఉన్నాం వేలలో ఉన్నాం మరో లేదు మరో వేలలో ఉన్నాం, మరొక వేలలో ఉన్నాం వేలలో ఉన్నాం వేలలో ఉన్నాం వేలలో ఉన్నాం

(1) 20 : 15 : 12
(2) 16 : 12 : 7
(3) 25 : 23 : 19
(4) 12 : 15 : 19

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 80 Question Id : 3944843205 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
అగ్రపాతిక సంఖ్యా శాస్త్రం
If $x = \sqrt{21}$, $y = \sqrt{23}$, then which of the following is correct?

$x = \sqrt{21}$, $y = \sqrt{23}$

(1) $y = x + 1$
(2) $x = y + 1$
(3) $x > y$
(4) $y > x$

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

The positive square root of $14 + 6\sqrt{15}$ is

$14 + 6\sqrt{15}$

(1) $3 + \sqrt{5}$
(2) $3 - \sqrt{5}$
(3) $3 + 2\sqrt{5}$
(4) $3 - 2\sqrt{5}$

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

Options :
1. 1
The remainder when $3^{45}$ is divided by 6 is

$3^{45} \equiv 6 \mod 6$

Options:
1. 1
2. 2
3. 3
4. 4
The number of positive divisors of \( n = 311^2 \times 373^3 \times 307^4 \) is.

\[ n = 311^2 \times 373^3 \times 307^4 \]

(1) 60

(2) 58

(3) 65

(4) 68

Options:
1. ✔️ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 84 Question Id : 3944843209 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 GCD of 3240, 3600 and \( x \) is 36 and the LCM of these three numbers is

\[ 2^4 \times 3^5 \times 5^2 \times 7^2 \text{ then } \sqrt[6]{\alpha} = \]

3240, 3600 మీదుగా \( x \) యొక్క గ.య.ప. 36 మీదుగా రెండు మాఖి సి.ప. గ.

\[ 2^4 \times 3^5 \times 5^2 \times 7^2 \text{ అంటే, } \sqrt[6]{\alpha} = \]

(1) 526

(2) 625

(3) 726

(4) 756

Options:
1. ☒ 1
Three bicycles are fitted with wheels that can make 6, 5 and 10 revolutions per minute respectively. One spoke on each wheel is painted blue. All three bicycles start moving at the same time, and the spoke of the wheels painted blue is in the same position for all 3 bicycles. After how much time, will all the three wheels be aligned in the same manner as they were at the starting? (in seconds)

(1) 60
(2) 30
(3) 12
(4) 120

Options:
1. ✔
2. ✗
3. ✗
4. ✔
The number of rational numbers in the expansion of \( \left( \sqrt{25} + \frac{1}{1\sqrt{10}} \right)^{20} \) is

\( \left( \sqrt{25} + \frac{1}{1\sqrt{10}} \right)^{20} \) భాగస్వామ్య అరాడము లో యోగ్యమైన సంఖ్యలు

(1) 2

(2) 3

(3) 4

(4) 6

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 87 Question Id : 3944843212 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
క్రమక దృశ్య స్థానాలు
The rational number that represents the recurring decimal number 0.234 is

(1) \(\frac{232}{9990}\)
(2) \(\frac{232}{990}\)
(3) \(\frac{232}{900}\)
(4) \(\frac{232}{99}\)

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 88 Question Id : 3944843213 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 కళలు
Six persons A, B, C, D, E and F are of different heights. No two among them are of same height. It is also known that

i) A is taller than B but shorter than C
   A > B > C

ii) D is taller than E who is in turn is taller than F
    D > E > F

iii) F is taller than A
     F > A

Who is the shortest?

Options:

1. F
2. B
3. C
4. D

Question Number: 89 Question Id: 3944843214 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

సంఖ్యాశాస్త్రం
If the following fractions are arranged in descending order (of their magnitudes), the middle one is

\[
\frac{2}{3}, \frac{5}{7}, \frac{9}{13}, \frac{9}{14}, \frac{7}{9}
\]

(1) \(\frac{7}{9}\)

(2) \(\frac{5}{7}\)

(3) \(\frac{9}{12}\)

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

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 90 Question Id : 3944843215 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
In a school 75% are girls, and the boys are 625 in number. The total student strength in the school is

(1) 3500
(2) 3000
(3) 2750
(4) 2500

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Arithmetical Ability
In a ready made cloth store a customer has got 10% discount on his dress, but has paid 2.5% CGST and 2.5% SGST on the discounted rate. Had he got Rs.200 as discount and then paid the said taxes, he would have paid Rs.42 more. The price (in Rupees) of the dress before the discount is

(1) 2400
(2) 2800
(3) 3200
(4) 3600

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 92 Question Id : 3944843217 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
సంఖ్యాశాస్త్ర నియంత్రణ
A dealer sells items at a 20% profit. If the cost of items doubles and the profit percent becomes half its present value, then the actual profit now is what percent of the previous profit?

(1) 25
(2) 50
(3) 100
(4) 200

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 93 Question Id : 3944843218 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
An item is sold at a profit of 30% to its cost price. Had the profit been 30% of the present selling price, the vendor would have gained Rs. 540 more. What is the present selling price? (In rupees)

(1) 5400
(2) 6000
(3) 7800
(4) 9100

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 94 Question Id : 3944843219 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
అంకేళ్ళ సౌందర్య
A and B started a business with B's investment 2.5 times that of A. Ratio of time period of the investment of A and B was 3 : 1 and the total investment made by both of them was Rs.28000. If the annual profit earned was Rs.2500 less than A's investment, the difference between their annual profit is (in rupees)

A को का B के निवेश 2.5 गुना होता था और अनुरूपीकरण के अनुसार समय का अनुपात 3 : 1 था। यह माना जा सकता है कि उनका कुल निवेश 28000 रुपये था। A की वर्षीय लाभ A की निवेश के लिए 2500 रुपये कम होता है, तो A और B के वर्षीय लाभ का अंतर (रुपये) क्या होगा?

