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 URDU 2019
Subject Name: TS ICET URDU 2019
Creation Date: 2019-05-24 14:55:23
Duration: 150
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?: No

Group Number: 1
Group Id: 66726925
Group Maximum Duration: 0
Group Minimum Duration: 150
Revisit allowed for view?: No
Revisit allowed for edit?: No
Break time: 0
Group Marks: 200

Analytical Ability
Section Id: 66726973
Section Number: 1
Section type: Online
Mandatory or Optional: Mandatory
Number of Questions: 60
Number of Questions to be attempted: 60
Section Marks: 75
Display Number Panel: Yes
Group All Questions: No
Question Number : 1  Question Id : 6672694987  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  
Single Line Question Option : No  Option Orientation : Vertical  
Correct Marks : 1  Wrong Marks : 0
Data Sufficiency

Note: In questions numbered 1 to 20, a 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 \(a > 1, b > 1\), what is the LCM of \(a\) and \(b\)?

\[
\text{LCM of } a \text{ and } b \ ?
\]

I. Product of \(a\) and \(b\) is 1763

II. \(a\) and \(b\) are coprimes

Options:
1. **
2. ✔️
3. 5
4. 4

Question Number : 2  Question Id : 6672694988  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
(i) **Data Sufficiency**

Note: In questions numbered 1 to 20, a 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 \(a, b, c\) are positive integers, is their product \(a \times b \times c\) even?

\[\text{Options:}\]

1. **1**
2. **2**
3. **3**
Data Sufficiency

Note: In questions numbered 1 to 20, a 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.
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(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 \( a > b? \)

I. \( x - 3 \) is a factor of \( x^3 - 27^a \)

II. \( x - 2 \) is a factor of \( x^4 - 16^b \)

Options:

1.  
2.  
3.  
4.  

\( a \) and \( b \) are positive integers.
(i) Data Sufficiency

Note: In questions numbered 1 to 20, a 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.
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(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.

Question Number : 4 Question Id : 6672694990 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Is the parallelogram ABCD a rectangle?

I. \(\text{AC} = \text{BD}\)

II. \(\angle A + \angle B = 180^\circ\)

(a)  

(b)  

(c)  

(d)  

Is the parallelogram ABCD a rectangle?
Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 5  Question Id: 6672694991  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct Marks: 1  Wrong Marks: 0
Data Sufficiency

Note: In questions numbered 1 to 20, a 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?

I. The circle is inscribed in a square

II. The length of the side of the square is 8 cm

Options:

1. * 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 6  Question Id : 6672694992  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
(i) Data Sufficiency

Note: In questions numbered 1 to 20, a 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 three digit number \( P \), where \( 100 < P < 210 \)?

I. \( P \) gives remainder 9 when divided by 10

II. \( P \) is divisible by 11

Options:

1. ** 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
(i) Data Sufficiency

Note: In questions numbered 1 to 20, a 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.
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(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 cost of one chair?

I. Chair and 1 Table cost Rs. 12,000

II. The cost of Table is twice the cost of the Chair

Options:

1. **1
Question Number: 8  Question Id: 6672694994  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0
(i) Data Sufficiency

Note: In questions numbered 1 to 20, a 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 selling price of each article?

I. The trader made a profit of Rs. 100

II. Two successive discounts of 10% each were given

Options:

1.  
2.  

Data Sufficiency

Options:

In questions numbered 1 to 20, a 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:

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(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 are the two natural numbers a and b?

I. LCM of a and b = 240

\[ \text{LCM} = \text{b + a} \]

II. HCF of a and b = 20

\[ \text{HCF} = 20 \]

Options:
1. * 1
2. ** 2
3. *** 3
(i) **Data Sufficiency**

Note: In questions numbered 1 to 20, a 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:

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(d) Mark choice (4) if both the statements I and II together are not sufficient to answer the question and additional data is required.

**Question:** How many people in the city speak Hindi?

I. 10% of people in the city can speak two languages

II. 5% of people in the city who can speak two languages can speak Hindi

Options:
1. * 1
2. * 2
3. * 3
4. ✅ 4
(i)  Data Sufficiency

Note: In questions numbered 1 to 20, a 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:

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(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.

Does the point \((x, y)\) lie in the first quadrant?

\[\text{Quadrant } I(x, y)\]

I. \(xy < -10\)

II. \(x + y \leq 10\)

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

Note: In questions numbered 1 to 20, a 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:

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(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 6 a factor of $n+3$?

Factor $n + 3$ 6  ؟

I. $n$ is even and divisible by 3

II. $n$ is divisible by a prime number

Options:

1. ✅ 1
Data Sufficiency

(i)

Note: In questions numbered 1 to 20, a 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:

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(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 height of the tree?

I. The height of mountain is 300 mts

II. The angles of depression of the top of the tree and the bottom of the tree are 45° and 60° respectively as seen from the top of the mountain.
Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number: 14  Question Id: 6672695000  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0
(i) **Data Sufficiency**

Note: In questions numbered 1 to 20, a 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:

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(d) Mark choice (4) if both the statements I and II together are not sufficient to answer the question and additional data is required.

**Question:** How many men are required to complete the work in 40 days?

I. 8 men and 10 women can complete the work in 20 days.
II. 12 women can complete the work in 30 days.

Options:
1. **1**
(i) Data Sufficiency

Note: In questions numbered 1 to 20, a 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:

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(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 \( x \) in the matrix \( A = \begin{bmatrix} x & 1 & 0 \\ 1 & 2 & 3 \\ 3 & 4 & x \end{bmatrix} \)?

I. \( A \) is a singular matrix
II. \( A \) is a non-singular matrix

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Correct Marks : 1 Wrong Marks : 0
Data Sufficiency

Note: In questions numbered 1 to 20, a 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:

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C is a point on the line joining B and E. D and A are point above BC such that \( \angle DCE = \frac{1}{2} \angle ACE \). Is CD parallel to AB?

I. \( \triangle ABC \) is a scalene triangle

II. \( BC = CE \)
Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number: 17  Question Id: 6672695003  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0
Data Sufficiency

Note: In questions numbered 1 to 20, a 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 are the co-ordinates of the point Q?

I. Q lies on the straight line \( L \) whose slope is 3

II. \( L \) makes an intercept of 4 on \( y \)-axis

Options:
1. ** 1
2. ** 2
Data Sufficiency

Note: In questions numbered 1 to 20, a 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.
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(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 number of divisors of \( n \)?

\[ \text{Divisors of } n \]

I. \( 1 \leq n \leq 10,000 \)  \( \quad 1 \leq n \leq 10,000 \) \( . \) I

II. \( n = 6000 \)  \( \quad n = 6000 \) \( . \) II

Options:
Data Sufficiency

Note: In questions numbered 1 to 20, a 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:
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How many positive integers are less than $n$ and relatively prime to $n$?

I. $\ n=2^3 \cdot 5^2 \cdot 7^3$

II. $n$ is composite

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
(i) Data Sufficiency

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What is the first term of the Geometric Progression \( t_1, t_2, t_3 \ldots \)?

\[ \text{Geometric Progression} = t_1, t_2, t_3, \ldots \]

Options:

1. \( t_4 : t_3 = 2 \)  
2. \( t_5 = 64 \)
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

قوت: 1-20 سوالات تلی مسئله ی باز کردن کلید مناسب از جواب‌های منتشر شده که ۴ اختیارات دارند. دارایی که سلسله کوپراکریکی

27, 343, ________ 6859.

