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 2018 23rd May 2018 Shift 2
Subject Name: TS ICET 2018
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Total Marks: 200
Display Marks: No
Calculator: None
Magnifying Glass Required?: No
Ruler Required?: No
Eraser Required?: No
Scratch Pad Required?: No
Rough Sketch/Notepad Required?: No
Protractor Required?: No
Display Number Panel: Yes
Group All Questions: No

Question Number : 1  Question Id : 9126062861  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What is the area of the circle P?

What is the area of the circle P?

I. Diameter of circle Q = 6 cm

II. Radius of the circle Q is twice the radius of circle P

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

Note: This question is followed by data in the form of two statements labeled 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.

What is the value of \( xy \)?

\( xy = \) what?

I. \( x^2 = 4 \)
II. \( y^2 = 9 \)
Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔️ 4

Question Number: 3  Question Id: 9126062863  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

Is \( x \) positive?

\( x \) మీదుక అంచనా?

I. \( xy = 6 \)
II. \( xy^2 = 12 \)
Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 4  Question Id: 9126062864  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What is the value of \( r^2 + s \)?

\[ r^2 + s \text{ equals?} \]

I. \( t - u = 8 \)

II. \( r^2t - su + st - r^2u = 24 \)
Options:
1. ✗ 1
2. ✗ 2
3. ✔️ 3
4. ✗ 4

Question Number: 5  Question Id: 9126062865  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes
Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

If p and q are positive real number, is the product of pq>1?

P. q is a multiple of 5
Q. pq>1

I. q > 1
II. P < 1
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

When n and m are real numbers, what is the value of n?

n, m are real numbers such that n = m. Find m?

I. 3n - m = 1
II. n + m = 23
Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 7  Question Id : 9126062867  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What is the value of \[ \frac{2p+3q}{3p+2q} \]

\[ \frac{2p+3q}{3p+2q} \] is an integer?

I. \( \frac{p}{q} = \frac{2}{5} \)

II. \( p \) and \( q \) are positive numbers

\( p, q \) యొక్క వాటిని తెలుసుకుంటుంది.
Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 8  Question Id : 9126062868  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Data Sufficiency

పరిసిద్ధి

Note: This question is followed by data in the form of two statements labeled 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.

పిల్లె: తెలుగు శాస్త్రాలు విషయంలో, తెలుగు భాష ఇంటిలో చరిత్రకాలం లో ప్రధానమైన శాస్త్రాలు. ప్రపంచ ప్రస్తావనలు క్రితితే, తెలుగు భాషలకు అధికంగా తెలుగు శాస్త్రాలు అధికంగా విధ్యాతితే. తెలుగు భాషలేదా తెలుగు శాస్త్రిక నిర్ధారణలు (1) కలిగి (4) విభాగం నూనె సూచించడం ఉండాలి.

(a) తెలుగు భాషలో అంశాన్ని వినిపించడం తెలుగు శాస్త్రాలకు ప్రధానమైన శాస్త్రాలు మనుస్తా గా గట్టుపట్టాలు.

(b) తెలుగు భాషలో అంశాన్ని తెలుగు శాస్త్రాలకు ప్రధానమైన శాస్త్రాలు మనుస్తా గా గట్టుపట్టాలు.

(c) తెలుగు భాషలో అంశాన్ని తెలుగు శాస్త్రాలకు ప్రధానమైన శాస్త్రాలు I, II యింది శాస్త్రాలు అంశాన్ని వినిపించడం కూడా ఉంది కాబట్టి తెలుగు శాస్త్రాలు మనుస్తా గా గట్టుపట్టాలు (3) గా గట్టుపట్టాలు.

(d) తెలుగు భాషలో అంశాన్ని తెలుగు శాస్త్రాలకు ప్రధానమైన శాస్త్రాలు I, II యింది శాస్త్రాలు అంశాన్ని వినిపించడం కూడా ఉంది కాబట్టి తెలుగు శాస్త్రాలు మనుస్తా గా గట్టుపట్టాలు (4) గా గట్టుపట్టాలు.

Is \( ab = cd \)?

\( ab = cd \) ఎంతో ప్రామాణికం?

I. \( a : b = c : d \)

II. \( a, b, c, d \) ఎన్నో సంఖ్యలు కలిగిన మార్గాలు

\( a, b, c, d \) ఎన్నో సంఖ్యలు కలిగిన మార్గాలు.
Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ☑ 4

Question Number: 9  Question Id: 9126062869  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes
Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

For the function \( f : \mathbb{R} \rightarrow \mathbb{R} \) is \( f \left( -\frac{1}{2} \right) = f \left( \frac{1}{2} \right) = f (2) \) ?

For the function \( f : \mathbb{R} \rightarrow \mathbb{R} \) is \( f \left( -\frac{1}{2} \right) = f \left( \frac{1}{2} \right) = f (2) \) ?

I. \( f(x) = \begin{cases} 
-x & \text{for } x < 0 \\
x & \text{for } x \geq 0 
\end{cases} \)

II. \( f(x) = \begin{cases} 
-x & \text{for } x < 0 \\
0 & \text{for } 0 \leq x \leq 1 \\
\frac{1}{x} & \text{for } x > 1 
\end{cases} \)
Options:
1. ✊ 1
2. ☑ 2
3. ✊ 3
4. ✊ 4

Question Number: 10  Question Id: 9126062670  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What is the surface area of the rectangular solid Y?

What is the surface area of the rectangular solid Y?

I. The dimensions of one face of Y are 2 and 3.

II. The volume of Y is 12.
Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number: 11  Question Id: 9126062871  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

Is $ab$ a rational number?

$ab$ అనే పూర్తిహద నాటి కాదు?

I. $a$ is a rational number.

$a$ అనే పూర్తిహద నాటి

II. $b$ is an irrational number.

$b$ అనే అంకువంత నాటి
Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 12  Question Id : 9126062872  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

If the perimeter of a rectangular hall is 80 feet, what is its area?

I. The length of the hall is 25 feet.

II. The length of the hall is greater than its width.
Questions:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What is the value of the integer \( x \geq 0 \)?

\( x \geq 0 \) మీదుగా ఎంత?

I. \( 16^x \) is odd

\( 16^x \) ఎద్డ

II. \( 15^x \) is odd

\( 15^x \) ఎద్డ
Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 14  Question Id: 9126062874  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

Is \( x > y \)?

\( x > y \) चेतावनी?

I. \( 2x + y = 9 \)
II. \( |x - y| = 25 \)
Options:
1. **1**
2. **2**
3. **3**
4. ✔️ 4

Question Number : 15  Question Id : 9126062875  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

In the figure, is $AB = AC$?

In the diagram, $AB = AC$ whether?

I. $x + y = z$
II. $y = 180 - z$
Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 16  Question Id: 9126062876  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

For $a, b \in \mathbb{R}$, if the number of positive integral divisors of the positive integer $4ab$ is 3, then what is the value of $b$?

$$a, b \in \mathbb{R}, \text{ then } 4ab \text{ has } 3 \text{ divisors.}$$

I. $a = 5$

II. $a$ is a prime number.

$\text{Then } b = \ldots$
Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 17  Question Id: 9126062877  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What is the integer $\alpha$?

$\frac{1}{7} < \frac{1}{2 + \alpha} \leq \frac{1}{2}$

$\alpha^2 + 24 = 10\alpha$
Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number: 18  Question Id: 9126062878  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

How old is Raghun?

ఎంత వయస్సు రాగును?

I. Today is his birth day.

అప్పుడు వార్తని దినును.

II. One year after he will be twice as old as 10 years ago.

ఒక సంవత్సరం పైగా తనదే వయస్సు 10 సంవత్సరాలకు రెండు గణితులు ఎక్కడ.
Questions:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 19  Question Id : 9126062879  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What is the value of the integer w?

What is the value of the integer w?

I. w is a multiple of 3.

II. 420 < w < 425.
Question Number : 20  Question Id : 9126062880  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical

Options :
1.  
2.  
3. ✓
4.  

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Data Sufficiency

Note: This question is followed by data in the form of two statements labeled 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.

What percentage of students in the college receive scholarships?

I. The total number of students in the college is 2000.

II. The percentage of students that receive scholarships in the final year is 5% more than the students that receive scholarships in the first year.
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

MOUSE : KPSTC : LIGHT : ________

(1) MGHEU (2) JJEIR (3) JHEGR (4) MJHKV

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✔ 4
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

8 : 64 :: 12 : ________

(1) 72    (2) 84    (3) 96    (4) 108

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

4 : 18 :: 6 : _________

(1) 18  (2) 42  (3) 54  (4) 39

Options:
1. * 1
2. * 2
3. * 3
4. ✔ 4

Question Number : 24  Question Id : 9126062884  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

123 : 169 :: 235 : ________

(1) 5475    (2) 9525    (3) 12575    (4) 15625

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 25 Question Id : 9126062885 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

99 : 120 :: 48 : ________

(1) 49  (2) 52  (3) 54  (4) 63

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

Question Number : 26  Question Id : 9126062886  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

63 : 49 :: 35 : _______

(1) 21   (2) 28   (3) 32   (4) 27

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

QPON : MLKJ :: XWVU : ________

(1) PQRS  (2) SRPQ  (3) TSRQ  (4) USRQ

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 28  Question Id : 9126062888  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

House : Door :: Compound : ____?