(1) 400
(2) 500
(3) 650
(4) 800

Options:
1. ✓ 1
2. ✓ 2
3. ✓ 3
4. ✓ 4

Question Number : 95 Question Id : 3944843220 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
కార్యకలాల విశేషాలు
Three persons A, B, C start a business with capitals Rs.8 lakhs, Rs.10 lakhs and Rs.12 lakhs. After 6 months C has taken back Rs.4 lakhs from the capital and after another 2 months B withdraws an amount of Rs.2 lakhs from the capital. Then A's share in a profit of Rs.574000, at the end of the year, in Rupees

 Options:
1. 287000
2. 240000
3. 168000
4. 144000

Question Number : 96 Question Id : 3944843221 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
అంకాలనించి సమాధానం
An overhead tank is connected by 3 pumps A, B and C. The pumps A and B can fill the tank in 4 hours and 5 hours respectively, whereas C can empty the tank in 2 hours. If A, B and C are opened in order at 5.00 am; 6.00 am and 7.00 am when will the tank be empty?

(1) 6 pm
(2) 7 pm
(3) 8 pm
(4) 9 pm

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 97 Question Id : 3944843222 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
అంధరాశి పాఠప్రదానం
Two pipes A and B can fill a cistern in 12 minutes and 18 minutes respectively. Both are kept open for 2 minutes and A is closed. In how many minutes will the tank be full?

పిగుడ గుప్తల్లోని A మరియు B ను రెండు సంవత్సరాలలో ప్రారంభం అయితే 12 సంవత్సరాలలో ఉపాధ్యాయం 18 
సంవత్సరాలలో ప్రారంభమైంది. రెండు సంవత్సరాలు ప్రారంభం అడుగులో A 
సంవత్సరాలు ప్రారంభం అడుగులు ప్రారంభమైంది. రెండు సంవత్సరాలు ప్రారంభమైంది?

1. 20
2. 16
3. 15
4. 12

Options:
1. ✗ 1
2. ✗ 2
3. ☑ 3
4. ✗ 4

Question Number: 98 Question Id: 3944843223 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 అధికారితతা
A train travelling at 90 kmph takes 20 seconds to cross a platform of length 150 m.

The length of the train in meters is

(1) 275
(2) 300
(3) 325
(4) 350

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 99 Question Id : 3944843224 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
అగిరిఫిక్ సామితికేశ్వర మ్యూసిక్
A car covers a given distance moving at a speed of 35 kmph. However, if it were to halt for a fixed number of minutes every hour, its average speed would work out to 28 kmph. For how many minutes does the car stop per hour?

(1) 12 minutes  (1) 12 మినుసెక్షన్
(2) 7 minutes  (2) 7 మినుసెక్షన్
(3) 14 minutes  (3) 14 మినుసెక్షన్
(4) Indeterminate  (4) ఇండైటరమెటెరేటేడ్

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 100 Question Id : 3944843225 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 అబిలిటీ
Three Engineers or four Technicians can complete a project in 43 days. How many days will it take for seven Engineers and five Technicians to complete the same project?

(1) 10
(2) 12
(3) 13
(4) 15

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

Question Number: 101 Question Id: 3944843226 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 మాధ్యమిక
A and B can complete a piece of work independently in 12 and 16 days respectively. Both of them start the work and after 4 days B leaves. In how many days, will A complete the work?

A మాత్రమే B ఏ ఎంపిక అడి అప్పటి. నూతనంగా మందాపి 12 తేదీలలో మందాపి 16 తేదీలలో ప్రారంభం మారి. అయితే ప్రారంభం రెండు తేదీల పరంగా B రాళ్ళు ఇది మారి. తరువాత తారుతే B ఏ ఎంపిక అడి అప్పటి. నూతనానే A ఏ ఎంపిక అడి అప్పటి?

(1) 9
(2) 7
(3) 5
(4) 4

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 102 Question Id : 3944843227 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
అధికారిత శాసనమ రంగు
A cuboid has dimensions \( l, b \) and \( h \). If all its dimensions are increased by 10\%, then the percentage increase in total surface area is

1. 20\%
2. 15\%
3. 21\%
4. 10\%

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

Question Number: 103 Question Id: 3944843228 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 అబిలిటీ
A rectangular field has its length and breadth in the ratio 5 : 4. A man riding on a bicycle completes one lap of the field along its perimeter at a speed of 10.8 kmph in 4 minutes and 36 seconds. The area of that field (in sq. meters) is

(1) 40640
(2) 41820
(3) 42670
(4) 42320

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

Question Number: 104 Question Id: 3944843229 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
అరిధమిటిసల్ ప్రశ్నస్వభావం
What is the radius of a spherical ball which is formed by melting a metallic cylinder of base diameter 8 inches and height 160 inches, if conversion wastage results in 10% of weight loss? (in inches)

(1) 9
(2) 12
(3) 15
(4) 8

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 105 Question Id: 3944843230 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
ఖండించి సమాధానం
A pyramid 6 mts high has a square base. Length of diagonal of the base is $\sqrt{98}$ mts.

Its volume is (in cu mts.)

\[ \text{Given: Height of the pyramid} = 6 \text{ mts.} \\
\text{Diagonal of the base} = \sqrt{98} \text{ mts.} \\
\text{Volume of a pyramid} = \frac{1}{3} \times \text{Base area} \times \text{Height} \]

\[ \text{Base area} = \frac{D^2}{2} = \frac{98}{2} = 49 \text{ mts}^2 \]

\[ \text{Volume} = \frac{1}{3} \times 49 \times 6 = 98 \text{ cu mts.} \]

Options:
1. 109
2. 100
3. 84
4. 98

Correct Answer: 4

Question Number: 106
Question Id: 3944843231
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 rectangular park is of dimensions 80m x 60m. The two walking paths 10m wide are to be constructed in the middle of the park parallel to its length and breadth. If the cost of construction of the path is Rs.300 per sq.m. Then the total cost (in lakhs) is