Options:

1. 3375
2. 1331
3. 2197
4. 1728

27, 343, ________ 6859

Options:

1. 3375 (1)
2. 1331 (2)
3. 2197 (3)
4. 1728 (4)
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

Pattern: 7, 3, 8, ________, 9, 5.

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

Question Number: 23  Question Id: 6672695009  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0
(ii) Problem Solving

(a) Sequence and Series

**Note:** In each of the questions numbered 21 to 30, 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.

\[ \text{Pattern: L, L, S, } \_\_\_\_\_\_\_, Y \]

(1) E
(2) G
(3) F
(4) H

Options:

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number: 24  Question Id: 6672695010  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes
Single Line Question Option: No  Option Orientation: Vertical
Correct Marks: 1  Wrong Marks: 0
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

Pattern: 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

Z, W, Q ________, V

Options:
1. H (1)
2. J (2)
3. G (3)
4. I (4)
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

Pattern: 170, 1332, 50, __________, 10.

(1) 82
(2) 75
(3) 120
(4) 126

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 26  Question Id : 6672695012  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

Pattern: 6FL : 9IR : : __________ : 5Ed

(1) 3CE
(2) 2BD
(3) 4DF
(4) 8HP

Options:
1. 3CE (1)
2. 2BD (2)
3. 4DF (3)
4. 8HP (4)
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

Book: Publisher: : Film : _________

________________________

(1) Director
(2) Editor
(3) Script Writer
(4) Producer

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

Options:

1. FGV
2. FCG
3. FGC
4. GFC

Correct Marks: 1 Wrong Marks: 0
(ii) Problem Solving

Note: In each of the questions numbered 21 to 30, 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.

\[ \frac{Z}{M} : 2 : : \frac{T}{E} : \]

Options:

1. 2
2. 3
3. 4
4. 5

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

Question Number : 30  Question Id : 6672695016  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
(ii) Problem Solving

(a) Sequence and Series

Note: In each of the questions numbered 21 to 30, 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.

Number: 21

السؤال: 20 سوالات تحتوي على سلسلة من تاريخيا للأسئلة عن التسلسل العلمي، حيث يكون النمط محددًا، يجب إكماله باستخدام النهاية من القيم المعينة.

Output: 30

OP: 30

CX: __________

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<td>9</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
</tr>
</tbody>
</table>

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

Sub-Section Number: 3
Sub-Section Id: 667269505
Question Shuffling Allowed: Yes

Question Number: 31  Question Id: 6672695017  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0
Note: In questions numbered 31 to 35 pick the odd thing out:

(1) Chord
(2) Radius
(3) Circumference
(4) Diagonal

Options :
1. Chord 🟢 1
2. Radius 🟢 2
3. Circumference 🟢 3
4. Diagonal 🟢 4

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

(1) Crow
(2) Parrot
(3) Eagle
(4) Duck

Options :
1. Crow 🟢 1
2. Parrot 🟢 2
3. Eagle 🟢 3
4. Duck 🟢 4
Note: In questions numbered 31 to 35 pick the odd thing out:

\[(1) \quad x^2 + y - 2x\sqrt{y} \quad \quad \quad x^2 + y - 2x\sqrt{y} \quad (1)\]
\[(2) \quad x + y + 2\sqrt{xy} \quad \quad \quad x + y + 2\sqrt{xy} \quad (2)\]
\[(3) \quad x^2 - y^2 + 2yx \quad \quad \quad x^2 - y^2 + 2yx \quad (3)\]
\[(4) \quad 4x^2 - 4\sqrt{3}xy + 3y^2 \quad \quad \quad 4x^2 - 4\sqrt{3}xy + 3y^2 \quad (4)\]

Options:
1. ✔ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 34  Question Id : 6672695020  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

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

\[(1) \quad 62 \quad \quad \quad 62 \quad (1)\]
\[(2) \quad 59 \quad \quad \quad 59 \quad (2)\]
\[(3) \quad 67 \quad \quad \quad 67 \quad (3)\]
\[(4) \quad 73 \quad \quad \quad 73 \quad (4)\]

Options:
1. ✔ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 35  Question Id : 6672695021  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
Note: In questions numbered 31 to 35 pick the odd thing out:

(1) Hyderabad  
(2) Mumbai  
(3) Bhuvaneshwar  
(4) Indore

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

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

9. ______, 126, 48, 1332, 168

Options:
1. ✓ 1

Options: 1. 8
2. 10
3. 9
4. 12
Note: Each of the questions from 36 to 45 follows a definite pattern. Observe the same and fill in the blanks with suitable answers.

DOG, HDN, PHB, ____________

(1) ABW
(2) BAW
(3) BAV
(4) BAX

Options:
1. * 1
2. ✓ 2
3. * 3
4. * 4
Note: Each of the questions from 36 to 45 follows a definite pattern. Observe the same and fill in the blanks with suitable answers.

1, 4, 8, 11, 22, __________

(1) 25
(2) 33
(3) 26
(4) 44

Options :
1. ✓ 1
2. 2
3. ✗ 3
4. ✗ 4

Question Number : 39  Question Id : 6672695025  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes Single Line Question Option : 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 answers.

Z, U, Q, __________ L

(1) K
(2) M
(3) I
(4) N

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4
Note: Each of the questions from 36 to 45 follows a definite pattern. Observe the
text and fill in the blanks with suitable answers.

A2A, D9E, G16I

1. K 32 U
2. J 32 O
3. J 23 O
4. I 25 O

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

EDU, IGS, ______, QMO

1. MJQ
2. UPN
3. MJP
4. LJQ

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
Note: Each of the questions from 36 to 45 follows a definite pattern. Observe the same and fill in the blanks with suitable answers.

Question Number : 42  Question Id : 6672695028  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Options :
1. 
2. 
3. 
4. 

Question Number : 43  Question Id : 6672695029  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Options :
1. 
2. 
3. 
4. 

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

Question Number : 42  Question Id : 6672695028  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Options :
1. 
2. 
3. 
4. 

Question Number : 43  Question Id : 6672695029  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Options :
1. 
2. 
3. 
4. 

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

Question Number : 42  Question Id : 6672695028  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Options :
1. 
2. 
3. 
4. 

Question Number : 43  Question Id : 6672695029  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Options :
Question Number: 44  Question Id: 6672695030  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: 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 answers.

\[ \{ X, Y \}, \{ X + Y, X - Y \}, \{ 2X, 2Y \}, \{ 2(X + Y), 2(X - Y) \} , \]

\{ \_\_\_\_, \_\_\_\_\_ \} 

(1) 3X, 3Y 
(2) 3(X + Y), 3(X - Y) 
(3) 4X, 4Y 
(4) 4(X + Y), 4(X - Y) 

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

---

Question Number: 45  Question Id: 6672695031  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: 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 answers.

\[ 2 + \sqrt{6}, 4 + \sqrt{20}, 6 + \sqrt{42}, \_\_\_\_\_\_ \] 

(1) 8 + \sqrt{72} 
(2) 12 + \sqrt{72} 
(3) 8 + \sqrt{74} 
(4) 8 + 3\sqrt{7}

Options: 
1. 1  
2. 2
Note: The following passage to be analyzed for answering the questions

Passage

Study the following Bar diagram carefully and answer questions 46 to 48.

The average food production (in Tonnes) from 2001 to 2005 is

Options:
1. 50,000
2. 40,000
3. 45,000
4. 55,000

Options:
1. ✓
2. ✗
Question Number : 47  Question Id : 6672695034  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0

The ratio between the increase in production between 2000 and 2003 and 2000 and 2005 is:

(1) 3:2
(2) 4:3
(3) 5:3
(4) 5:2

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 48  Question Id : 6672695035  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
The approximate percentage increase in production of food grains from 2001 to 2003 is.