House : House ?

(1) Gate    (2) Fence    (3) Foundation    (4) Wall

Options :

1. ✔️ 1
2. ❌ 2
3. ❌ 3
4. ❌ 4

Question Number : 29  Question Id : 9126062889  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

ప్రశ్న: ఈవైపు కసూరి సారి సారి నెమటాడు కాదు అనే పాత యొక్క మామలు మరియు పాత యొక్క మామలు యొక్క మామలు మామలు. ఈవైపు కసూరి సారి సారి నెమటాడు కాదు అనే పాత యొక్క మామలు యొక్క మామలు యొక్క మామలు యొక్క మామలు మామలు యొక్క మామలు మామలు మామలు.

22 : 2222 : : _______ : 222222

(1) 222    (2) 22    (3) 22222    (4) 222222

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 30  Question Id : 9126062890  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Problem Solving — Sequence and Series

Note: The following question has a sequence of numbers or letters that follow a definite pattern is given. Each question has a blank space. This has to be filled by the correct answer from the four given options to complete the sequence without breaking the pattern.

25 : 37 :: 49 : ________

(1) 42  (2) 56  (3) 64  (4) 65

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

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Note: From the question, pick the odd thing out:

(1) FLASH  (2) CROWD  (3) JUDGE  (4) SCANT

Options:
1. 1
2. 2
3. 3

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Question Number : 32  Question Id : 9126062892  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical

Note : From the question, pick the odd thing out :

మామిడి: ఈమటకిని తిగిలించి కొనసాగం:

(1) ABC  (2) PQR  (3) MNP  (4) XYZ

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 33  Question Id : 9126062893  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical

Note : From the question, pick the odd thing out :

మామిడి: ఈమటకిని తిగిలించి కొనసాగం:

(1) \( \frac{1}{100} \)  (2) \( \frac{1}{1000} \)  (3) \( \frac{1}{10000} \)  (4) \( \frac{1}{100000} \)

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 34  Question Id : 9126062894  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Note: From the question, pick the odd thing out:

(1) 81  (2) 64  (3) 49  (4) 25

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

---

Question Number : 35  Question Id : 9126062895  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical

Note: From the question, pick the odd thing out:

(1) D  (2) H  (3) L  (4) P

Options:
1. ✗ 1
2. ✓ 2
3. ✓ 3
4. ✗ 4

---

Question Number : 36  Question Id : 9126062896  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

6, 15, 35, 77, ____?

(1) 143  (2) 134  (3) 119  (4) 123

Options:
1. ✓ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

3, 5, 9, 17, ___, 65, ___

(1) 19  (2) 23  (3) 29  (4) 33

Options:
1. * 1
2. * 2
3. * 3
4. ✔ 4

Question Number : 39  Question Id : 9126062899  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

13 \frac{5}{6}, 10 \frac{1}{3}, 7 \frac{1}{3}, 4 \frac{5}{6}, 2 \frac{5}{6}, _____

(1) 1 \frac{3}{4}  (2) 1 \frac{5}{6}  (3) 1 \frac{1}{6}  (4) 1 \frac{1}{3}

Options:
1. * 1
2. * 2
3. * 3
4. ✔ 4

Question Number : 40  Question Id : 9126062900  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

1. 2, 5, 12, 27, ____, 121, 248, ______

(1) 58 (2) 64 (3) 86 (4) 112

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 41 Question Id: 9126062901 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

65, 61, 56, 50, ______

(1) 43 (2) 42 (3) 41 (4) 44

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 42 Question Id: 9126062902 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

107, 77, 52, 32, ___, 7, 2

(1) 17   (2) 16   (3) 14   (4) 12

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

11, 27, 51, 123, ___,

(1) 173   (2) 163   (3) 171   (4) 179

Options:
1. ✗ 1
2. ✔ 2
3. ✔ 3
4. ✗ 4
Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

99, 98, 94, 85, _____, 44, 8

(1) 32  (2) 36  (3) 48  (4) 69

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

Note: The question follows a definite pattern, observe the same and fill in the blanks with suitable answers.

3, 3, 4.5, 9, 22.5, _____

(1) 67.5  (2) 65.5  (3) 60.5  (4) 62.5

Options:
1. 1
2. 2
3. 3
4. 4
Problem Solving — Data Analysis

Note: The following Bar Diagram shows the marks obtained by 5 students P, Q, R, S, T in Physics (Ph) and Chemistry (Ch) out of possible 140 marks in each subject. Based on the data answer questions 46, 47 and 48.

Sub questions

Question Number : 46  Question Id : 9126062907  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Marks obtained by S in chemistry is what percent of the total marks obtained by all students in chemistry?

(1) 25%  (2) 30%  (3) 32%  (4) 35%

If the marks obtained by T in Physics were increased by 14% then what would be his approximate new percentage in Physics when the maximum marks in Physics were 140?

(1) 38%  (2) 41%  (3) 43%  (4) 45%

Options :
What is the ratio between the total marks scored by Q and S together in Chemistry to the total marks scored by P and R together in Physics?

Q, S యొక్క విద్యాంశానికి సంతరించబడిన సంఖ్యలు సాధనం మాత్రమే పనులు పరిమితం ప్రకారం P, R యొక్క విద్యాంశానికి సంతరించబడిన సంఖ్యలు సాధనం మాత్రమే పనులు పరిమితం ప్రకారం

(1) 17 : 19
(2) 23 : 25
(3) 23 : 21
(4) 17 : 23

Options:
1. ✗ 1
2. ✗ 2
3. ☑ 3
4. ✗ 4
Problem Solving — Data Analysis

Note: The pie chart given below shows the marks obtained by a student in 5 subjects out of total marks 900. Based on this data answer questions 49 to 53.

Sub questions
The marks obtained in Maths are

(1) 220  (2) 200  (3) 180  (4) 210

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

The total marks obtained in languages are

(1) 280  (2) 260  (3) 275  (4) 295

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
The percentage of marks obtained in Maths, Physics and Chemistry among the total marks in all the five subjects is

(1) \(68\frac{4}{5}\%\)  
(2) \(64\frac{2}{5}\%\)  
(3) \(79\frac{4}{5}\%\)  
(4) \(69\frac{4}{5}\%\)

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

The ratio between the marks in languages and other subjects is

(1) 11 : 24  
(2) 11 : 25  
(3) 13 : 23  
(4) 15 : 21

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4
The marks obtained in English are

1. 180
2. 170
3. 185
4. 175

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

Question Number : 54  Question Id : 9126062916  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Note: In a group of 160 people, each person speaks Telugu or English or Tamil. 20 persons speak all the three languages. 100 persons speak at least two languages of the three. Using this information answer questions 54 and 55.

Options:

How many persons in the group speak exactly two languages of the three?

1. 65
2. 80
3. 75
4. 70

Options:
Note: In a group of 160 people, each person speaks Telugu or English or Tamil. 20 persons speak all the three languages. 100 persons speak at least two languages of the three. Using this information answer questions 54 and 55.

What percent of the persons who speak only one of the three languages among all the persons in the group?

1. $37$
2. $36$
3. $36\frac{1}{2}$
4. $37\frac{1}{2}$

Options:
1. $1$
2. $2$
3. $3$
4. $4$
Problem Solving — Coding and Decoding Problems

Note: English alphabet is coded as follows:

(i) Each consonant is coded to its next 3\textsuperscript{rd} consonant cyclically.

\[ \text{i.e., B is coded as F, F to J, \ldots, X to B, Z to D, \ldots.} \]

(ii) Vowels A, E, I, O, U are coded to Vowels as A to U, E to O, I to I, O to E, and U to A.

Using this coding pattern, answer the following question.
The word VOWEL is coded as

VOWEL వోవేలు

(1) YEZON   (2) YEZOQ   (3) YEZOP   (4) YEZOQ

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 57  Question Id : 9126062920  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

The word CONSONANT is coded as

CONSONANT కాసనాంటు

(1) GERWERURX   (2) GFRWFRURX

(3) GESWESUSX   (4) GETWETUTX

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 58  Question Id : 9126062921  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Code word for WORD is

WORD యువక అనే

(1) YEVH    (2) WEVJ    (3) ZEVJ    (4) ZEYH

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

The number of letters that left fixed under this coding is?