(1) 4.5  
(2) 4.1  
(3) 4.0  
(4) 3.9

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

Question Number: 107 Question Id: 3944843232 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
అరీథమిటికల్ విశ్లేషణ
A vessel is in the form of a cylinder surmounted by a hemisphere. If the diameter of sphere is same as diameter 14 cm of the cylinder and if height of the cylinder is 7 cm, then the volume of the vessel (in cm³) is

(1) \(1709 \frac{\pi}{3}\)
(2) \(1710 \frac{\pi}{2}\)
(3) \(1715 \frac{\pi}{3}\)
(4) \(1718 \frac{\pi}{3}\)

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 108 Question Id : 3944843233 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
సంఖ్యాశాస్త్ర కౌర్ణ్యం
From a rectangular sheet of paper of dimension 30cm × 20cm, squares of equal side 3 cm is cut out from each corner, and the remaining parts are folded on 4 sides to form open rectangular box. Then the volume of the box (in cm³) is

30 30 20 3 3 3 3 3

(1) 1008
(2) 1377
(3) 1134
(4) 564

Options:
1. ☑ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 109 Question Id : 3944843234 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
అధికారిణి శాస్త్రం
If $3^{58} \equiv r \pmod{5}$ and $0 \leq r \leq 4$, then $r =$

$3^{58} \equiv r \pmod{5}$  మాటం లేదు $0 \leq r \leq 4$ తో అంటే, $r =$

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number: 110 Question Id: 3944843235 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
అధికారిత శక్తి

The solution set for the inequation $|x - 1| + |x + 2| < 2$ is $|x - 1| + |x + 2| < 2$ మాటది విపథం మాంత్రించ

(1) $(-\infty, -2) \cup (1, \infty)$
(2) [2,1)
(3) (-1,2)
(4) An empty set

Options:
1. ✗ 1
What is the contrapositive of the following statement?

‘If two triangles are congruent, then they are similar’

(1) If two triangles are not congruent then they are not similar.

(2) If two triangles are not similar then they are not congruent.

(3) If two triangles are similar then they are congruent.

(4) If two triangles are not similar then they are congruent.

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
When is the statement \((-p) \land q\) is true?

\[ (\neg p) \land q \]

Options:
1. \(p\) is false, \(q\) is true
2. \(p\) is false, \(q\) is false
3. \(p\) is true, \(q\) is false
4. \(p\) is true, \(q\) is true
In a group of athletes in a school, 21 are on basket ball team, 26 are on hockey team and 29 are on foot ball team. If 14 play hockey and basket ball, 12 play foot ball and basket ball, 15 play hockey and foot ball and 8 play all the three, how many play only foot ball?

(1) 10
(2) 9
(3) 8
(4) 6

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
If the function given by \( f(x) = x + 2 \) with domain \( \{ x : 2 \leq x \leq 5 \} \), then the intervals of domain and range of \( f^{-1} \) are respectively

\[ f(x) = x + 2 \] for the given domain \( \{ x : 2 \leq x \leq 5 \} \) is defined, \( f^{-1}\) is defined.

(1) \((4,7), (2,5)\)

(2) \([4,7], [2,5]\)

(3) \([4,7], [2,5]\)

(4) \([4,7], (2,5)\)

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

Question Number: 115 Question Id: 3944843240 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
If \( A = \{1, 2, 3\} \) and \( R \) is the relation given by
\[
R = \{(1, 1), (2, 2), (3, 3), (1, 2), (2, 1)\},
\]
then
\[
A = \{1, 2, 3\} \text{ అంకితంి ర ద్వితీయ రేఖలు}.
\]
\[
R = \{(1, 1), (2, 2), (3, 3), (1, 2), (2, 1)\} \text{ ద్వితీయ రేఖలు}
\]

(1) R is only reflexive
(2) R is an equivalence relation
(3) R is only symmetric
(4) R is not transitive

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 116 Question Id: 3944843241 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, విభాగానికి సమాధానం
If $A = (2, 3)$ and $B = (4, 5)$ then slope of line $AB$ is

$A = (2, 3)$ మరియు $B = (4, 5)$ అంటే, $AB$ భిరి రాశిల్చే గొప్పం

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

(2) 1

(3) -1

(4) 2

Options:
1. $\times$ 1
2. $\checkmark$ 2
3. $\times$ 3
4. $\times$ 4

Question Number: 117 Question Id: 3944843242 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

Equation of line which is parallel to $2x + 3y = 4$ is

$2x + 3y = 4$ నుండి పాయనించిన భిరి రాశిల్చే గొప్పం

(1) $2x + 3y + c = 0$

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

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

(4) $\frac{x}{2} + \frac{y}{3} = \frac{1}{4}$

Options:
1. $\checkmark$ 1
2. $\times$ 2
3. $\times$ 3
4. $\times$ 4
If \( 13 \sin \theta = 12 \) and \( \theta \) is acute, then

\[
\frac{\csc \theta + \cot \theta}{\tan \theta + \sec \theta} =
\]

1. \( \frac{3}{8} \)
2. \( \frac{3}{10} \)
3. \( \frac{10}{3} \)
4. \( \frac{6}{3} \)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
\[\frac{1 + \cos \theta}{\sqrt{1 - \cos \theta}} = \quad \]

(1) \(\csc \theta - \cot \theta\)

(2) \(\csc \theta + \cot \theta\)

(3) \(\csc \theta\)

(4) \(\cot \theta\)

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

Question Number : 120  Question Id : 3944843245  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

\[\sin A + \sin B = \]

(1) \(2 \sin \left(\frac{A-B}{2}\right) \cos \left(\frac{A+B}{2}\right)\)

(2) \(2 \sin \left(\frac{A+B}{2}\right) \cos \left(\frac{A-B}{2}\right)\)

(3) \(2 \sin \left(\frac{A+B}{2}\right) \sin \left(\frac{A+B}{2}\right)\)

(4) \(2 \cos \left(\frac{A+B}{2}\right) \cos \left(\frac{A-B}{2}\right)\)