سال 2001 کے بعد کی بھی ایک سال کی تخمینہ اضافہ ہے۔

(1) 15.66%
(2) 15.03%
(3) 16.66%
(4) 16.075%

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Note: The marks obtained by a student in the examination in (A) Mathematics (B) English (C) Telugu, (D) Social Science (E) Science are depicted in the following Pie Diagram. Based on this data answer the questions 49 to 53.

Sub questions

**Question Number : 49  Question Id : 6672695037  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0**

If the student secured 150 marks in A, how many total marks did he secure in the complete examination?

(1) 360  
(2) 450  
(3) 600  
(4) 1000

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

**Question Number : 50  Question Id : 6672695038  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0**
The ratio of the marks obtained by the student in Mathematics and Telugu.

(1) 11:9
(2) 15:13
(3) 18:13
(4) 19:14

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

Question Number : 51 Question Id : 6672695039 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If a student has scored 150 marks in Mathematics, how many marks did he score in social science?

(1) 100
(2) 105
(3) 110
(4) 120

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.
What is the percentage of the total marks scored by the student in C, D and E put together?

(1) $52\frac{1}{3}$
(2) $58\frac{1}{3}$
(3) $60\frac{1}{3}$
(4) $61\frac{1}{3}$

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

Options:
1. 1
2. 2
3. 3
4. 4
If a student got 150 marks in A, how many marks did he get in D & E put together?

(1) $240\frac{1}{3}$
(2) $241\frac{2}{3}$
(3) 245
(4) $245\frac{1}{3}$

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

Options:
1. 1
2. 2
3. 3
4. 4
(Q No 54 to 55)

In a class of 60 students, 23 play Hockey, 15 play Basketball and 20 plays Cricket. 7 play Hockey and Basketball, 5 play Cricket and Basket Ball, 4 play Hockey and Cricket, and 15 students do not play any of these games.

Using this data, answer the questions 54 and 55.

The number of students who play Hockey, Basketball and Cricket is.

1. 3
2. 8
3. 11
4. 6

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
The number of students who play Cricket and Hockey but not Basketball is

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

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

Note: The letters A, B, C, .... Z of the English Alphabet are numbered 1, 2 .......
26 respectively. A Code is designed by the following rule:

Rule: The $i^{th}$ letter is coded as the $j^{th}$ letter where $j = 3i + 2 \pmod{26}$. The reverse process is followed for decoding.

Example: The $9^{th}$ letter is coded as C because, $3 \times 9 + 2 \pmod{26}$ is 29 (mod 26) which is 3 and the letter C is numbered as 3. Based on this coding procedure answer the questions 56 to 60.

Sub questions

Question Number : 56  Question Id : 6672695046  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

The code for COMPUTER is?

(1) KUOXMJQD
(2) KUPYNLRE
(3) KVPXMQJD
(4) KVOXNJQD

Options:
What is the code for STATE?

1. GSFS
2. GJEJQ
3. GJFJP
4. GQEQR

Which word is coded as FULLY?

1. SILLY
2. JETTY
3. JOLLY
4. SORRY

Options:
1. 1
2. 2
3. 3
4. 4
The number of letters of the alphabet that remain unchanged in this coding is:

1. 1
2. 2
3. 3
4. 4

What is the code for \textit{M A N A G E R}?

1. 1
2. 2
3. 3
4. 4
Note: The following passage to be analyzed for answering the questions.

Passage

Sub questions

Question Number : 61  Question Id : 6672695052  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
If “CHENNAI” is coded as “XSVMMZ” than “MUMBAT” is coded as:

(1) NONAYR
(2) LFLYZR
(3) OFOXZR
(4) NFNYZR

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 62  Question Id : 6672695053  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
If “PUNE” is coded as “QXSL”, then the code for “CUTE” is:

(1) EXZL
(2) DXYL
(3) CXYL
(4) FXAL

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
If “MAHATMA” is coded as “PDKAQIX” then “KRISHNA” is coded as

‘MAHATMA’

(1) NULSKEX
(2) NULSXEX
(3) NULSEXN
(4) NULSEKX

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

If “RING” is coded as “SJMF” then which of the following is coded as “GSNF”?

(1) FIGO
(2) FRUG
(3) FROG
(4) FORK

Options :
If “2018” is coded as “7981” then “1947” is the code for

1. 8153
2. 8052
3. 8025
4. 8513

Options:
1. 8153
2. 8052
3. 8025
4. 8513
d) Date, Time & Arrangement Problems

If today is Friday, then the day after 185 days will be

1. Sunday
2. Wednesday
3. Tuesday
4. Monday

Options:
1. ✔
2. ❌
3. ❌
4. ✔
At what time between 7 O'clock and 8 O'clock will the two hands in the clock be at right angles to each other?

(1) 7.45\frac{5}{11}
(2) 7.55\frac{5}{11}
(3) 7.48\frac{5}{11}
(4) 7.46\frac{5}{11}
If a clock takes 20 seconds to strike 11, how many seconds will it take to strike 5?

(1) 8
(2) 5
(3) 6
(4) 10

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
d) **Date, Time & Arrangement Problems**

P says “my father is the only son of Q’s mother and A, Q are sisters”. If R is grandfather of A, B is Q’s son then how is P related to B?

(1) Brother  
(2) Cousin  
(3) Father  
(4) Uncle

Options:

1. ✗ 1  
2. ✔ 2  
3. ✗ 3  
4. ✗ 4

Correct Marks: 1 Wrong Marks: 0
d) **Date, Time & Arrangement Problems**

Ram left office for the bus stop 15 minutes early. It takes 25 minutes for him to reach bus stop. Due to traffic he reached 10 minutes late and missed the bus. How much time did he take to come to bus stop?

(1) 30 minutes
(2) 25 minutes
(3) 50 minutes
(4) 40 minutes
d) Date, Time & Arrangement Problems

A train leaves Hyderabad at 6:10 a.m. and reaches Warangal at 9:25 a.m. The average speed of the train is 44 Km/h. Then the distance from Hyderabad to Warangal in km is:

(1) 130
(2) 135
(3) 143
(4) 140

130 (1)
135 (2)
143 (3)
140 (4)
d) Date, Time & Arrangement Problems

A, F are in different rows and columns. B is opposite to F and H is opposite to D, who is in the same row as that of A. E and G are neighbors of F. If the person sitting in the rows faces each other and C is immediate right to D, then who is diagonally nearest to D?