యువక అనే వి సర్వే వాతా మనం యువక జనమానం?

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

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 59  Question Id : 9126062922  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Question Number : 60  Question Id : 9126062923  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Code word for ENGLISH is

ENGLISH ఎ లింగ్‌ స

(1) ORKPIXL  (2) ORKPIWL

(3) ORLPIXL  (4) OSKPIWL

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

Problem Solving — Coding and Decoding Problems

ప్రశ్నాంశం — కోడంగా అనుక్షించడం సమస్యలు

If IMMUNE is coded as JSTRK then code word for MENU is

IMMUNE లో JSTRK యె లేదా MENU లో మీను

(1) SRKT  (2) KSTR  (3) SKRT  (4) TRSK

Options:
1. 1
2. 2
3. 3
4. 4
AISLE is coded as 0910111213 then code for LESS is

AISLE యొక్క 0910111213 యొక్క LESS యొక్క సంఖ్య

(1) 12131111     (2) 11131212

(3) 13121111     (4) 11121313

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving — Coding and Decoding Problems

Note: Let $n^{th}$ letter for $14 \leq n \leq 26$ in the English alphabet be coded as $(n-13)^{th}$ letter and $n^{th}$ letter for $1 \leq n \leq 13$ be coded as $(n+13)^{th}$ letter. For this coding pattern, answer the question.

Code word for GAME is

GAME గామే

(1) NTRZ  (2) TNZR  (3) TNRZ  (4) TNSZ

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving — Coding and Decoding Problems

Note: Let \( n^{th} \text{ letter for } 14 \leq n \leq 26 \) in the English alphabet be coded as \( (n-13)^{th} \) letter and \( n^{th} \text{ letter for } 1 \leq n \leq 13 \) be coded as \( (n+13)^{th} \) letter. For this coding pattern, answer the question.

14\leq n \leq 26 \text{ : } \text{_CODE}\text{ as } (n-13)\text{^{th} letter}
1 \leq n \leq 13 \text{ : } \text{_CODE}\text{ as } (n+13)\text{^{th} letter}

Code word for ALERT is

ALERT

Options:

(1) NYSEG  (2) NYREH  (3) NYREG  (4) NYREF

Options :

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Problem Solving — Coding and Decoding Problems

Note: Let \( n^{th} \) letter for \( 14 \leq n \leq 26 \) in the English alphabet be coded as \( (n-13)^{th} \) letter and \( n^{th} \) letter for \( 1 \leq n \leq 13 \) be coded as \( (n+13)^{th} \) letter. For this coding pattern, answer the question.

Code word for VICTORY is

VICTORY

(1) IVPGBEL     (2) IVPBGEEL
(3) IVPGBLE     (4) IVPGBLM

Options:
1. ✓ 1
2. × 2
3. × 3
4. × 4

Question Number: 66  Question Id: 9126062929  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
66. If a month starts with Monday then the date on which the Second Saturday falls is?

(1) 12    (2) 13    (3) 14    (4) 15

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

The angle between the two hands of a clock when it shows 5.12 hours?

(1) 76°    (2) 80°    (3) 84°    (4) 86°

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Problem Solving — Coding and Decoding Problems

At what time between 10 am and 11 am the angle between hands of a clock is \(162\frac{10}{2}\) ?

(1) 10.25 am  
(2) 10.30 am  
(3) 10.40 am  
(4) 10.45 am

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Problem Solving — Coding and Decoding Problems

If A is the brother of the son of B’s son, how is A related to B?

B ప్రతి ఖాతాలో A ప్రతి కుమారు. B ప్రతి A నుండి ఎలా రాయవచ్చు?

(1) Uncle  
(2) Grand Son  
(3) Son  
(4) Brother

Options :
A loan application was submitted at a bank counter on a certain day of the week. After verification of the details the application was forwarded to the Manager on the next day. The Manager after scrutiny sent the application the same day to Head Office. The next 2 days were bank holidays and the loan was sanctioned next day which was Monday. Which day of the week was the application submitted?

Options:
1. Monday  
2. Tuesday  
3. Thursday  
4. Friday

Options:
Problem Solving — Coding and Decoding Problems

A local train leaves the station at regular intervals of 45 minutes. Arriving at the station a person realized that the last train left 15 minutes back and next train is at 8.45 am. When did the person arrive at the station?

\[ \text{65 \text{ minutes}} \times 15 \text{ minutes} = 975 \text{ minutes} \]

\[ \text{975 minutes} = 1 \text{ hour and 30 minutes} \]

\[ \text{8.45 am + 1 hour and 30 minutes = 9.35 am} \]

Options:

1. 7.45 am
2. 8.00 am
3. 8.15 am
4. 8.30 am

(1) 7.45 am  (2) 8.00 am  (3) 8.15 am  (4) 8.30 am
Six friends A, B, C, D, E and F sit around a circle facing the center such that

(i) A is between C and E; (ii) E is between D and F; (iii) B is between C and F and to the left of C. Who is sitting between A and B?

A. B, C, D, E, F
B. A, C, E, F, D
C. A, D, F, E, C
D. E, F, C, D, A

Options:
(1) C  (2) D  (3) E  (4) F
Problem Solving — Coding and Decoding Problems

Let the symbols $\alpha, \beta, \gamma, \text{and } \delta$ denote the arithmetic operations of addition, subtraction, multiplication and division respectively. Then,

$100\alpha10\delta5\beta15\gamma5 =$

(1) 27  (2) 52  (3) 68  (4) 124

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving — Coding and Decoding Problems

For two non-zero numbers \( m \) and \( n \) define \( \ast \) by:

\[
m \ast n = \frac{1}{mn} + 1.
\]

Then compute

\[
\sum_{k=1}^{2018} \left( \frac{1}{k^2} \ast k \right) =
\]

(1) 1008 \times 2018  
(2) 1009 \times 2019  
(3) 2017 \times 2018  
(4) 2018 \times 2019
For integers $x$ and $y$ define $\ast$ by

$$x \ast y = (x + y)^2 - (x - y)^2 \quad \text{and} \quad x \Delta y = (x + y)^3 + (x - y)^3$$

Then $\boxed{3 \ast 5} \ast (1 \Delta 2) = \boxed{13 \times 280}$

Options:
1. **1**
2. **2**
3. **3**
4. ✓ 4
Arithmetical Ability

\[(a^m)^n = a^{mn} \Rightarrow m = \]

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 77  Question Id : 9126062940  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Arithmetical Ability

\[2x^2 - 4 = \frac{1}{16(10-3x)} \Rightarrow x = \]

(1) 6 \hspace{1cm} (2) 4 \hspace{1cm} (3) -6 \hspace{1cm} (4) -2

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 78  Question Id : 9126062941  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Arithmetical Ability

20 men can do a piece of work in 10 days working 6 hours a day. How many men are needed to complete double the work in 8 days working 10 hours a day?

20 మంది మనుగమ అని మూడు రెండు నాలుగు రోజులలో ఏడు ఘనారు 10 ఘనారు
మంది యొక్క కరపం. ఏడు ఘనారు 10 ఘనారు మంది, అంటే ఏడు రోజులలో 8 ఘనారు
మంది యొక్క కరపం ఎంత మంది మనుగమారు?

(1) 25   (2) 26   (3) 28   (4) 30

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Arithmetical Ability

If the ratio of the areas of two squares is 4:7 then the ratio of the perimeters of the squares is?

సాముద్రిక విస్తారాల మంది 4:7 అంటే నేల విస్తారాల మంది?

(1) 4 : 7   (2) 8 : 4√7   (3) √7 : 2   (4) 2 : √7

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

\[ x = 5 - 2\sqrt{6} \quad \Rightarrow \quad \sqrt{x} - \frac{1}{\sqrt{x}} = \]

(1) 2\sqrt{3}  \hspace{1cm} (2) 2\sqrt{2}  \hspace{1cm} (3) -2\sqrt{3}  \hspace{1cm} (4) -2\sqrt{2}

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

For \( k \neq 0 \), if \( a = \frac{3}{\sqrt{k}} - \frac{1}{\sqrt[3]{k}} \) then, \( a^3 + 3a = \)

\( k \neq 0 \), \( a = \frac{3}{\sqrt{k}} - \frac{1}{\sqrt[3]{k}} \) \( \Rightarrow \) \( a^3 + 3a = \)

(1) \( \frac{k-1}{k^2+1} \)  \hspace{1cm} (2) \( \frac{k^2-1}{k} \)  \hspace{1cm} (3) \( \frac{k-1}{k^2} \)  \hspace{1cm} (4) \( \frac{k}{k^2-1} \)

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

Question Number : 80  Question Id : 9126062943  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Question Number : 81  Question Id : 9126062944  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Question Number : 82  Question Id : 9126062945  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Arithmetical Ability

Which of the following numbers is divisible by 11?