Options:
1. ☑️ 1
2. ☑️ 2
3. ☑️ 3
4. ☑️ 4
Two boys A and B are opposite side of a tower of height 150 mts. They measure the angle of elevation of top of the tower as $30^0$ and $60^0$. Then the distance between the boys (in mts)

150 m. ఈ లద్ద తద్ద శిఖరం పైన ఉన్ని ఆధ్యాత్మికంగా, ఈ ఇచ్చిని, అ మూడు సౌతాంతి
A, B తిత గుండా వెలుపు నిశ్చేతం 30°, 60° ని సింహింది. అ తిత మూడు సౌతాంతి

\[
\text{(1)} \quad \frac{600}{\sqrt{3}} \\
\text{(2)} \quad \frac{550}{\sqrt{3}} \\
\text{(3)} \quad \frac{650}{\sqrt{3}} \\
\text{(4)} \quad \frac{450}{\sqrt{3}}
\]

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
If \( f(x) = x^2 + 6x + K_1 \) and \( g(x) = x^2 + 5x + K_2 \) have a common factor \( x - a \), then \( a = \)

\[ x - a \]

\[ f(x) = x^2 + 6x + K_1 \]

\[ g(x) = x^2 + 5x + K_2 \]

Solving these equations, \( a = \)

1. \( K_2 - K_1 \)
2. \( K_1 + K_2 \)
3. \( \frac{K_1 + K_2}{2} \)
4. \( 2(K_1 + K_2) \)

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 123 Question Id: 3944843248 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 number of solutions of the equation

\[ \sqrt{x^2 - x + 1} + \frac{1}{\sqrt{x^2 - x + 1}} = 2 - x^2 \]

\[ (1) \ 1 \]
\[ (2) \ 2 \]
\[ (3) \ 3 \]
\[ (4) \ 4 \]
The remainder when $21^{875}$ is divided by 17 is

$21^{875}$  ನಿ 17 ಲ್ಲಾಯಿಸಿದ್ದಾಗ ರೇಖೆಯಾಗಿ ಬೆಂಕಿ  ಪ್ರತ್ಯೇಕ

(1) 14
(2) 16
(3) 13
(4) 15
If $x^2 + 6x - k = 0$ has distinct real roots, then $k$ lies in the interval

$\begin{align*}
x^2 + 6x - k &= 0 \\
(1) & \ (-\infty, 9) \\
(2) & \ (-\infty, 9] \\
(3) & \ [10, \infty) \\
(4) & \ (10, \infty)
\end{align*}$

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 : 126 Question Id : 3944843251 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 \( \frac{xy}{x+y} = \frac{35}{12} \) and \( \frac{xy}{y-x} = \frac{35}{2} \), then \((x, y) = \)

\( \frac{xy}{x+y} = \frac{35}{12} \quad \text{and} \quad \frac{xy}{y-x} = \frac{35}{2} \quad \text{implies}, \quad (x, y) = \)

1. \((-5, -7)\)
2. \((-7, -5)\)
3. \((5, 7)\)
4. \((7, 5)\)

Options :
1. 
2. 
3. 
4. 

Question Number : 127 Question Id : 3944843252 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

Algebra and Geometrical Ability
The sum of a two digit number \( n \) and the number formed by reversing its digits is 99.

When 5 is added to \( n \) then it becomes 5 less than 6 times the sum of digits of \( n \). Then the number \( n \) is

\[ \text{ఒకసారి రాబేందుకు నంబరు నంబరు రివర్స్ దిగిట్సు నంబర్ నంబరు నంబరు రివర్స్ దిగిట్సు నంబర్ 99. \ n \text{ నంబర్ సాధనం నంబర్ నంబర్ నంబర్} \Rightarrow \text{ఒకసారి రివర్స్ దిగిట్సు నంబర్ నంబరు నంబరు రివర్స్ దిగిట్సు నంబర్ 6 నంబరు నంబరు నంబరు నంబరు నంబరు నంబరు} \Rightarrow \text{ఒకసారి రివర్స్ దిగిట్సు నంబర్ నంబరు నంబరు రివర్స్ దిగిట్సు నంబరు నంబరు నంబరు} \]

\begin{align*}
(1) & \ 63 \\
(2) & \ 54 \\
(3) & \ 45 \\
(4) & \ 36
\end{align*}

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 : 128 Question Id : 3944843253 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
ప్రక్రియనము ఆధారం ఆధారం
A machine costs Rs.875000. If the value of the machine depreciates 15% of its cost in the first year, $13\frac{3}{2}$% of its cost in the second year, 12% of its cost in the third year and so on, then its value at the end of 10 years is (in rupees)

$\text{Rs. } 875000 \times (1 - 0.15) \times (1 - 0.1375) \times (1 - 0.12) \times \ldots \times (1 - 0.12) \times \ldots$ (for 10 years)

(1) 224650
(2) 182420
(3) 153125
(4) 135225

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 129 Question Id : 3944843254 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
If AM and GM of the two numbers are 34 and 16 respectively, the numbers are

(1) 1, 67
(2) 2, 66
(3) 3, 65
(4) 4, 64

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

If the 21st and 22nd terms in the expansion of \((1 + x)^{44}\) are equal, then \(x = \)

\[(1 + x)^{44} \text{ ప్రమాణాంకంగా 21 రెండవ చేరి 22 రెండవ చేరి విశేషించాలి, \(x = \)}

(1) \(\frac{7}{8}\)
(2) 7
(3) 8
(4) 1

Options:
1. % 1
If \((1 + x + x^2)^n = \sum_{r=0}^{2n} a_r x^r\), then \(a_0 + a_2 + a_4 + \ldots = \)
\[(1 + x + x^2)^n = \sum_{r=0}^{2n} a_r x^r, a_0 + a_2 + a_4 + \ldots = \]

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

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

Question Number : 132 Question Id : 3944843257 Question Type : MCQ Option Shuffling : No Display  
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical  
Correct Marks : 1 Wrong Marks : 0
If \[ \begin{vmatrix} x & 5x \\ 1 & x \end{vmatrix} = -6 \], then the values of \( x \) are

\[ \begin{vmatrix} x & 5x \\ 1 & x \end{vmatrix} = -6 \]  