1. H
2. F
3. G
4. B

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 73  Question Id : 6672695064  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
d) Date, Time & Arrangement Problems

If + means ÷, - means x, + means + and x means –

Then the value of 16 + 4 ÷ 5 - 3 x 1 is

(1) 20
(2) 18
(3) 14
(4) 02

Options:
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4

Question Number : 74  Question Id : 6672695065  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

---

d) Date, Time & Arrangement Problems

\[ a \ast b = \frac{a^2 + b^2}{ab}, \quad a > 0, b > 0 \Rightarrow \frac{(1 \ast 2) \ast (1 \ast 1)}{1 \ast 3} = \]

(1) \( \frac{111}{10} \)
(2) \( \frac{121}{100} \)
(3) \( \frac{123}{150} \)
(4) \( \frac{123}{200} \)

Options:
1. ✔ 1
2. ✔ 2
3. ✔ 3
4. ✔ 4
d) Date, Time & Arrangement Problems

If the symbols *, #, @, £ represent addition, subtraction, multiplication and division respectively then:

\[
\frac{(15 \times 8) \# (15 \# 2)}{(15 \# 3) \times (12 \times 8) \# (5 \times 5)} =
\]

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

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

Options :
1. 1
2. 2
3. 3
4. 4
(i) Arithmetical Ability

\[
\frac{(x + \frac{1}{y})^a \cdot (x - \frac{1}{y})^b}{(y + \frac{1}{x})^a \cdot (y - \frac{1}{x})^b} =
\]

1. \( \left( \frac{x}{y} \right)^{a+b} \)
2. \( \left( \frac{x}{y} \right)^{a+b} \)
3. \( (x + y)^{a+b} \)
4. \( (x - y)^{a+b} \)

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 77  Question Id : 6672695068  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
(i) Arithmetical Ability

\[ 3^a = 5^b = 75^c \Rightarrow c(2a+b) = \]

(1) \(a + b\)
(2) \(ab\)
(3) \(a - b\)
(4) \((ab)^{-1}\)

\[ 3^a = 5^b = 75^c \Rightarrow c(2a+b) = \]

\[ a + b \quad (1) \]
\[ ab \quad (2) \]
\[ a - b \quad (3) \]
\[ (ab)^{-1} \quad (4) \]

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

Question Number : 78  Question Id : 6672695069  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

(i) Arithmetical Ability

\[ ab : bc : ca = 3:1:2 \Rightarrow \frac{a}{bc} : \frac{b}{ca} = \]

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

\[ ab : bc : ca = 3:1:2 \Rightarrow \frac{a}{bc} : \frac{b}{ca} = \]

\[ 1:4 \quad (1) \]
\[ 4:1 \quad (2) \]
\[ 4:3 \quad (3) \]
\[ 2:1 \quad (4) \]

Options:
1. 1
2. 2
(i) Arithmetical Ability

1. \( a:b = 3:5; \ ab = 2535 \Rightarrow a+b = \)

   (1) 104
   (2) 108
   (3) 112
   (4) 116

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

Question Number : 80  Question Id : 6672695071  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

\( x = 5 + \sqrt[3]{5} + \sqrt[5]{25} \Rightarrow x^3 - 15x^2 + 60x + 10 = \)

\( x = 5 + \sqrt[3]{5} + \sqrt[5]{25} \Rightarrow x^3 - 15x^2 + 60x + 10 = \)

   (1) 40
   (2) 70
   (3) 90
   (4) 100

Options:
1. 1
(i) Arithmetical Ability

\[ \sqrt{6 + \sqrt{6 + \sqrt{6 + \cdots}} } = \]

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

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

What is the least value of \(x\) such that \(43x4567\) is divisible by 11?

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

Options:
(i) Arithmetical Ability

The number of positive integers between 1 and 2087 that are divisible by 31 is:

\[ \frac{2087}{31} = 66 \text{ integers} \]

Options:
1. 53
2. 59
3. 67
4. 73
What is the largest four digit number that leaves a remainder 4 when it is divided by 36, 48 and 64?

(1) 9697  
(2) 9782  
(3) 9796  
(4) 9802
(i) Arithmetical Ability

What is the minimum number of square tiles required to pave a floor of dimensions 24.78 meters × 22.26 meters?

(1) 3027
(2) 3127
(3) 3242
(4) 3247

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

---

(1) Arithmetical Ability

\[
\frac{3.61}{0.361} = \frac{361}{x} \Rightarrow x = \frac{361}{3.61} = 100
\]

(1) 36.1
(2) 3.61
(3) 0.361
(4) 0.0361
Question Number: 87  Question Id: 6672695078  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct Marks: 1  Wrong Marks: 0

(i) Arithmetical Ability

If the recurring decimal number $1.\overline{27}$ is equal to the rational number $\frac{p}{q}$
then $p-q =$

\[ p-q = \frac{p}{q} - 1.27 \]

\[ \begin{align*}
(1) & \quad 3 \\
(2) & \quad 8 \\
(3) & \quad 27 \\
(4) & \quad 83
\end{align*} \]

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 88  Question Id: 6672695079  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical
Correct Marks: 1  Wrong Marks: 0
(i) Arithmetical Ability

The difference between the largest and the smallest of the following rational numbers is:

\[ \frac{3}{5} - \frac{8}{3} , \frac{2}{9} - \frac{1}{2} , \frac{1}{11} \]

Options:

1. \( \frac{11}{48} \)
2. \( \frac{13}{48} \)
3. \( \frac{11}{24} \)
4. \( \frac{7}{24} \)

Correct Marks: 1 Wrong Marks: 0
(i) Arithmetical Ability

What is the least fraction to be added to the sum of the following fractions to make it an integer?

\(3\frac{1}{3}, 6\frac{11}{12}, 4\frac{7}{36}, 3\frac{1}{12}, 7\frac{1}{4}\)

Options:

1. \(\frac{7}{9}\)
2. \(\frac{5}{9}\)
3. \(\frac{2}{9}\)
4. \(\frac{1}{9}\)
(i) Arithmetical Ability

If the length of a rectangle is increased by 15% and the breadth decreased by 10% then the percentage change in its area is:

اکثر طول کے سمجھیںہے 15٪ کا اضافہ اور عرض کی پلاٹ 10٪ کی کمی سے، تھا کہ:

(1) 7% increase
(2) 7% decrease
(3) 3½% decrease
(4) 3½% increase

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 91  Question Id : 6672695082  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
A spends 70% of his income and saves the rest. If his income increases by 15% and expenses increase by 20% the percentage change in his saving will be:

1) 30% increase
2) $\frac{10}{3}$% increase
3) $\frac{3}{10}$% decrease
4) $\frac{1}{10}$% decrease

A ایبی آدی کا 70% وارق خرچ دیہار اور پالیئے۔ اگر کان 15% کم ہو جاتے ہے اور اوربیک کی 15% اور اخراجات میں 20% کم ہو جائیں تو ہونے لگی ہویں اس فکر کے سبھی 4 کے اعداد

 اضافہ 30% (1)

 اضافہ $\frac{10}{3}$% (2)

 اضافہ $\frac{3}{10}$% (3)

 اضافہ $\frac{1}{10}$% (4)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 92  Question Id : 6672695083  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
(i) Arithmetical Ability

A person buys an article for Rs.18000 and after one year sells it for less than 25% of its cost price. What is the sale price (in Rs.)?

(1) 15,000
(2) 13,500
(3) 12,500
(4) 12,000

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
(i) Arithmetical Ability

A buys a piece of land for Rs. 75 lakhs and sells it to B at a profit of 10%. B in turn sells it to C at a profit of 20%. The amount of money paid by C (in Rs. lakhs) is:

1. 97
2. 98
3. 99
4. 101

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

Question Number: 94  Question Id: 6672695085  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0
A and B started a business with capitals of Rs. 12 lakhs and Rs. 24 lakhs respectively. A receives a monthly salary for running the business. At the end of the year they receive Rs. 1,80,000 each. What was the monthly salary of A (in Rs.)?

(1) 6,000
(2) 7,500
(3) 9,000
(4) 10,500
A and B enter into a partnership business with capitals in the ratio 4:5 respectively. At the end of 4 months A withdraws and B continued. At the end of the business they share profits in the ratio 1:5. The number of months B’s capital was used is:

(1) 8
(2) 12
(3) 16
(4) 20

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
(i) Arithmetical Ability

2 pipes can fill a tank in 30 minutes and 36 minutes respectively. A third pipe empties the tank at the rate of 11 liters per minute. If all the three pipes are opened simultaneously it take $22\frac{1}{2}$ minutes for the tank to be full. The capacity of the tank in litres is:

1. 1060
2. 960
3. 760
4. 660
(i) Arithmetical Ability

Two pipes $A$ and $B$ can fill a tank in 2 hours and 3 hours respectively. If both the pipes are opened together the time required in minutes to fill the tank is:

(1) 72
(2) 85
(3) 105
(4) 108
A man is walking at a speed of 10 kmph. After every kilometer he takes rest for 5 minutes. How much time he takes in minutes to cover a distance of 7 kms?