(1) 1111111   (2) 9999999   (3) 99999   (4) 999999

Options:
1. * 1
2. * 2
3. * 3
4. ✓ 4

What is the number in the units place of $359^{59}$?

$359^{59}$ యొక్క మధ్య ఎందరూ సేందులు విని?

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

Options:
1. * 1
2. * 2
3. * 3
4. ✓ 4
Arithmetical Ability

The gcd of two numbers is 85 and their sum is 1020. One such pair of the numbers is

(1) 425, 595  
(2) 500, 520  
(3) 510, 510  
(4) 550, 650

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

What is smallest number of 5 digits which is divisible by 12, 15, 20 and 35?

12, 15, 20 మొత్తం 35 వ్యాఖ్యాత కంటే 5 వ్యాఖ్యాత రావు?

(1) 10070  
(2) 10080  
(3) 10090  
(4) 10110

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

\[\frac{3.2575757\ldots}{a}\] \gcd (a, b) = 1 \Rightarrow a-b =

\[\frac{3.2575757\ldots}{a}\] \gcd (a, b) = 1 \Rightarrow a-b =

(1) 149 \quad (2) 447 \quad (3) 2235 \quad (4) 3257

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 87  Question Id : 9126062950  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Arithmetical Ability

\[\text{If } \frac{5}{8}\text{th of a number } x \text{ is subtracted from } \frac{25x}{32}, \text{ the result is 320. Then } x = \]

\[x \quad \frac{5}{8} \quad \frac{25x}{32} \quad \text{result} \quad 320. \text{ Hence } x =

(1) 512 \quad (2) 1024 \quad (3) 2048 \quad (4) 4096

Options :
1. ✗ 1
2. ✔ 2
3. ✔ 3
4. ✗ 4

Question Number : 88  Question Id : 9126062951  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Arithmetical Ability

The largest among $\frac{1}{2}$, $\frac{11}{23}$, $\frac{3}{8}$, $\frac{9}{16}$ is

(1) $\frac{1}{2}$  (2) $\frac{11}{23}$  (3) $\frac{3}{8}$  (4) $\frac{9}{16}$

Options:
1. ⭐ 1
2. ⭐ 2
3. ⭐ 3
4. ✓ 4

Arithmetical Ability

If $a = \sqrt[3]{11}$, $b = \sqrt[4]{23}$ and $c = \sqrt[6]{119}$ then the decreasing order of $a$, $b$, $c$ is

$a = \sqrt[3]{11}$, $b = \sqrt[4]{23}$, $c = \sqrt[6]{119}$ decreasing $a$, $b$, $c$ is

(1) $a > b > c$  (2) $b > a > c$  (3) $a > c > b$  (4) $c > b > a$

Options:
1. ⭐ 1
2. ⭐ 2
3. ✓ 3
4. ⭐ 4
Arithmetical Ability
అరిథ్మెటికల్ అబిలిటీ

4 \frac{1}{3} \% \text{ of } 5 \frac{2}{7} \% \text{ of } x = 962 \Rightarrow x =

x \times 5 \frac{2}{7} \% \times 4 \frac{1}{3} \% = 962 \Rightarrow x =

(1) 2100000 \quad (2) 420000 \quad (3) 630000 \quad (4) 840000

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Anil, Sunil and Akhil are trading of same goods. Anil sells his goods 25% cheaper than Sunil and 25% costlier than Akhil. Then Akhil’s sells goods cheaper than Sunil by percentage of

విషే, అనిల్ బాధ్యం జాతిత్వ అంతర ఇప్పుడు సమానం దృశ్యం మాత్రమే ఏడిప్పుడు నిష్ణాతుడు. అనిల్ వాడి 25% అధిగానం, సహిత్త వాడి 25% ఉందుందే సహిత్త తన వాడి వాడుతున్నాడు. అనిల్ వాడి 25% అధిగానం ఉన్నప్పుడు సహిత్త వాడి చాలే ఏడిప్పుడు అధిగానం ఉన్నప్పుడు అనిల్ వాడి వాడుతున్నాడు అధిగానం ఉందుండాలి

(1) 40\% \quad (2) 33 \frac{1}{3} \% \quad (3) 30\% \quad (4) 25\%

Options:
Arithmetical Ability

If the cost price of 11 mangoes is equal to the selling price of 9 mangoes then percentage of profit is

\[
\frac{11}{9} \quad (2) \quad 11 \frac{1}{9} \quad (3) \quad 9 \frac{1}{11} \quad (4) \quad 22 \frac{2}{9}
\]

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

Mr. A has purchased a property and sold $\frac{2}{3}$ of the property with 10% profit. If the profit received through this sale is Rs. 60000, the cost price of the total property (in rupees) is

\[\text{Salary} = \frac{2}{3} \times 10\% \times \text{Total Salary}, \quad \text{Salary} = 60000 \text{ Rs.} \]

(\text{Salary})

1. 1200000
2. 900000
3. 7500000
4. 600000

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

A, B entered into a business with a capital of Rs. 9 lakh, Rs. 12 lakh respectively. After 4 months C has joined the business with a capital of Rs. 15 lakh then the share of ‘C’ in a profit of Rs. 6.975 lakh at the end of the year is

A, B వంటివారు 9 లక్ష, 12 లక్ష విధానాలు ప్రతిబింభం చేసి 4 మోష్ట్ వేల ప్రకారం సుమారు 15 లక్ష విధానాన్ని ఉపయోగించారు. 4 మోష్ట వేల ప్రకారం 15 లక్ష విధానందరు C నిర్ధిష్ఠం చేసినాం.

విధానాన్ని సుమారు 6.975 లక్ష అద్భుతంగా C నిర్ధిష్ఠం చేసినాం.

(1) 257500    (2) 232500    (3) 225000    (4) 205000

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

A, B and C entered into a business partnership. A got $\frac{2}{5}$ of the profit while B and C distributed the remaining profit equally. If C got Rs. 4000 less than A, their total profit was

A, B, C అవి కలిసి కార్యసాధనాలను వేసారు. ఆడిసన్ $\frac{2}{5}$ పరిష్కారం అయితే, మార్పిడి B, C ద్వారా సాధారణంగా విభజించబడింది. C నియంత్రణ భాగం A ముఖ్యంగా 4000 రూపాయాలు కుటుంబం కారణంగా, మార్పిడి భాగం

(1) 36000 (2) 40000 (3) 42000 (4) 44500

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Arithmetical Ability

Two taps A and B can independently fill a tank in 30 minutes and 45 minutes respectively and a pump C can empty full tank in 20 minutes. If all are opened for 10 minutes and the pump C is closed, then the time required to fill the tank (in minutes) is?

Options:

1. 17
2. $25\frac{1}{3}$
3. $15\frac{1}{3}$
4. 27

Question Number : 97  Question Id : 9126062960  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Arithmetical Ability

Two pipes A and B can fill a tank in 24 minutes and 30 minutes respectively. Both pipes are opened simultaneously but after 5 minutes A is turned off. After how much more time will the tank be filled?

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.
Arithmetical Ability
అరిథ్మెటికల్ అబిలిటి

A cyclist travelling at 30 kmph takes 3 hrs more to cover distance between two cities A and B than another cyclist travelling at 40 kmph. What is the distance between A and B?

ఒక పర్యాటకుడు A, B యప్పుడు 30 కి.మీ.ప్రాంతంలో మరింతం 3 ఎం. క్రితి, మరొక పర్యాటకుడు 40 కి.మీ.ప్రాంతంలో ఆడినా, ముందు నమోదు చేయాలని ప్రశ్నలు. A, B యఖాని ఎందుకు హేతువల్ల?

(1) 360 km  (2) 350 km  (3) 320 km  (4) 300 km

360 కి.మీ. 350 కి.మీ. 320 కి.మీ. 300 కి.మీ.

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

Question Number : 99  Question Id : 9126062962  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
The distance between two cities is 30 km. If two persons A and B travel in the opposite directions starting from the two cities, they meet after 2 hours. If they start from the same city and travel in same direction they meet after 3 hours. If A is faster than B the speed of A is

B రెండు ఆస్తులలో బయటిలో బయటి

(1) 10 kmph
(2) $12\frac{1}{2}$ kmph
(3) 15 kmph
(4) $16\frac{1}{2}$ kmph

Options:
1. 1
2. 2
3. 3
4. 4
Of the two workers A works twice as fast as B. If A and B work together they require 12 days to complete a piece of work. How many days are needed if A alone works to complete the same work.