(1) 3, 2  
(2) -3, -2  
(3) 3, -2  
(4) -3, 2

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

Question Number : 133 Question Id : 3944843258 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
అంగాంకం పరిమితి శక్తి

If \( \omega \) is cube root of unity, then
\[
\begin{vmatrix}
1 + \omega & \omega^2 & -\omega \\
1 + \omega^2 & \omega & -\omega^2 \\
\omega^2 + \omega & \omega & -\omega^2 \\
\end{vmatrix} =
\]

\(3 \omega\)

(1) \(-3\omega\)

(2) \(3\omega\)

(3) \(3\omega^2\)

(4) \(-3\omega^2\)

Options:
1. 1
2. 2
3. 3
4. 4
\[
\lim_{x \to 0} \frac{x}{\sqrt{1+x} - \sqrt{1-x}} = \] 

(1) 0  
(2) \frac{1}{2}  
(3) 1  
(4) 2  

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

Question Number : 135  
Question Id : 3944843260  
Question Type : MCQ  
Option Shuffling : No Display  
Question Number : Yes  
Is Question Mandatory : No  
Option Orientation : Vertical  
Correct Marks : 1  
Wrong Marks : 0  

\[
\lim_{x \to 0} \frac{\tan 2x - x}{3x - \sin x} = \] 

(1) 0  
(2) 1  
(3) \frac{1}{2}  
(4) \frac{1}{3}  

Options :  
1. ✗ 1
In the figure \( \angle A = 60^0 \), \( BD \perp AC \), and the area of \( \triangle ADC = \frac{\sqrt{3}}{2} \).

Then \( BC = \) ___

\[ \text{Area of } \triangle ADC = \frac{\sqrt{3}}{2} \]

\( \text{So, } BC = \) ___

1. \( \sqrt{2} \)
2. \( \sqrt{3} \)
3. 2
4. 6

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
In a parallelogram ABCD, the length of the adjacent sides AB and BC are 14 cm and 12 cm. If the diagonal AC = 22 cm, then its area (in sq.cm.) is

\( \text{Area} = \frac{1}{2} \times \text{Diagonal} \times \text{Height} \)

\( = \frac{1}{2} \times 22 \times \sqrt{14^2 - 12^2} \)

\( = \frac{1}{2} \times 22 \times \sqrt{196 - 144} \)

\( = \frac{1}{2} \times 22 \times \sqrt{52} \)

\( = 11 \times \sqrt{13} \)

\( \approx 22.36 \text{ sq.cm.} \)

Options:
1. \(24\sqrt{10}\)
2. \(32\sqrt{10}\)
3. \(48\sqrt{5}\)
4. \(48\sqrt{10}\)

Correct Mark: 4
One of the angles of a triangle is \( \frac{2}{5} \) of the sum of the adjacent angles of a parallelogram.

The remaining angles of the triangle are in the ratio of 5 : 7. The value of the second largest angle of the triangle is

\[
\frac{2}{5} \times \text{sum of adjacent angles} = \frac{2}{5} \times 5 = 2 \times 7 = 14 \degree
\]

\( \text{Remaining angles are in the ratio of 5 : 7, so the second largest angle is:} \)

\[
\frac{2}{5} \times \text{sum of adjacent angles} = \frac{2}{5} \times 14 = 5.6 \degree
\]

\( \text{Hence, the second largest angle is:} \)

\[
\text{(1) 45}^\circ
\]

\( \text{(2) 63}^\circ
\]

\( \text{(3) 67}^\circ
\]

\( \text{(4) 85}^\circ
\)

Options:
1. % 1
2. ✔ 2
3. % 3
4. % 4

Question Number : 139 Question Id : 3944843264 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
If $(3, -6), (5, 7)$ and $(13, 4)$ are the midpoints of the sides $BC, CA$ and $AB$ of triangle $ABC$ and if the centroid of the triangle is $(a, b)$, then $a + b =$

$(3, -6), (5, 7)$ మిట్టింది $(13, 4)$ రు మిట్టింది $ABC$ రెండు కోheits రేఖలు $BC, CA$

మిట్టింది $AB$ రెండు కోheits రేఖలు. $a$ లేదా $b$ పరిమితం రెండు కోheits రేఖలు $(a,b)$

$\Rightarrow a + b =$

(1) $\frac{26}{2}$

(2) $\frac{26}{3}$

(3) $\frac{20}{3}$

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

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 140  Question Id: 3944843265  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
సంఖ్యాశాస్త్రం, విభూషణ శాస్త్రం
If (17, 16), (14, 16) and (17, 20) are the vertices of a triangle, then the its circumcentre is

(1) \( \left( \frac{31}{2}, 16 \right) \)
(2) (17, 18)
(3) \( \left( \frac{31}{2}, 18 \right) \)
(4) (17, 16)

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number: 3
Sub-Section Id: 394484328
Question Shuffling Allowed: Yes

Question Number: 141 Question Id: 3944843266 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

సిద్ధాంత సామర్థ్యం
If the arithmetic mean of the first ‘n’ natural numbers is 8, then \( n = \) 
(1) 9  
(2) 15  
(3) 13  
(4) 11

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

Question Number : 142 Question Id : 3944843267 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

The average of cubes of first ten natural numbers is 

(1) 301  
(2) 302.5  
(3) 300  
(4) 300.5

Options:
1. ✗ 1  
2. ✓ 2
Question Number: 143  Question Id: 3944843268  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

If the median of the following distribution is 9.89, then the mode of the distribution is

<table>
<thead>
<tr>
<th>Class interval</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>45</td>
</tr>
<tr>
<td>10-20</td>
<td>20</td>
</tr>
<tr>
<td>20-30</td>
<td>14</td>
</tr>
<tr>
<td>30-40</td>
<td>7</td>
</tr>
<tr>
<td>40-50</td>
<td>3</td>
</tr>
</tbody>
</table>

(1) 1.47
(2) 1.68
(3) 1.84
(4) 1.92

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
The variance of the weights of the ten persons whose weights (in kgs) are
45, 49, 55, 50, 41, 44, 60, 58, 53, 55 is