Options:

1. 68
2. 70
3. 72
4. 76

Options:

1. 68
2. 70
3. 72
4. 76
What is the time taken in hours by a cart to cover a distance of 0.9 km at 0.25 (meters per second)?

\[ \text{(1)} \quad 1 \]
\[ \text{(2)} \quad 1.2 \]
\[ \text{(3)} \quad 1.4 \]
\[ \text{(4)} \quad 1.5 \]
(i) Arithmetical Ability

R and S can finish a job in 10 days, S and M can finish it in 12 days and M and R can finish it in 15 days. In how many days will R, S and M together finish the job?

(1) 8
(2) 7
(3) $6\frac{1}{2}$
(4) 6
(i) Arithmetical Ability

P can do a work in 12 days and Q can do the same work in 16 days. Both start the work together and Q left after 4 days. How many more days are required by P to finish the work?

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

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 102  Question Id : 6672695093  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
(i) Arithmetical Ability

The length of a plot is 5 times its breadth. A playground measuring 500 sq. m is occupied by one fourth of the total area of the plot. The length of the plot in meters is:

1. 80
2. 100
3. 120
4. 125
(i) Arithmetical Ability

Area of the given figure.

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

Options:
1. 1
2. 2
3. 3
4. 4
What is the volume of a cube (incu.cms) whose total surface area is 726 sqcms?

(1) 1231
(2) 1321
(3) 1331
(4) 1728
(i) Arithmetical Ability

The length, breadth and the height of a cuboid are in the ratio 6:5:4 and its total surface area is 33,300 sq.m. What is the length of the cuboid (in meters)?

(1) 60
(2) 75
(3) 85
(4) 90

Options:
1. ** 1
2. ** 2
3. ** 3
4. ✔ 4
(i) Arithmetical Ability

If the length and breadth of a rectangular plot area 120m and 76m respectively, then the cost of fencing it at Rs. 8 per metre (in Rs) is:

(1) 3136
(2) 3130
(3) 3124
(4) 3118

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 107  Question Id : 6672695098  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
(i) Arithmetical Ability

The area (in sq.cm) of a regular hexagon of side 4cm is:

(1) \(16\sqrt{3}\)
(2) \(24\sqrt{3}\)
(3) \(24\sqrt{2}\)
(4) \(16\sqrt{2}\)
(i) Arithmetical Ability

Two equal cubes of side of length 18 cm are joined together to form a cuboid. Then the total surface area of this cuboid (in sq.cm) is:

1. 2430
2. 3240
3. 4860
4. 7290

(i) Arithmetical Ability

\[ \{ x : |8 - 4x| > 12 \} = \]

1. \( ( -\infty, -1 ) \cup ( 6, \infty ) \)
2. \( ( -\infty, -1 ) \cup ( 5, \infty ) \)
3. \( ( -1, 5 ) \)
4. \( ( 1, 5 ) \)
(i) Arithmetical Ability

If $5x + 7 = 12 \pmod{18}$, then the smallest integral value of such an $x$ is:

1) 19
2) 17
3) 13
4) 15

Sub-Section Number: 2
Sub-Section Id: 667269514
Question Shuffling Allowed: Yes
(ii) Algebraic and Geometrical Ability

If $p, q$ are any two statements, the negation of the statement

$((\sim P \lor q) \land (p \lor \sim q) \lor (p \land q))$ is:

1. $((P \lor q) \land (\sim p) \lor (\sim q))$
2. $((P \land q) \lor (\sim p) \land (\sim q))$
3. $((P \land q) \land (\sim p) \lor (\sim q))$
4. $((P \lor q) \land (\sim p) \land (\sim q))$

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 112  Question Id : 6672695103  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
Algebraic and Geometrical Ability

For any two statements \( p, q \) a tautology among the following is:

1. \( p \lor (\neg (p \land p)) \)
2. \((p \lor q) \Rightarrow p\)
3. \(\neg (p \land q) \Rightarrow p\)
4. \(\neg (p \land q) \Rightarrow \neg p\)

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number: 113  Question Id: 6672695104  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Single Line Question Option: No  Option Orientation: Vertical  Correct Marks: 1  Wrong Marks: 0
Let $A$, $B$ be subsets of a set $X$ and let $n(A)$ denote the number of elements in $A$. If $n(A) = 15$, $n(A \cap B) = 4$, $n(A \cup B) = 21$ then $n(B - A) =$

(1) 4  
(2) 6  
(3) 10  
(4) 14
If a set $X$ has four elements, then the number of relations on $X$ that are symmetric is:

1. $2^{16} - 2^6$
2. $2^{10}$
3. $2^6$
4. $2^{10} - 2^{10}$
(ii) Algebraic and Geometrical Ability

Let \( R = \{(m, n) \in \mathbb{N}^2 : m + n \text{ is even}\} \). Then the relation \( R \) on \( \mathbb{N} \) is:

1. Reflexive only
2. Reflexive and symmetric but not transitive
3. An equivalence relation
4. Symmetric only

\[ R = \{(m, n) \in \mathbb{N}^2 : m + n \text{ is even}\} \]

Relationship

Reflexive only \hspace{1cm} (1)
Reflexive and symmetric but not transitive \hspace{1cm} (2)
An equivalence relation \hspace{1cm} (3)
Symmetric only \hspace{1cm} (4)

Options:
1. \( \checkmark \) 1
2. \( \checkmark \) 2
3. \( \checkmark \) 3
4. \( \checkmark \) 4
(ii) Algebraic and Geometrical Ability

A line \(l\) which makes equal intercepts with the coordinate axes, passes through the point \(3, -4\). Then it also passes through the point:

(1) \((5, -6)\)
(2) \((-6, 7)\)
(3) \((-3, 4)\)
(4) \((-2, 3)\)

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 117  Question Id : 6672695108  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
**Algebraic and Geometrical Ability**

If $A(2, -3)$, $B(3,4)$ and $C(-1,5)$ are vertices of a triangle, then the length of median through $A$ is:

1. \(\frac{15}{2}\)
2. \(\sqrt{\frac{229}{4}}\)
3. \(\sqrt{\frac{219}{4}}\)
4. \(\frac{13}{2}\)
(ii) **Algebraic and Geometrical Ability**

\[ \text{If } \sin \theta = \frac{\sqrt{3}}{2} \text{ and } \theta \text{ is not in the first quadrant, then } \sec \theta + \tan \theta = \frac{3}{2} \text{ and } \theta \text{ is not in the first quadrant.} \]

\[
\begin{align*}
(1) & \quad \frac{-3}{2} \\
(2) & \quad \frac{12}{13} \\
(3) & \quad \frac{2}{3} \\
(4) & \quad \frac{13}{12}
\end{align*}
\]

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
(ii) **Algebraic and Geometrical Ability**

\[ A + B = \frac{\pi}{4} \Rightarrow (1 + \tan A)(1 + \tan B) = \]

<table>
<thead>
<tr>
<th>Option</th>
<th>Value</th>
</tr>
</thead>
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<td>(2)</td>
<td>2</td>
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<tr>
<td>(3)</td>
<td>0</td>
</tr>
<tr>
<td>(4)</td>
<td>-1</td>
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</tbody>
</table>