B ధర్మ మరియు A ధర్మ భూమి వాటా కావాల్సాగారు. A, B యొక్క వహిత వేగాలు 12 దినాలు వచ్చాడు. అంటే మిగిలి A విమర్శించడానికి ఎవుండు దినాలు వచ్చారు?

(1) 15 (2) 16 (3) 18 (4) 20

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 101  Question Id : 9126062964  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Arithmetical Ability

A, B and C can independently complete a work in 10, 15 and 20 days respectively. If they start the work together and A leaves after 2 days and B leaves after 4 days the number of days required for the completion of work is

A. B, C యొక్క కోసం ఉద్యమం చేసి 10, 15, 20 రోజులు పనిస్థాపించడానికి. A మరియు B వంటి మూడు మనుషులు కూలిలో ఉద్యమం చేసి 2 రోజులు మరియు 4 రోజులు పనించడానికి అవసరం ఉండే రోజులు సంఖ్య ఉంటుంది.

(1) $13\frac{1}{3}$  (2) $12\frac{2}{3}$  (3) $11\frac{1}{3}$  (4) $10\frac{2}{3}$

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

Question Number : 102  Question Id : 9126062965  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Arithmetical Ability

An equilateral triangle is inscribed in a circle of 462 sq.cms. The perimeter (in cms) of the triangle is

462 స్కెచ్చెస్ పై గల  నిష్పత్తి చేయబడిన అతిధీమణ విభాగం ఉంటుంది.

అనుకూలంగా నుండి విభాగం ఉంటుంది (స్కెచ్చెస్ పై)

(1) 72  (2) 84  (3) 63  (4) 126

Options :
1. 1  
2. 2

TS ICET 2018
The perimeter of rhombus is 68 meters and one of its diagonals is 16 meters.

The area of the rhombus is (in sq.ms.)

\[
\text{Area} = \frac{1}{2} \times \text{Diagonal}_1 \times \text{Diagonal}_2 = \frac{1}{2} \times 16 \times 68 = 544 \text{ sq.ms.}
\]

Options:
1. 1
2. 2
3. 3
4. 4
Arithmetical Ability

Three solid metal cubes whose sides are in the ratio 3:4:5 are melted and made into a single cube. If length of the diagonal of this single cube is $48\sqrt{3}$ meters then the side of the smallest of the three cubes is?

3:4:5 వస్తుం కోణాలు కోణాలు మరియు ఏకాంత ఉన్నాం అని ఆధారంగా తమందం ప్రదానం చేస్తుంది. అ మార్గం తెలియజేంది వంటూ వీటి మినమం 48\sqrt{3} మీ.మ. అ అంశానికి మినమం విస్త్రస్తులు ఇతరుల ఏకాంతం అయితే అతి అంతకం రే.

(1) 24 m  (2) 22 m  (3) 20 m  (4) 18 m

24 మీ. 22 మీ. 20 మీ. 18 మీ.

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

A solid cylinder of diameter 24 cm and height 10 cm is melted and cast into spheres of diameter 12 cm each. What will be the number of solid spheres made?

24 सेम. घनाक वाला, 10 सेम. ऊँचा का क्षेत्रफल समीकरण 12 सेम. वाले स्फेरा का क्षेत्रफल में बदल दिया जाता है । जितने संख्या के ऐसे स्फेरे बनेंगे?

(1) 5    (2) 6    (3) 7    (4) 8

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Arithmetical Ability

The base and height of a triangle are in the ratio 4:3 and its area is 54 sq. cm. What is its height?

4:3 विषयक आधार व ऊँचाई का अनुपात 81 व आयतन 54 हैं। आयतन की ऊँचाई कितनी है?

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

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

**Question Number : 107  Question Id : 9126062970  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**

**Arithmetical Ability**

Area of the rhombus whose diagonals are 36 cm and 20 cm

(1) 480 sq cm  (2) 360 sq cm  (3) 200 sq cm  (4) 320 sq cm

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

**Question Number : 108  Question Id : 9126062971  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical**

**Arithmetical Ability**

What is the cost of fencing around a circular field of diameter 28 meters at the rate of Rs. 10 per meter?

28 మీటర్ల వ్యాసం కలిగిన వృత్తాకార ప్రాంగణానికి మిగిలిన పరిధి నియమించడానికి ఎందుకు నమూనా మొత్తము?

10 రూపాయల స్థానికంగా ఎంత మొత్తము?

(1) ₹ 880  (2) ₹ 440  (3) ₹ 660  (4) ₹ 550

Options:
1. ✔ 1
Arithmetical Ability

If $11011_2 + 11101_2 + 1111_2 + 1001_2 = X_{10}$ then $X =$

$11011_2 + 11101_2 + 1111_2 + 1001_2 = X_{10}$ अनुसार $X =$

(1) 80  (2) 120  (3) 124  (4) 132

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Arithmetical Ability

If $k_1, k_2$ are natural numbers such that

(i) $2^{k_1} | 10!$ but $2^{k_1+1} \nmid 10!$ and (ii) $5^{k_2} | 10!$ but $5^{k_2+1} \nmid 10!$ then

(i) $2^{k_1} | 10!$ की 2 $2^{k_1+1} \nmid 10!$ अनुसार (ii) $5^{k_2} | 10!$ की 5 $5^{k_2+1} \nmid 10!$ अनुसार

सम्मेलन सामायिक $k_1, k_2$ एवं $k_1, k_2$

(1) $k_1 = k_2$  (2) $k_1 < k_2$  (3) $k_1 > k_2$  (4) $k_1 = k_2 + 3$

Options :
1. ✓ 1
2. ✗ 2
Algebraic and Geometrical Ability

The contra positive of the statement:

“If in a $\Delta ABC$, $AB = AC$ then $\angle B = \angle C$” is

$\Delta ABC \not\sim AB = AC \text{ and } \angle B = \angle C$’ is

(1) If in a $\Delta ABC$, $\angle B \neq \angle C$ then $AB \neq AC$

$\Delta ABC \not\sim \angle B \neq \angle C \text{ and } AB \neq AC$

(2) If in a $\Delta ABC$, $AB \neq AC$ then $\angle B \neq \angle C$

$\Delta ABC \not\sim AB \neq AC \text{ and } \angle B \neq \angle C$

(3) If in a $\Delta ABC$, $\angle B = \angle C$ then $AB = AC$

$\Delta ABC \not\sim \angle B = \angle C \text{ and } AB = AC$

(4) If in a $\Delta ABC$, $\angle B \neq \angle C$ then $AB = AC$

$\Delta ABC \not\sim \angle B \neq \angle C \text{ and } AB = AC$
Algebraic and Geometrical Ability

Which of the following is equivalent to the statement $p \lor [\sim (q \land \sim r)]$

(1) $[p \lor (\sim q)] \lor r$

(2) $[p \land q] \lor \sim r$

(3) $[p \land (\sim q)] \lor (\sim r)$

(4) $[p \lor q] \lor (\sim r)$

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Algebraic and Geometrical Ability

If \( I_n = \{ x \in R : -\frac{1}{n} < x < \frac{1}{n} \} \) for \( n = 1, 2, 3, \ldots \) then

\[
\bigcap_{n=1}^{\infty} I_n = \]

\( n = 1, 2, 3, \ldots \) లో ఇద్ది \( I_n = \{ x \in R : -\frac{1}{n} < x < \frac{1}{n} \} \) ఎండు బాయి

\[
\bigcap_{n=1}^{\infty} I_n = \]

(1) \( \{0\} \)  (2) \( \emptyset \)  (3) \( \{1\} \)  (4) \( \{x \in R : 0 < x < 1\} \)

Options :
1. ✅ 1
2. ❌ 2
3. ❌ 3
4. ❌ 4

Question Number : 114  Question Id : 9126062977  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Algebraic and Geometrical Ability

If \( f(x) = \frac{x}{x-1} \) then \( \frac{f(a)}{f(a+1)} = \)

\( f(x) = \frac{x}{x-1} \) \( \Rightarrow \) \( \frac{f(a)}{f(a+1)} = \)

(1) \( \frac{a^2}{a^2-1} \) \hspace{1cm} (2) \( \frac{a^2}{a^2+1} \) \hspace{1cm} (3) \( f(a^2) \) \hspace{1cm} (4) \( f(a^3) \)

Options :
1. ✔ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.
Algebraic and Geometrical Ability

\[ f(x) = x^2 - |x| \text{ is} \]

\[ f(x) = x^2 - |x| \text{ ఎంత} \]

(1) An even function  
(2) An odd function

(3) Not a function  
(4) Neither even nor odd function

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 116  Question Id : 9126062979  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Algebraic and Geometrical Ability

41. The equation of the straight line having intercepts \(a\) and \(b\) on the axes such that \(a + b = 5\) and \(ab = 6\) is