(1) 34.3
(2) 35.6
(3) 36.4
(4) 36.7

Options :
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 145 Question Id : 3944843270 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

పరిసంఖ్య శక్తి
A data consists of 100 observations \( x_1, x_2, \ldots, x_{100} \). If \( \sum_{i=1}^{100} (3x_i + 17)^2 = 22500 \) and \( \sum_{i=1}^{100} (3x_i + 17) = 900 \), then the standard deviation of \( x_1, x_2, \ldots, x_{100} \) is

\[
\sum_{i=1}^{100} (3x_i + 17)^2 = 22500 \quad \text{and} \quad \sum_{i=1}^{100} (3x_i + 17) = 900
\]

\( x_1, x_2, \ldots, x_{100} \)  

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

Question Number: 146 Question Id: 3944843271 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
Which of the following two variables likely to have maximum positive correlation coefficients?

(1) \( x = \text{the annual salary} \)
   \( y = \text{the annual savings} \)
   \( x = \text{మాసిక వ్యాఖ్యాతాను} \)
   \( y = \text{మాసిక విద్యార్థి వ్యాఖ్యాతాను} \)

(2) \( x = \text{Air fares} \)
   \( y = \text{Air passengers} \)
   \( x = \text{ఎయర్ ఫ్యార్స్} \)
   \( y = \text{ఎయర్ పాసేజ్స్} \)

(3) \( x = \text{The cost of health care} \)
   \( y = \text{the number of patients} \)
   \( x = \text{సెన్ట్రల్ విద్యార్థి సంఖ్య} \)
   \( y = \text{సెన్ట్రల్ విద్యార్థి సంఖ్య} \)

(4) \( x = \text{Cost of railway platform ticket} \)
   \( y = \text{Passengers on the railway platform} \)
   \( x = \text{రైలు పల్యాండ్ ప్రదర్శన} \)
   \( y = \text{రైలు పల్యాండ్ ప్రదర్శన} \)

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 147 Question Id : 3944843272 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

ఉపభాగాలు నిర్ధితం
Three unbiased coins are tossed. The probability of getting exactly one Head is

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

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

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

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✅ 4

Question Number : 148 Question Id : 3944843273 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 సమాధానం
If a fair die is thrown 3 times, the probability that the sum of the numbers turned up 14 is

(1) \( \frac{5}{216} \)
(2) \( \frac{5}{108} \)
(3) \( \frac{5}{162} \)
(4) \( \frac{5}{72} \)

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

Question Number : 149 Question Id : 3944843274 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

If A, B and C are any three events in a sample space S then \( P(A \cup B \cup C) = \)

\( P(A) + P(B) + P(C) - P(A \cap B) - P(B \cap C) - P(A \cap C) + P(A \cap B \cap C) \)

Options:
(1) \( P(A) + P(B) - P(A \cap B) + P(A \cap B \cap C) \)
(2) \( P(A) + P(B) + P(C) - P(A \cap B) - P(B \cap C) - P(A \cap C) + P(A \cap B \cap C) \)
(3) \( P(A) + P(B) + P(C) + P(A \cap B \cap C) \)
(4) \( P(A) + P(B) + P(C) - P(A \cap B) - P(B \cap C) - P(A \cap C) \)
If A and B are two mutually exclusive events of a sample space S such that AUB = S and P(B) = 2P(A), then P(A) =

AUB = S మర్పండు P(B) = 2P(A) అంటే రంగం సరిస్థితి అంటే S మర్పండు B అంటే రంగం విస్తరించబడింది అంటే P(A) =

\[
(1) \frac{2}{3} \\
(2) \frac{1}{3} \\
(3) \frac{1}{2} \\
(4) \frac{1}{6}
\]

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

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Communication Ability

Section Id : 39448448
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
Opportunity

(1) Musical
(2) Timely
(3) Fortune
(4) Ability

Options:
1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4

Laconic

(1)Verbose
(2)Loquacious
(3)Talkative
(4)Concise

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

(1) Faulty
(2) Irritating
(3) Improved
(4) Faultless

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 154 Question Id : 3944843279 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

Nonpareil

(1) Unrivalled
(2) Mediocre
(3) Ordinary
(4) Amateurish

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 155 Question Id : 3944843280 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0
Ebullient

(1) Enthusiastic
(2) Dull
(3) Melancholic
(4) Indolent

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 156 Question Id: 3944843281 Question Type: MCQ Option Shuffling: No Display
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

Inveigh

(1) Weigh
(2) Carry
(3) Denounce
(4) Break

Options:
1. ✗ 1
2. ✔ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number: 2
Sub-Section Id: 394484330
Question Shuffling Allowed: Yes

Question Number: 157 Question Id: 3944843282 Question Type: MCQ Option Shuffling: No Display
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 _____ chosen for construction of the office is in the heart of the city.

(1) Site
(2) Sight
(3) Cite
(4) Slight

Options:
1. ✔️ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 158 Question Id : 3944843283 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 student who absents himself without permission is a ___

(1) Sceptic
(2) Tyrant
(3) Indiscipline
(4) Truant

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ✔️ 4

Question Number : 159 Question Id : 3944843284 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 ____ crowds greeted the winning team outside the stadium.

(1) Hesitant
(2) Despairing
(3) Jubilant
(4) Desperate

Options:
The ____ rule of good writing is clarity.

1. Brazen
2. Cardinal
3. Permeable
4. Perfunctory

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

The following authority that decides policy bank interest rates on periodical basis is __________.

1. RBI
2. Monetary Policy Committee
3. Finance Ministry
4. Chief Economic Advisor

Options:
1. 1
2. 2
3. 3
4. 4
More money circulation with less quantum of goods produced is one of the reasons for ________.

(1) Inflation
(2) Contraction
(3) Stagnation
(4) Depression

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

An illegally altered file that is made in order to steal a software program is known as ________.