Options:

1. ✅ 1
2. ✅ 2
3. ✅ 3
4. ✅ 4

---

Question Number : 121  Question Id : 6672695112  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0
Algebraic and Geometrical Ability

The angles of elevation of a tower from the top and bottom of a building of height 30 meters are 30° and 60° respectively. Then the height of the tower (in meters) is:

1. 45
2. 60
3. 75
4. 90
(ii) Algebraic and Geometrical Ability

\[ x + \frac{1}{x} = 5 \Rightarrow x^3 + \frac{1}{x^3} = \]

\[
x + \frac{1}{x} = 5 \Rightarrow x^3 + \frac{1}{x^3} =
\]

(1) 125
(2) 110
(3) 90
(4) 105

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

Question Number : 123  Question Id : 6672695114  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

(ii) Algebraic and Geometrical Ability

\[ 3x - 4y = 7; \ xy = 5 \Rightarrow 9x^2 + 16y^2 = \]

\[
3x - 4y = 7; \ xy = 5 \Rightarrow 9x^2 + 16y^2 =
\]

(1) 120
(2) 144
(3) 169
(4) 196

Options :
1. ** 1

Question Number : 123  Question Id : 6672695114  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
(ii) **Algebraic and Geometrical Ability**

The remainder when the polynomial \( 7x^3 + 13x^2 - 19x - 20 \) is divided by \( x + 2 \) is:

1. 14
2. 18
3. -14
4. -18

Options:

1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

---

Question Number : 125  Question Id : 6672695116  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  
Single Line Question Option : No  Option Orientation : Vertical  
Correct Marks : 1  Wrong Marks : 0
(ii) Algebraic and Geometrical Ability

If a polynomial in $x$ leaves remainders 19, 17 respectively when divided by $x + 4$ and $x - 5$, then the remainder it leaves when divided by $x^2 - x - 20$ is

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
(ii) **Algebraic and Geometrical Ability**

The value of $k$ for which the system $kx + 3y = k-3$ and $12x + ky = k$ of equations has infinitely many solutions is:

1. 4
2. 5
3. 6
4. 7

**Options:**

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

**Question Number : 127  Question Id : 6672695118  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0**
(ii) Algebraic and Geometrical Ability

A fraction becomes $\frac{4}{5}$ if 1 is added to both its numerator and denominator while it becomes $\frac{1}{2}$ if 5 is subtracted from its numerator and denominator. The fraction is

(1) $\frac{5}{11}$
(2) $\frac{6}{11}$
(3) $\frac{7}{9}$
(4) $\frac{7}{10}$

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

Question Number : 128  Question Id : 6672695119  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
(ii) Algebraic and Geometrical Ability

If the sum of first 21 terms of an arithmetic progression is 609, then the 11th term of progression is

(1) 23  
(2) 25  
(3) 27  
(4) 29

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

Correct Marks: 1  Wrong Marks: 0
(ii) Algebraic and Geometrical Ability

The harmonic mean of \( \frac{1}{x} \) and \( \frac{1}{y} \) is

(1) the reciprocal of the average of \( x \) and \( y \)
(2) product of \( x \) and \( y \)
(3) the average of \( x \) and \( y \)
(4) the reciprocal of the sum of \( x \) and \( y \)

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

The coefficient of $x^{12}$ in the expansion of

$$(x-1)(x-2)(x-3)\ldots(x-13)$$

is

1. $-78$
2. $78$
3. $-91$
4. $91$

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
(ii) **Algebraic and Geometrical Ability**

The sum of all the coefficients in the expansion of 

\[(1-2x+3x^2)^9\]

is

1. \(4^9\)  
2. \(2^{11}\)  
3. \(2^9\)  
4. 0

**Options:**

1.  
2.  
3. ✔  
4. ✗
(ii) Algebraic and Geometrical Ability

\[ A = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix} \Rightarrow A^{2019} = \]

\[ A = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix} \Rightarrow A^{2019} = \]

1. \[ 3^{2020}A \] (1)
2. \[ 3^{2019}A \] (2)
3. \[ 3^{2018}A \] (3)
4. \[ 3^{2017}A \] (4)

Options :
1. ✅ 1
2. ✗ 2
3. ✅ 3
4. ✗ 4

Question Number : 133  Question Id : 6672695124  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0

(ii) Algebraic and Geometrical Ability

\[ A = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{bmatrix} \Rightarrow A^{90}B^{100} + B^{90}A^{100} = \]

1. \[ A+B \] (1)
2. \[ A-B \] (2)
3. \[ AB \] (3)
4. \[ 0 \] (4)

Options :
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
(ii) Algebraic and Geometrical Ability

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

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

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

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

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

Options:

1. \( \ast \) 1
2. \( \ast \) 2
3. \( \ast \) 3
4. \( \checkmark \) 4
Algebraic and Geometrical Ability

If \( y = x \sin x \), then at \( x = \frac{\pi}{2} \), \( \frac{dy}{dx} = \) 

\[ (1) \frac{\pi}{2} \]
\[ (2) 1 \]
\[ (3) 0 \]
\[ (4) \frac{\pi}{4} \]
(ii) Algebraic and Geometrical Ability

In a triangle $ABC$, $\angle A = \angle B = \angle C$. The bisectors of the angles $\angle B$ and $\angle C$ intersect at $D$. Then $\angle BDC =$

(1) $30^\circ$
(2) $60^\circ$
(3) $90^\circ$
(4) $120^\circ$

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

If the diagonals of a rhombus are 9 cm and 12 cm, then the perimeter of the rhombus (in cm) is:

1. 30
2. 21
3. 32
4. 28

Correct Marks: 1  Wrong Marks: 0

Options:
1. ✔ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4
Let $P$ be an external point to a circle and $PT$ be a tangent drawn from $P$ meeting the circle at $T$. If $AB$ is a chord of the circle such that $A, B, P$ are collinear, $PT = 5$ cm and $PB = 4$ cm then $PA =$

(1) 6 cm
(2) 6.25 cm
(3) 6.5 cm
(4) 6.75 cm
(ii) Algebraic and Geometrical Ability

If the area of the triangle with vertices (1, 2), (2, 3) and (x, 4) is 40 sq. units then the value of |x - 3| is:

\[ \text{Area} = \frac{1}{2} \times |1 \times 4 - 2 \times 3 - 2 \times 4 + x \times 1| = 40 \]

(1) 70  
(2) 80  
(3) 85  
(4) 90

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

Area (in sq. units) of the quadrilateral \(ABCD\) with vertices \(A(2,1), B(4,3), C(-1, 2), D(-3,-2)\) is:

1. 30
2. 21
3. 22
4. 18

\[D \, 'B(4,3) 'C(-1, 2) 'A(2,1) 'vertices \triangle ABCD \text{ quadrilateral} \]

30 (1)
21 (2)
22 (3)
18 (4)
(iii) Statistical Ability

Arithmetic mean of 56, 57, 58, ..., 100 is:

1. 78
2. 80
3. 82
4. 76

Correct: 1
(iii) Statistical Ability

The median of some observations is 12. If two additional observations 10, 15 are added to these observations, then the median of the new series of observations is:

1. 11
2. 14
3. 13
4. 12

Options:

1. **1**
2. **2**
3. **3**
4. ✔️4
(iii) Statistical Ability

If the arithmetic mean of some observations is 26.5 and their median is 25.4, then their mode is:

1. 22.3
2. 23.2
3. 23.4
4. 24.3
(iii) Statistical Ability

Standard deviation of first $2n$ natural numbers is:

(1) $\sqrt{\frac{4n^2-1}{12}}$

(2) $\sqrt{\frac{4n^2+1}{12}}$

(3) $\sqrt{\frac{n^2+1}{12}}$

(4) $\sqrt{\frac{n^2-1}{12}}$

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 145  Question Id : 6672695136  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
(iii) Statistical Ability

For the ten observations \( x_1, x_2, \ldots, x_{10} \) it is given that \( \sum_{i=1}^{10} x_i = 12 \) and \( \sum_{i=1}^{10} x_i^2 = 18 \). Then the standard deviation of the data is:

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

Standard deviation

\[
\frac{5}{3} \quad (1) \\
\frac{2}{5} \quad (2) \\
\frac{3}{5} \quad (3) \\
\frac{5}{2} \quad (4)
\]
(iii) Statistical Ability

If the sum of the squares of the deviations of ranks of two students in seven subjects is 21, then the coefficient of rank correlation is:

1) $\frac{3}{8}$
2) $\frac{5}{8}$
3) $\frac{7}{8}$
4) $\frac{1}{8}$

Options:

1. ** 1
2. ✔ 2
3. ** 3
4. ** 4

Question Number : 147  Question Id : 6672695138  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
A problem in mathematics is given to three students $P$, $Q$ and $R$ whose chances of solving it are $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{2}$ respectively. Then the probability that the problem will be solved is:

(1) $\frac{2}{3}$
(2) $\frac{3}{4}$
(3) $\frac{4}{5}$
(4) $\frac{5}{6}$
(iii) Statistical Ability

Four dice are thrown simultaneously. The probability that all of them show the same numbers is:

(1) \( \frac{1}{6^4} \)
(2) \( \frac{1}{6^3} \)
(3) \( \frac{1}{720} \)
(4) \( \frac{1}{1440} \)

4. دانس کو ایک ساتھ اچھا لاگیا۔ ایک بی عدد کے واقع بونے کی کبھی چھوٹی۔ یہ probability کی ہوگی۔

\[ \frac{1}{6^4} \] (1)
\[ \frac{1}{6^3} \] (2)
\[ \frac{1}{720} \] (3)
\[ \frac{1}{1440} \] (4)

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
(iii) **Statistical Ability**

If two cards are drawn at random from a well shuffled pack of 52 cards,

then the probability of getting both cards from same suit is:

(1) \(\frac{1}{17}\)

(2) \(\frac{2}{17}\)

(3) \(\frac{3}{17}\)

(4) \(\frac{4}{17}\)
(iii) Statistical Ability

When two dice are rolled at random, then the probability of getting same prime number on both dice is

\[
\begin{align*}
\text{(1)} & \quad \frac{1}{12} \\
\text{(2)} & \quad \frac{5}{36} \\
\text{(3)} & \quad \frac{1}{9} \\
\text{(4)} & \quad \frac{7}{36}
\end{align*}
\]

Options:
1. ✓ 1
2. 2
3. 3
4. 4

Communication Ability

Section Id: 66726975
Section Number: 3
Section type: Online
Mandatory or Optional: Mandatory
Number of Questions: 38
Number of Questions to be attempted: 38
Section Marks: 50
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Sub-Section Id: 667269516
Choose the correct meaning for the word given:

**Slipshod**

(1) slippers  
(2) careless  
(3) careful  
(4) cunning

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Choose the correct meaning for the word given:

**Recalcitrant**

(1) lesson  
(2) recall  
(3) sympathetic  
(4) disobedient

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

**Placid**

(1) turbulent  
(2) tranquil  
(3) agitated  
(4) troubled

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

Choose the correct meaning for the word given:

**Frugal**

(1) economical  
(2) financial  
(3) monetary  
(4) industrial

Options:  
1. ☑ 1  
2. ☑ 2  
3. ☑ 3  
4. ☑ 4
Choose the correct meaning for the word given:

Conciliate

(1) change
(2) rouse
(3) offend
(4) placate

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Choose the correct meaning for the word given:

Wholesome

(1) delicate
(2) gaunt
(3) unsound
(4) healthy

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

A printed list of questions to be answered by a number of people is called ____________

(1) a survey
(2) an agenda
(3) a menu
(4) a questionnaire

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Fill in the blank choosing the correct word

Many would not prefer to live a ____________ life like that of a hermit.

(1) solitary
(2) solitude
(3) solo
(4) solitaire

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

The old people in the village still ________ the old traditions.

(1) observe  
(2) ignore  
(3) discourage  
(4) forget

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

Fill in the blank choosing the correct word

Although he is shy it certainly has not ________ his career in any way.

(1) helped  
(2) encouraged  
(3) impeded  
(4) impelled

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

Sub-Section Number: 3
Sub-Section Id: 667269518
Question Shuffling Allowed: Yes
Choose the correct answer

A storage area in memory that stores information temporarily while in use is known as

(1) Buffer
(2) Bug
(3) Capacity
(4) Check box

Choose the correct answer

Pictorial representation of programming procedure is called

(1) Algorithm
(2) Program
(3) Flowchart
(4) Executive file
Choose the correct answer

An inter connection of two or more computing devices is generally known as

(1) Web page
(2) Server
(3) Network
(4) Data communication

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✓ 4

Choose the correct answer

Which of the following is not a guided transmission media?

(1) Fiber optic cables
(2) Twisted pair cables
(3) Coaxial Cables
(4) Radio waves

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

The storing and accessing of data and programs over the internet instead of on another type of hardware drive is known as

(1) Cloud computing
(2) Compression
(3) Content
(4) Chip

Options :
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Choose the correct answer

When do you conduct an induction of a new employee in an organisation?

(1) Before recruitment
(2) Before Selection
(3) Before completion of probation period
(4) Before assigning the job

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

A report of accounts that represents ending balance of each account in the list at the end of the accounting period is known as

(1) Account Receivables
(2) Trial Balance
(3) Allocation Rate
(4) Asset Stripping

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Choose the correct answer

The economic concept that each consecutive unit of good consumed or resource used, is less useful or productive than the preceding one is known as

(1) Diminishing Returns
(2) Deflation
(3) Depression
(4) Discounting

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

One of the assumptions in economics is that human wants are

(1) scarce
(2) constrained by resource
(3) seasonal
(4) unlimited

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Choose the correct answer

A legal document by which a bank lends money at an interest in exchange for the title of a debtor’s property is known as

(1) Mortgage
(2) Premium
(3) Loan
(4) Credit

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

A: ‘Look at what you have done! You have knocked me down with your cycle.’
B: “Well you should be more careful while crossing the road.”
‘B’ is

(1) apologetic  
(2) furious  
(3) unapologetic  
(4) angry

Choose the correct answer

A: “My friend went through many ups and downs before he could reach the present stage.”
B: “Patience has its rewards, after all”.
‘B’ is

(1) hostile  
(2) philosophical  
(3) derogatory  
(4) unfriendly

Choose the correct answer

A: “My friend went through many ups and downs before he could reach the present stage.”
B: “Patience has its rewards, after all”.
‘B’ is

(1) hostile  
(2) philosophical  
(3) derogatory  
(4) unfriendly
Choose the correct answer:

Change the following sentence into active voice: My pocket has been picked.