- (1) \(2x - 3y = 6\)
- (2) \(2x + 3y = 6\) or \(3x + 2y = 6\)
- (3) \(3x - 2y = 6\)
- (4) \(2y - 3x = 6\)

Algebraic and Geometrical Ability

The equation of the straight line passing through \((4, 2)\) and parallel to the line \(x + 2y - 5 = 0\) is

- (1) \(2x + y = 8\)
- (2) \(x + 2y = 6\)
- (3) \(x + 2y = 8\)
- (4) \(2x + y = 6\)
Algebraic and Geometrical Ability

\[ \cos 0^\circ \cdot \cos 2^\circ \cdot \cdots \cdot \cos 179^\circ = \]

\[
(1) \frac{1}{\sqrt{2}} \quad (2) 0 \quad (3) 1 \quad (4) \frac{1}{2}
\]

Algebraic and Geometrical Ability

\[ \sin 420^\circ \cdot \cos 390^\circ + \cos(-300^\circ) \cdot \sin(330^\circ) = \]

\[
(1) 0 \quad (2) -1 \quad (3) 1 \quad (4) \frac{\sqrt{3}+1}{2}
\]
Algebraic and Geometrical Ability

\[ \frac{\cos \theta}{1+\sin \theta} + \frac{1+\sin \theta}{\cos \theta} = \]

(1) \(2\csc\theta\)  (2) \(2\csc^2\theta\)  (3) \(2\sec\theta\)  (4) \(2\sec^2\theta\)

Options:

1. 1
2. 2
3. 3
4. 4
Algebraic and Geometrical Ability

A person walking towards the foot of the mountain observes the angle of elevation of its peak to the $30^0$ and $60^0$ respectively. If the distance between two points A, B of observation is $\sqrt{3}$ km then the height of the mountain in meters is

$$\text{Height} = \frac{\text{Distance} \times \text{Sine of Degree}}{\text{Degree}}$$

$\text{Height} = \frac{\sqrt{3} \times \sin 30^0}{30^0} = \frac{\sqrt{3} \times 0.5}{30^0} = \frac{0.5 \sqrt{3}}{30^0}$

(1) 2500  (2) 2000  (3) 1500  (4) 1250

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Algebraic and Geometrical Ability

$$x + \frac{1}{x} = 5 \quad \Rightarrow \quad x^4 + \frac{1}{x^4} =$$

(1) 527  (2) 623  (3) 625  (4) 572

Options:
1. ✓ 1
2. ✗ 2
Algebraic and Geometrical Ability

For two polynomials \( p(x) \) and \( q(x) \) the highest common factor is \( (x - 2) \) and the least common multiple is \( x^3 - 9x^2 + 26x - 24 \). If \( p(x) = x^2 - 6x + 8 \) then \( q(x) = \)

\[
\text{highest common factor of } p(x), q(x) \text{ is } (x - 2) \text{ and least common multiple is } x^3 - 9x^2 + 26x - 24. \quad p(x) = x^2 - 6x + 8 \quad \text{then } q(x) =
\]

\[
(1) \quad x^2 + 5x + 6 \quad (2) \quad x^2 - 5x - 6 \\
(3) \quad x^2 - 5x + 6 \quad (4) \quad x^2 - 2x + 3
\]
Algebraic and Geometrical Ability

If the polynomial $x^3 + 10x^2 + ax + b$ is exactly divisible by $(x - 1)$ and $(x + 2)$ then $a - b = \phantom{1111}

\begin{align*}
x^3 + 10x^2 + ax + b &\text{ ए पूर्णाङ्क } (x - 1) \text{ और } (x + 2) \text{ जैसे व्यंजकों}\n\text{ लगती हैं } a - b = \phantom{1111}
\end{align*}

(1) 9  \hspace{1cm} (2) -9  \hspace{1cm} (3) -25  \hspace{1cm} (4) 25

Options :

1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4
Algebraic and Geometrical Ability

సామాన్యంగా, జ్యామితీయ కౌనసిల్యం

If a polynomial $p(x)$ leaves remainders 6 and 4 respectively when divided by $(x - 2)$ and $(x - 3)$ then the remainders when $p(x)$ is divided by $(x^2 - 5x + 6)$ will be

అయితే, చాటికింది $p(x)$ కు $(x - 2)$ లేదా $(x - 3)$ విభాగం వలె రాస్తుంది. $p(x)$ ను $(x^2 - 5x + 6)$ వలె విభాగం వలె బేచికిన విలువులు కూడా వేసండం అవలంబించడం జరిగింది.

(1) $2x + 6$  
(2) $-2x - 10$  
(3) $-2x + 10$  
(4) $2x + 10$

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✔ 4

Question Number : 126  Question Id : 9126062989  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Algebraic and Geometrical Ability

The sum of a two digit number and the number obtained by reversing the order of its digits is 121 and the digits differ by 3. The largest of such numbers is 21.

Options:
1. 47
2. 74
3. 63
4. 52

Algebraic and Geometrical Ability

If \( \frac{3}{x+y} + \frac{2}{x-y} = 2 \) and \( \frac{9}{x+y} - \frac{4}{x-y} = 1 \) then \( x : y = \)

\[
\frac{3}{x+y} + \frac{2}{x-y} = 2 \quad \text{and} \quad \frac{9}{x+y} - \frac{4}{x-y} = 1 \quad \text{then} \quad x : y =
\]

Options:
1. 3:2
2. 2:5
3. 5:1
4. 9:4
The \( r^{\text{th}} \) term of an arithmetic progression whose sum of first \( n \) terms is 
\[ 2n + 3n^2 \]
is

(1) \( 7r-1 \)  
(2) \( 6r+5 \)  
(3) \( 6r-1 \)  
(4) \( 7r+5 \)
Algebraic and Geometrical Ability

If the 6th and 13th terms of a geometric progression are 24 and $\frac{3}{16}$ respectively, then its 25th term is

$$a_{25} = a_{13} \cdot r^{12}$$

where $a_{13} = 24$ and $r = \frac{3}{16}$

Keeping $r$ as $\frac{3}{16}$ and $a_{13}$ as 24, we calculate $a_{25}$

$$(1) 3 \times 2^{-18}$$  
$$(2) 3 \times 2^{-16}$$  
$$(3) 3 \times 2^{-24}$$  
$$(4) 3 \times 2^{-22}$$

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

Question Number: 130  Question Id: 9126062993  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical

Algebraic and Geometrical Ability

The coefficient of $x^{n-1}$ in the product $(x + 1)(x + 2)(x + 3) \ldots (x + n)$ is

$$\binom{n}{2} (x + 1)(x + 2)(x + 3) \ldots (x + n)$$

$\Rightarrow x^{n-1}$ coefficient

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

Options:
1. $\checkmark$ 1
2. $\star$ 2
3. $\star$ 3
Algebraic and Geometrical Ability

If the coefficients of $x^7$ and $x^8$ are equal in the expansion of $\left(3 + \frac{x}{2}\right)^n$ then

\[ n = \]

\[ \left(3 + \frac{x}{2}\right)^n \]  

$\text{ Vijayakar } x^7, \ x^8 \ \text{ విజయకర్ \ విస్తృతి }$  

\[ n = \]

\[ \begin{array}{cccc}
(1) & 42 & (2) & 48 \\
(3) & 55 & (4) & 58
\end{array} \]

Options :

1. ** 1
2. ** 2
3. ✔ 3
4. ** 4
Algebraic and Geometrical Ability

If \[ \begin{bmatrix} a & b^2 \\ c^3 & 0 \end{bmatrix} = \begin{bmatrix} 2 & 9 \\ -8 & 0 \end{bmatrix} \] where \( a, b, c \) are real numbers of which \( b < 0 \) then

\[ 3a + b + c = \]

\( a, b, c \) are real numbers, \( b < 0 \) implies \( \begin{bmatrix} a & b^2 \\ c^3 & 0 \end{bmatrix} = \begin{bmatrix} 2 & 9 \\ -8 & 0 \end{bmatrix} \) implies

\[ 3a + b + c = \]

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

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Algebraic and Geometrical Ability

If \( A \) and \( B \) are matrices such that \( AB = B \) and \( BA = A \), then \( A^2 + B^2 = \)

\( A, B \) are matrices \( AB = B, BA = A \) implies \( AB, BA \) implies \( A^2 + B^2 = \)

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

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Algebraic and Geometrical Ability

\[ \lim_{n \to \infty} \frac{2^n - 5^n}{3^n + 5^n} = \]

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

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

Algebraic and Geometrical Ability

\[ \lim_{n \to \infty} \frac{(1+n)^7+(2+n)^7+\ldots+(7+n)^7}{1000+n^7} = \]

(1) 0  (2) 1  (3) 7  (4) ∞

Options:
1. ** 1
2. ** 2
3. ✓ 3
4. ** 4
Algebraic and Geometrical Ability

As given in the diagram, in $\Delta ABC$, $\angle B > 90^0$ and AD is perpendicular to BC.