(1) Cookie
(2) Copy
(3) Crack
(4) Crash

Options:
1. ✗ 1
2. ✔ 2
3. ✔ 3
4. ✗ 4
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word/Phrase / Verb / Proposition

The time taken to initiate a transfer is called___.

(1) Seek time
(2) Disk latency
(3) Rotational delay
(4) Data transfer cable

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 165 Question Id : 3944843290 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

USP is expanded as_______.

(1) Universal Selling Proposal
(2) Unique Selling Proposal
(3) Unique Selling Proposition
(4) Universal Selling Proposition

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 166 Question Id : 3944843291 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 promoter of the idea of management by objectives is _____.

(1) Henri Fayol
(2) Rensis Likert
(3) Elton Mayo
(4) Peter Drucker

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number: 167 Question Id: 3944843292 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Establishment of Goals, policies and procedures for an economic unit is known as ________:

(1) Execution
(2) Implementation
(3) Reviewing
(4) Planning

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number: 168 Question Id: 3944843293 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0
A business’s short-term assets minus accounts receivable and inventory, divided by short-term liabilities is known as ____.

(1) Acid test
(2) Acquisition costs
(3) Adventure capital
(4) Accumulated depreciation

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Value added services means ____.

(1) Paying more for product
(2) Getting a good discount
(3) Getting more services at little or no cost
(4) Paying less for services than the declared cost

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
A: Why did Ranjit leave suddenly for Dubai?
B: Well, I smell a rat!

In this conversation B is

1. Evasive in replying
2. Suspicious of Ranjit’s motive for travel
3. Alarmed by sudden appearance of a rat
4. Expressing his disapproval of A’s question

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 4
Sub-Section Id: 394484332
Question Shuffling Allowed: Yes

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The files were destroyed. (Change the voice)

1. Someone destroyed the files.
2. The files got destroyed.
3. It is a mystery that files were destroyed.
4. The files destroyed someone.

Options:
1. ✔ 1
2. ✗ 2
3. 🎓 3
4. 🎓 4

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Question Number: 172 Question Id: 3944843297 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: Why don’t we have a short walk.

B: Sorry, I am totally done up.

In this conversation ‘B’ implies

(1) He had a walk already.
(2) He had dressed up for work.
(3) He is exhausted.
(4) He is sick.

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Money distributed to the owners of a business as profits is known as ___.

(1) Equity
(2) Interest
(3) Shares
(4) Dividend

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4
Why do you always have to pick holes in whatever I say.

The underlined idiom means

(1) Praise  
(2) Ignore  
(3) Find fault with  
(4) Understand  

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

Question Number : 175 Question Id : 3944843300 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: “I’m apprehensive of the future”  
B: “You seem to have everything one could possibly want. So why are you so apprehensive?”

‘B’ implies that ‘A’ is

(1) Optimistic  
(2) Pessimistic  
(3) Narcissistic  
(4) Opportunistic  

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

Question Number : 176 Question Id : 3944843301 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
Unexpectedly, the officer who is the winner of many awards proved to be a man of straw.

The underlined expression means

(1) Stubborn
(2) Easily overcome
(3) Self-loving
(4) Disgusting

Options:
1. ☑️ 1
2. 2
3. ☑️ 3
4. ☑️ 4

Question Number : 177 Question Id : 3944843302 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: It is strange. I thought the audience were educated, but they could not follow what I said. I was thoroughly disappointed.

B: Don’t cast your pearls before the swine.

‘B’ is

(1) Measuring the value
(2) Wasting time
(3) Appreciating the value
(4) Getting unnecessarily involved

Options:
1. ☑️ 1
2. 2
3. ☑️ 3
4. ☑️ 4

Sub-Section Number : 5
Sub-Section Id : 394484333
Question Shuffling Allowed : Yes
Choose the correct word/Correct Meaning of the Word/Fill in the Blanks with correct word /Phrase / Verb / Proposition

_______ of people with rich experience of life will provide you much motivation and guidance.

(1) Take the help
(2) Takes the help
(3) Taking the help
(4) Take help

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 179 Question Id : 3944843304 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

My friend is angry ___ me.

(1) Over
(2) On
(3) Upon
(4) With

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 180 Question Id : 3944843305 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
Everyone hates being made to ______

(1) Look up
(2) Look small
(3) Look over
(4) Look through

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 181 Question Id : 3944843306 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

Lawyers are often ___ as greedy and dishonest

(1) Adored
(2) Maligned
(3) Jibed
(4) Gambolled

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 182 Question Id : 3944843307 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 government ____ private land to build low-cost housing

(1) Appropriated
(2) Ordained
(3) Apprised
(4) Alleviated

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

He _____ mc from getting my rightful inheritance.

(1) Prevented
(2) Helped
(3) Encouraged
(4) Tried

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Rohan ____ from the competition as he felt he needed more preparation.

(1) Backed up
(2) Backed out
(3) Pulled up
(4) Jumped out

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 185 Question Id : 3944843310 Question Type : MCQ Option Shuffling : No Display
A mere 43% of Indian ____ mobile phones as opposed to almost 80% of men

(1) Woman are owning
(2) Women owning
(3) Women's own
(4) Women own

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Sub-Section Number: 6
Sub-Section Id: 394484334
Question Shuffling Allowed: Yes

Question Id: 3944843311 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No
Question Numbers: (186 to 190)

Read the following passage and answer questions:

The difference between a physician and a quack is this—a physician knows and admits that his powers are limited. He can aid nature. He can help her remove obstruction and clear away abnormal growth; but he cannot recreate a broken constitution or make a perforated lung do the work of a sound one. But a quack with his pills, and his plasters, and his potions, will undertake to cure all the ills that flesh is heir to. In like manner, the genuine reformer knows that the living law is the thought of the people, and that all Parliament can do is to fit thought to the life of the nation. It is not so much speed in legislation that is wanted, as still. It is not quantity, but quality, that is required. The highest interests of the State would often be better served by the wise and liberal administration of old laws than by high pressure production of new and imperfect ones. Obstruction or no obstruction, necessary legislation will come in due time if people want it. Free speech is more precious than all the measures in the ministerial portfolio. Error of opinion may be tolerated as long as there is the right to combat it. Discussion is a bulwark against oppression, and the sheet-anchor of liberty.