(1) Someone has picked my pocket
(2) Someone have picked my pocket
(3) Someone picks my pocket
(4) Someone has been picking my pocket

Choose the correct answer:

“You had better hold your tongue.” The underlined expression means

(1) keep the tongue between the teeth
(2) take back what is said
(3) not mince words
(4) not speak
Choose the correct answer

“Membership in the sports club can cost you an arm and a leg.” The underlined expression means, it is

(1) physically strenuous
(2) exhaustive
(3) dangerous
(4) expensive

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Choose the correct answer

There is so much red tape involved in getting official permits. The underlined phrase means

(1) cost
(2) risk
(3) bribe
(4) delay

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

“Nobody appreciated the manager throwing his weight around”. The underlined expression means

(1) losing weight
(2) giving up the authoritative position
(3) wielding authority in a heavy-handed way
(4) losing the authority and power

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Fill in the blanks with the appropriate phase/verbs/preposition:

I must protest _____ this course of action

(1) at
(2) by
(3) from
(4) along

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

He delights __________ being helpful.

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

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

Fill in the blanks with the appropriate phase/verbs/ preposition:

___________ being a gentleman, he was also a reputed singer.

(1) Beside  
(2) Besides  
(3) Although  
(4) Despite of

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

Question Number : 180  Question Id : 6672695171  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

Question Number : 181  Question Id : 6672695172  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
Fill in the blanks with the appropriate phase/verbs/preposition:

I _________ waiting here for the last three hours.

(1) am
(2) have been
(3) was
(4) had been

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Fill in the blanks with the appropriate phase/verbs/preposition:

I wish she ___________ dead.

(1) were
(2) was
(3) had
(4) has

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

You are walking too fast. I can’t ________ with you.

(1) keep up
(2) make up
(3) bring up
(4) get by

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Fill in the blanks with the appropriate phase/verbs/preposition:

I love to ________ the stars in the sky at night.

(1) look out
(2) look up at
(3) look forward
(4) look away

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

A crisis can ________________ the best in someone.

(1) bring up
(2) bring out
(3) bring over
(4) bring round
Read the following passage and answer questions

To avoid the various foolish opinions to which mankind is prone, no superhuman genius is required. A few simple rules will keep you, not from error, but from silly error!

If the matter is one that can be settled by observation, make the observation yourself. Aristotle could have avoided the mistake of thinking that women have fewer teeth than men, by the simple device of asking Mrs. Aristotle to keep her mouth open while he counted. He did not do so because he thought he knew. Thinking that you know when in fact you don’t is a fatal mistake to which we are all prone. I believe myself that hedgehogs eat black beetles, because I have been told that they do; but if I were writing a book on the habits of hedgehogs I should not commit myself until I had seen one enjoying this unappetizing diet. Aristotle, however, was less cautious. Ancient and medieval authors knew all about unicorns; not one of them thought it necessary to avoid dogmatic statements about them because he had never seen one of them.

Sub questions

Question Number : 186  Question Id : 6672695178  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0

What do humans require to avoid being dogmatic?

(1) super human genius
(2) open-mindedness
(3) a few simple rules
(4) a firm belief in themselves

Options :
1. * 1
2. * 2
3. ✓ 3
4. * 4

Question Number : 187  Question Id : 6672695179  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes  Single Line Question Option : No  Option Orientation : Vertical  Correct Marks : 1  Wrong Marks : 0
What was a common personality trait in Aristotle?

1. He was right about his beliefs
2. He did not verify his beliefs
3. He was always obstinate
4. He never made any mistakes

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

What does the author believe in?

1. Intention
2. Dogmatism
3. Verification
4. Ignorance

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

What would the author do if he had to write a book on the eating habits of hedgehogs?

1. see hedgehogs eating black beetles
2. believe that hedgehogs ate black beetles
3. write about hedgehogs eating black beetles
4. read about hedgehogs eating black beetles.

Options:
Question Number : 190  Question Id : 6672695182  Question Type : MCQ  Option Shuffling : No  Display Question Number : Yes
Single Line Question Option : No  Option Orientation : Vertical
Correct Marks : 1  Wrong Marks : 0

According to the author, what did the ancient and medieval authors feel about their observations?

(1) It was foolproof
(2) It was cautious
(3) It was doubtful
(4) It was verified

Options :

1. ✓ 1
2. ☐ 2
3. ☐ 3
4. ☐ 4

Sub-Section Number: 7
Sub-Section Id: 667269522
Question Shuffling Allowed : Yes

Question Id : 6672695183  Question Type : COMPREHENSION  Sub Question Shuffling Allowed : Yes  Group Comprehension Questions : No
Question Numbers : (191 to 195)
Read the following passage and answer questions

Most managers don’t do things in the order of priority that they have rationally selected. They do things according to feelings. That’s how their day is run. Professional managers fall into two categories. There are doers and there are feelers. Doers do what needs to be done to reach a goal that they themselves have set. They come to work having planned out what needs to be done. Feelers, on the other hand, do what they feel like doing. Feelers take their emotional temperature throughout the day, checking in on themselves, figuring out what they feel like doing right now. Their lives, their outcomes, their financial security are all dictated by the fluctuation of their feelings. Their feelings will change constantly, of course, so it’s hard for a feeler to follow anything through to a successful conclusion. By contrast, a doer has high self-esteem. A doer enjoys many satisfactions throughout the day, even though some of them were preceded by discomfort. A feeler is almost always comfortable, but never really satisfied. A doer experiences more and more power every year of his life. A feeler feels less and less powerful as the years go on.

Sub questions

What is the major shortcoming in most managers?

1. they are inactive
2. they do not act rationally
3. they are dependent on others
4. they are foolish

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
Who is a ‘feeler’?

(1) a person with a goal
(2) a person who plans his day
(3) a person who is a slave to his emotions
(4) a person who enjoys life

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

What is the meaning of “emotional temperature”?

(1) constant changes in one’s feelings
(2) the temperature of the physical body
(3) intensity of one’s emotions
(4) attitude to life

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
What does a ‘doer’ have?

(1) plenty of work
(2) high self-esteem
(3) a loss of confidence
(4) others to work with

What does a ‘feeler’ experience as the years go by?

(1) a sense of achievement
(2) a sense of failure
(3) a sense of satisfaction
(4) a sense of happiness
Read the following passage and answer questions

It requires a sense of superiority assurance, and self-confidence, to write about bores at all, except as one of them. But since a true bore is always unconscious of his ‘borishness’, and indeed usually thinks of himself as the most companionable of men, to write as one of them is to acquit oneself of the stigma.

Bores are happy largely because they have so much to tell and they can find people to tell it to. The tragedy is they can always find their listeners, me almost first And why can they? Why can even notorious bores always be sure of an audience? The answer is the ineradicable kindness of human nature. Few men are strong enough to say ‘For Heaven’s sake go away, you weary me’

One of the bore’s greatest assets is his simplicity which disarms. Astute crafty men are seldom bores; very busy men are seldom bores.

Sub questions

Question Number : 196 Question Id : 6672695190 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which quality is NOT required to write about bores?

(1) Kindness
(2) Confidence
(3) A sense of superiority
(4) Belief in oneself

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 197 Question Id : 6672695191 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0
Which of the following is NOT true of a true bore?

(1) being conscious of his boorishness
(2) being happy by and large
(3) finding their listeners
(4) sure of an audience

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Why are bores happy?

(1) they love their audience
(2) they have never faced any tragedy in their lives
(3) they always find their listeners
(4) they are loved by everyone

Options:
1. ✗ 1
2. ✗ 2
3. ✅ 3
4. ✗ 4

Which quality stands out in a bore?

(1) Astuteness
(2) Cunningness
(3) Simplicity
(4) Busyness

Options:
What does ‘ineradicable’ mean?

(1) extreme

(2) feeling

(3) shameless

(4) deep-rooted