Then $b^2 =$

\[ a^2 + c^2 - 2ax \quad \text{(1)} \]
\[ a^2 + c^2 + 2ax \quad \text{(2)} \]
\[ a^2 + c^2 + ax \quad \text{(3)} \]
\[ a^2 + c^2 - ax \quad \text{(4)} \]
Algebraic and Geometrical Ability

If the angles of a quadrilateral are in the ratio 3:4:5:6 then the smallest of these angles is

(1) $30^0$  
(2) $90^0$  
(3) $60^0$  
(4) $45^0$

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Algebraic and Geometrical Ability

If a chord of a circle of radius 10cm subtends an angle $60^0$ at the center of the circle, then the length of the chord (in centimeters) is

$10 \text{ cm}$. ప్రత్యేక వెలుచ్చిన వేసిన క్రిందానికి నేటి దశాన్ని $60^0$ వంటి అంశం మార్పు వేయాలి  అను

(1) 10  
(2) $10\sqrt{3}$  
(3) $\frac{10}{\sqrt{3}}$  
(4) 5

Options :
Algebraic and Geometrical Ability

A point \((x, y)\) is equidistant from the points \((7, 1)\) and \((3, 5)\). Then \(x - y = \) 

\\(x)\\(y)\\

\(1)\ 5 \quad (2)\ 4 \quad (3)\ 3 \quad (4)\ 2 \)

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 140  Question Id : 9126063003  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

TS ICET 2018
Algebraic and Geometrical Ability

The vertices of ΔABC are A(4, 2), B(6, 5) and C(1, 4). The median through A meets BC at D. Then AD² =

ΔABC is a triangle A(4, 2), B(6, 5), C(1, 4). A's median intersects BC at D. Then AD² =

(1) 13  (2) \(\frac{13}{2}\)  (3) 17  (4) \(\frac{17}{2}\)

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Statistical Ability

The arithmetic mean of 287, 292, 297, 302, ……, 447 is

287, 292, 297, 302, ……, 447 are terms

(1) 367  (2) 362  (3) 372  (4) 377

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

If the mean and mode of a data are 58 and 52 respectively. Then the median of the data is

(1) 53  (2) 54  (3) 55  (4) 56

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Statistical Ability

The mode of 124, 142, 86, 136, 126, 124, 98, 114 is

124, 142, 86, 136, 126, 124, 98, 114 ✗ 124

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

The standard deviation of any five consecutive positive integers is

\[ \begin{align*}
(1) & \sqrt{2.5} \\
(2) & \sqrt{2} \\
(3) & \sqrt{5} \\
(4) & 2
\end{align*} \]

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 145  Question Id : 9126063008  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical

Statistical Ability

The standard deviation of \( n \) observations \( x_1, x_2, \ldots, x_n \) is 15. Then the standard deviation of the observations \( 5x_1 - 11, 5x_2 - 11, \ldots, 5x_n - 11 \) is \( n \) observations \( x_1, x_2, \ldots, x_n \) are distributed uniformly between 15. Therefore, the distribution

\[ \begin{align*}
(1) & 64 \\
(2) & 75 \\
(3) & 86 \\
(4) & 130
\end{align*} \]

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 146  Question Id : 9126063009  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical

TS ICET 2018
Statistical Ability

Two sports persons P and Q have participated in four competitions and their respective ranks are as given in the table below. The rank correlation coefficient is

\[
P. Q \quad 3 \quad 4 \quad 1 \quad 5 \\
2 \quad 5 \quad 4 \quad 3
\]

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

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

Question Number : 147  Question Id : 9126063010  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Statistical Ability

A bag contains 3 white, 2 black and 4 red balls. Three balls are drawn in succession without replacement. The probability that of the three balls drawn one is white, one is black and one is red, is

\[
\frac{3 \times 2 \times 4}{9 \times 8 \times 7} = \frac{1}{21}
\]

Options:
1. \(\frac{1}{21}\)
2. \(\frac{1}{25}\)
3. \(\frac{1}{28}\)
4. \(\frac{1}{32}\)
Statistical Ability

Two unbiased six faced dice are rolled. The probability of getting a sum which is a prime number is

(1) $\frac{1}{12}$  \hspace{1cm} (2) $\frac{5}{12}$  \hspace{1cm} (3) $\frac{7}{12}$  \hspace{1cm} (4) $\frac{11}{12}$

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Statistical Ability

When 4 un-biased coins are tossed, the probability of getting at least 2 heads is

(1) $\frac{11}{16}$  \hspace{1cm} (2) $\frac{5}{16}$  \hspace{1cm} (3) $\frac{1}{2}$  \hspace{1cm} (4) $\frac{1}{4}$

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

If a four digit number is formed at random using the digits 2, 5, 7, 8, 9 then the probability that the sum of the digits in that number is a multiple of 2 is

\[ \text{(edges) 2, 5, 7, 8, 9 and numbers} \Rightarrow \text{sum is even because 4 is even number} \]

So, even number is formed 2 numbers for the sum to be multiple of 2

\[ (1) \frac{2}{5} \quad (2) \frac{3}{5} \quad (3) \frac{3}{10} \quad (4) \frac{7}{10} \]

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Choose the correct meaning of the word given:

Punitive

(1) acquitting
(2) vengeful
(3) very small
(4) intended as punishment

Options:
Choose the correct meaning of the word given:

Morale
(1) confidence
(2) dread
(3) morals
(4) purpose

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Choose the correct meaning of the word given:

Repertoire
(1) repentance
(2) inventory
(3) ruination
(4) symposium

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
Choose the correct meaning of the word given:

Apartheid
(1) segregation
(2) aggregation
(3) integration
(4) immigration

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Choose the correct meaning of the word given:

Foment
(1) cement
(2) instigate
(3) investigate
(4) profligate

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
Choose the correct meaning of the word given:

Heckle

(1) abuse
(2) praise
(3) extreme
(4) solid

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Fill in the blank choosing the correct word:

The Prime Minister _________ the members of his Cabinet to improve the governance of the country.

(1) abandoned
(2) reshuffled
(3) scolded
(4) admired

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
Fill in the blank choosing the correct word:

Meritorious candidates should not be ________ from entering politics due to lack of financial resources.

(1) included
(2) excluded
(3) agitated
(4) punished

Options :

1. ❌ 1
2. ✔️ 2
3. ❌ 3
4. ✔️ 4

Fill in the blank choosing the correct word:

It is unlawful to _________ upon the copyrights of another person.

(1) intrude
(2) infringe
(3) take
(4) tread

Options :

1. ❌ 1
2. ✔️ 2
3. ❌ 3
4. ✔️ 4
Fill in the blank choosing the correct word:

The eagle _______ down to catch its prey.

(1) swooped  
(2) climbed  
(3) walked  
(4) turned

Choose the correct answer:

A piece of code or data created by web server and stored on a user’s computer is called

(1) cookie  
(2) byte  
(3) content  
(4) browser
Choose the correct answer:

A type of e-mail fraud in which the perpetrator sends out e-mails that appear to come from a legitimate service or company is known as

(1) malware
(2) gateway
(3) device driver
(4) phishing

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Choose the correct answer:

A computer memory with very short access time used for storage of recently used data is called

(1) browser
(2) processor
(3) cache
(4) SSD

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Choose the correct answer:
The unwanted software that can track one’s activities on the computer is called

(1) spy bug  
(2) spy virus 
(3) spy spot 
(4) spyware 

Choose the correct answer:
Boolean Algebra finds its application in computer because

(1) it is easier than conventional algebra 
(2) computers are programmed for it 
(3) digital circuits are ON-OFF devices 
(4) it is a sophisticated branch of algebra
Choose the correct answer:

‘No smoking in the factory’ is an example of

(1) policy
(2) procedure
(3) strategy
(4) rule

Choose the correct answer:

What is the title of the person who heads Reserve Bank of India?

(1) Chairman
(2) Chairman and Managing Director
(3) Governor
(4) Chancellor

Choose the correct answer:

A short official statement of news is called

(1) Notice
(2) bulletin
(3) memoir
(4) minute
Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Choose the correct answer:
The number assigned to every GST registered dealer is called
(1) GST NI
(2) GST IN
(3) INGST
(4) NIGST

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Choose the correct answer:
CPM stands for
(1) Critical Path Method
(2) Critical Policy Method
(3) Composite Path Method
(4) Complex Path Method

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Choose the correct answer:

A: “He gave them elaborate instructions to carry out their project.”
B: “His advice fell on the deaf ears.”