Sub questions:

Question Number: 186 Question Id: 3944843312 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical Correct Marks: 1 Wrong Marks: 0
Unlike a quack, a physician

(1) Does not help nature.
(2) Claims that his ability is limited.
(3) Denies that he cannot cure every disease and any disease.
(4) Hesitates to recreate a broken constitution.

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 187 Question Id : 3944843313 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Perception of people is

(1) In no way related to law
(2) Detrimental to law
(3) Always contrary to law
(4) Directly affiliated to law

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✔ 4

Question Number : 188 Question Id : 3944843314 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Legislation thrives on

(1) Speed and not skill
(2) Skill and not speed
(3) Partisan attitude
(4) Undigested information

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 189 Question Id : 3944843315 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Old laws well observed are

(1) As imperfect as new laws
(2) Better than new laws
(3) Free from the liberty of the new laws
(4) Ugly compared to the new ones

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

By ‘bulwark’ and ‘sheet-anchor’, the author means

(1) Measures that hinder progress
(2) Impediment and antagonism
(3) Fortification and support
(4) Conditional support

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number: 7
Sub-Section Id: 394484335
Question Shuffling Allowed: Yes

Question Id: 3944843317 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No
Question Numbers: (191 to 195)

Read the following passage and answer questions
Each of us has locked within us all that is necessary to achieve wealth and greatness. It's merely a matter of learning to use these hidden assets, of investing them so to speak, so we can cash in on them. The tragic thing is that so many go through life without ever putting them to use. Sometimes, trouble and adversity is necessary to make people use their resourcefulness and brain power to achieve success. A book keeper lost his job as Christmas was approaching. He had no money to buy his 10 year old son a gift. Instead of merely despairing, he went to work making the boy a gift. Using two wheels from a discarded baby carriage, a few pieces of lumber from the basement, and some bright red paint, he constructed a toy that captured the attention of the entire neighbourhood. Other children wanted similar toys. The demand grew so fast that the unemployed book keeper turned his basement into a factory, then moved his production to a real industrial plant. The toy the book keeper designed was called the 'Scooter'. Have you searched carefully for any 'hidden' resources you've overlooked simply because they weren't in some form you could bank immediately? Have you some plan or idea which might prove of great value if you brought it into the open and put it to use? Somewhere you have unused assets. Put them to work for you and make yourself financially independent.

Sub questions

Question Number : 191 Question Id : 3944843318 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

What are 'hidden assets'?  

(1) Hidden money  
(2) Accumulated wealth  
(3) Secret qualities  
(4) Potential for achieving greatness

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

Question Number : 192 Question Id : 3944843319 Question Type : MCQ Option Shuffling : No Display
Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

What generally forces a person to exploit these 'assets'?  

(1) Adversity  
(2) Resourcefulness  
(3) Brain power  
(4) Money

Options :  
1. ✅ 1
How did the book keeper manage to give his son a gift?

1. He used two wheels
2. He bought a carriage
3. He bought red paint
4. He created a 'scooter' from junk

Options:
1. ✗
2. ✗
3. ✗
4. ✔

How did the book keeper become rich?

1. He opened a shop in his basement
2. He started a shop in the neighbourhood
3. He opened a real industrial plant
4. He started a factory

Options:
1. ✗
2. ✗
3. ✗
4. ✔

How can one become financially independent?

1. By using one's 'unused' assets
2. By becoming rich
3. By taking up a job
4. By setting up factories

Options:
1. ✔
Leading investors have joined the growing chorus about governments and companies rusting into producing biofuels as a solution for global warming saying that many involved in the sector could be jeopardising future profits if they do not consider the long-term impact of what they are doing carefully.

It is essential to build sustainability criteria into the supply chain of the green fuel project in order to ensure that there is no adverse effect on the surrounding environment and social structures. The report produced by the investors expresses concern that many companies may not be fully aware of the potential pitfalls in the biofuel sector.

Production of corn and soya beans has increased dramatically in the last years as an eco-friendly alternative to fossil fuels but environmental and human rights campaigners are worried that this will lead to destruction of rain forests. Food prices could also go up as there is increased competition for crops as both food stuffs and sources of fuel. Last week, the UN warned that biofuels could have dangerous side effects and said that steps need to be taken to make sure that land converted to grow biofuels does not damage environment or cause civil unrest. There is already great concern about palm oil, which is used in many foods in addition to being an important biofuel, as rain forests are being cleared in some countries and people driven from their homes to create palm oil plantations.

An analyst and author of investors’ report says that biofuels are not a cure for climate change but they can play their part as long as governments and companies manage the social and environmental impacts thoroughly. There should also be greater measure taken to increase efficiency and to reduce demand.

Sub questions
Who are not happy about rushing into producing biofuels?

(1) Governments
(2) Investors
(3) Companies
(4) General public

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 197 Question Id: 3944843325 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

Who are jeopardizing future profits?

(1) Those who don’t think of profits.
(2) Those who don’t think of short-term impact
(3) Those who don’t think of long-term impact
(4) Those who think of long-term impact

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number: 198 Question Id: 3944843326 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks: 1 Wrong Marks: 0

“Potential pitfalls” means

(1) Possible unsuspected dangers in future
(2) Dangers that are sure to come in future
(3) Dangers that have already been faced
(4) Dangers that would never come

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 199 Question Id: 3944843327 Question Type: MCQ Option Shuffling: No Display
Question Number: Yes Is Question Mandatory: No Option Orientation: Vertical
Correct Marks : 1 Wrong Marks : 0

Increase in production of corn and soya bean will not lead to

1. Destruction of fossil fuels
2. Destruction of rainforests
3. Increased competition for crops as food as well as fuel
4. Increase in food prices

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 200 Question Id : 3944843328 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Sustainability of supply chain in green fuel project is necessary for

1. Safeguarding profits
2. Reducing risks
3. Protecting environment and society
4. Increasing production

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4