‘B’ means
(1) they failed to hear because they were deaf
(2) they followed his advice scrupulously
(3) they followed his advice, but were unsuccessful
(4) they did not bother about his instructions

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Choose the correct answer:

Change the active form of the following sentence to passive:
“We had baked the bread.”

(1) The bread is baked by us
(2) The bread has been baked by us
(3) The bread was baked by us
(4) The bread had been baked by us

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
Choose the correct answer:

A: ‘Are you appearing for ICET this year?’
B: ‘I think I will have a go at it.’
‘B’ means that he intends to:

(1) skip it
(2) appear for it
(3) take it casually
(4) decide on it later

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Choose the correct answer:

A: “How is your partnership with Ravi going.”
B: “Sorry, we fell out.”
‘B’ implies that

(1) they quarrelled
(2) they went broke
(3) they had met with an accident
(4) their plan failed

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Choose the correct answer:

A: “I wish I had worked harder, I would have done better at the interview.”

B: “Well you could try again.”

‘B’ implies that ‘A’

(1) should not cry over split milk
(2) should strike while the iron is hot
(3) should make a hay while the sun shines
(4) should not be a stick in the mud

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Choose the correct answer:

A: “Can I try it on?”

B: “Sure, the changing rooms are over there.”

The conversation taken place in a

(1) footwear shop
(2) hotel
(3) hospital
(4) garment shop

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✅ 4
Choose the correct answer:

A: “Why did you leave the company?”

B: “Only the wearer of shoe knows where it pinches.”

‘B’ means that

(1) the shoes given by the company were bad.
(2) the company is good but ‘A’ doesn’t know it.
(3) only an insider knows the difficulties
(4) the insiders know how to make good shoes.

Options :
1. ★ 1
2. ★ 2
3. ✔ 3
4. ★ 4

Fill in the blanks with the appropriate phrase / verb / preposition:

He delights__________ doing good.

(1) through
(2) in
(3) at
(4) over

Options :
1. ★ 1
2. ✔ 2
3. ★ 3
4. ★ 4
Fill in the blanks with the appropriate phrase / verb / preposition:

He prevailed ________ his misfortunes by not losing hope.

(1) on  
(2) into  
(3) with  
(4) over

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

Fill in the blanks with the appropriate phrase / verb / preposition:

They decided to have an informed and brief discussion ______ a cup of coffee.

(1) on  
(2) over  
(3) by  
(4) to

Options:
1. ✗ 1  
2. ✔ 2  
3. ✗ 3  
4. ✗ 4
Fill in the blanks with the appropriate phrase / verb / preposition:

If teachers show favouritism, it can ________ resentment.

(1) provide  
(2) breed  
(3) wreak  
(4) hamper

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

Question Number : 182  Question Id : 9126063045  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Fill in the blanks with the appropriate phrase / verb / preposition:

Many species of birds have become ________ in the last hundred years.

(1) obsolescent  
(2) obscure  
(3) extinct  
(4) feeble

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

Question Number : 183  Question Id : 9126063046  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Fill in the blanks with the appropriate phrase / verb / preposition:

You should not _______ when I am talking to the other man.

(1) cut out  
(2) cut in  
(3) cut up  
(4) cut above

Options :

1. ✗ 1  
2. ✓ 2  
3. × 3  
4. × 4

Fill in the blanks with the appropriate phrase / verb / preposition:

However will we ________ without you?

(1) get over  
(2) get at  
(3) get on  
(4) get off

Options :

1. ✗ 1  
2. ✗ 2  
3. ✓ 3  
4. × 4
Fill in the blanks with the appropriate phrase / verb / preposition:

The whole project dropped __________ because of the lack of finance.

(1) through
(2) across
(3) in
(4) away

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Read the following passage and answer questions 36-40:

What is freedom? Freedom is the right to choose; the right to create for oneself the alternatives of choice. Without the possibility of choice and exercise of choice, we are not human beings but only inanimate objects. Fortunately, we are now living in a world full of choice; even in the selection of ice-cream or soaps, there is so much choice that we find it difficult to choose and some people feel that we actually suffer from what may be called choice fatigue!

Thanks to the tremendous growth and diversification in all spheres of life, the educational spectrum is crowded with a variety of courses in every conceivable field; most of the courses offered are practical and job-oriented and as a result, there is an array of career options available. Students are becoming smarter and they are learning to take intelligent decisions based on what is right for them. A good way to choose one’s career path is to match one’s strengths and aptitudes to the opportunities and threats in the job market of tomorrow. There are career guidance cells and centres in most colleges and universities from where one can get detailed information on career options.

Sub questions

Question Number : 186  Question Id : 9126063050  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical

Why is the right to choose important?

(1) without it we become soulless
(2) it helps us to be happy
(3) it enables us to be successful
(4) it prevents conflict

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

Question Number : 187  Question Id : 9126063051  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
What is ‘choice fatigue’?

(1) choices are indispensable
(2) choices are inevitable
(3) there are too many options to choose from
(4) a feeling of tiredness after making a choice

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

Why is there an ‘array of career options’ available?

(1) due to technological advances
(2) due to business opportunities
(3) due to skilled labour
(4) due to the availability of practical and job oriented courses

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

How does one choose a ‘good career path’?

(1) by reading newspapers
(2) by assessing one’s own strengths and aptitudes
(3) by becoming smarter
(4) by looking at the job market

Options :
1. 1
2. 2
3. 3
4. 4
Where can one get information on career options?

(1) from teachers
(2) from parents
(3) from career guidance centres
(4) from classmates

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Private victory precedes public victory. Self-mastery and self-discipline are the foundations of good relationships with others. Some people say that you have to like yourself before you can like others. I think that idea has merit, but if you don’t know yourself, if you don’t control yourself, if you don’t have mastery over yourself, it is very hard to like yourself.

Independence is an achievement. Interdependence is a choice only independent people can make. Unless we are willing to achieve real independence, it is foolish to try to develop human relations skills.

The most important ingredient we put into any relationship is not what we say or what we do, but what we are. And if our words and our actions come from superficial human relations rather than from our own inner core, others will sense that duplicity. We simply won’t be able to create and sustain the foundation necessary for effective interdependence.

So the place to begin building any relationship is inside us, inside our own character. As we become independent – proactive, centred in correct principles – we then can choose to become interdependent capable of building rich, enduring, highly productive relationships with other people.

Sub questions

What is the most important ingredient we put into a relationship?

(1) words
(2) character
(3) actions
(4) Public victory

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
What according to the author is ‘self independence’?

(1) a choice
(2) an achievement
(3) a social necessity
(4) a duplicity

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

What is the right place to build a relationship?

(1) society
(2) inside ourselves
(3) office
(4) outside ourselves

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

When do you like yourself?

(1) When you have mastery over yourself
(2) When you don’t control yourself
(3) When you don’t know yourself
(4) When you have human skills

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
“You have to like yourself before you can like others”, is a view the author:

(1) disagrees with
(2) denounces
(3) negates
(4) agrees with

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4
Read the following passage and answer questions 46-50:

The origin and progress and future promotion of civilization are all ill understood and misconceived. These should be made the chief theme of education, but much hard work is necessary before we can reconstruct our ideas of man and his capacities and free ourselves from innumerable persistent misapprehensions. There have been obstructionists in all times, not merely the lethargic masses, but the moralists, the rationalizing theologians, and most of the philosophers, all busily if unconsciously engaged in ratifying existing ignorance and mistakes and discouraging creative thought. Naturally, those who reassure us seem worthy of honour and respect. Equally naturally those who puzzle us with disturbing criticisms and invite us to change our ways are objects of suspicion and readily discredited. Our personal discontent does not ordinarily extend to any critical questioning of the general situation in which we find ourselves. In every age prevailing conditions of civilization have appeared quite natural and inevitable to those who grew up in them. Indeed, we are usually quite unaware that a game is being played at all.

Sub questions

What hampers the future of civilization?

(1) over enthusiasm
(2) lack of enthusiasm
(3) misconceptions
(4) proper analysis

Options:
1. * 1
2. * 2
3. ✔ 3
4. * 4
How were promoters of change treated?

(1) always respected
(2) often suspected
(3) looked upon as profit seekers
(4) looked upon as cynical people

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

In all ages, there were people who blocked progress as there were

(1) dogmatic
(2) charismatic
(3) analytic
(4) uninterested

Options:
1. ✔️ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4

In all times, even philosophers emerged as enemies of

(1) inductive philosophy
(2) deductive philosophy
(3) creative thought
(4) calculated responses

Options:
1. ✔ 1
2. ✔ 2
3. ✔️ 3
People of every age seem to accept the prevailing conditions

(1) after weighing the pros and cons
(2) prima facie
(3) on the recommendation of others
(4) under threat from authorities

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4