<table>
<thead>
<tr>
<th>Notations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Options shown in green color and with icon are correct.</td>
</tr>
<tr>
<td>2. Options shown in red color and with ✗ icon are incorrect.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question Paper Name:</th>
<th>TS ICET 2023 26th May 2023 Shift 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Name:</td>
<td>TS ICET 2023</td>
</tr>
<tr>
<td>Creation Date:</td>
<td>2023-05-26 16:37:50</td>
</tr>
<tr>
<td>Duration:</td>
<td>150</td>
</tr>
<tr>
<td>Total Marks:</td>
<td>200</td>
</tr>
<tr>
<td>Display Marks:</td>
<td>Yes</td>
</tr>
<tr>
<td>Share Answer Key With Delivery Engine:</td>
<td>Yes</td>
</tr>
<tr>
<td>Actual Answer Key:</td>
<td>Yes</td>
</tr>
<tr>
<td>Calculator:</td>
<td>None</td>
</tr>
<tr>
<td>Magnifying Glass Required?:</td>
<td>No</td>
</tr>
<tr>
<td>Ruler Required?:</td>
<td>No</td>
</tr>
<tr>
<td>Eraser Required?:</td>
<td>No</td>
</tr>
<tr>
<td>Scratch Pad Required?:</td>
<td>No</td>
</tr>
<tr>
<td>Rough Sketch/Notepad Required?:</td>
<td>No</td>
</tr>
<tr>
<td>Protractor Required?:</td>
<td>No</td>
</tr>
<tr>
<td>Show Watermark on Console?:</td>
<td>Yes</td>
</tr>
<tr>
<td>Highlighter:</td>
<td>No</td>
</tr>
<tr>
<td>Auto Save on Console?:</td>
<td>Yes</td>
</tr>
<tr>
<td>Change Font Color:</td>
<td>No</td>
</tr>
<tr>
<td>Change Background Color:</td>
<td>No</td>
</tr>
<tr>
<td>Change Theme:</td>
<td>No</td>
</tr>
<tr>
<td>Help Button :</td>
<td>No</td>
</tr>
<tr>
<td>Show Reports :</td>
<td>No</td>
</tr>
<tr>
<td>Show Progress Bar :</td>
<td>No</td>
</tr>
</tbody>
</table>

---

**TS ICET 2023**

| Group Number : | 1 |
| Group Id : | 78567415 |
| Group Maximum Duration : | 0 |
| Group Minimum Duration : | 150 |
| Show Attended Group? : | No |
| Edit Attended Group? : | No |
| Break time : | 0 |
| Group Marks : | 200 |
| Is this Group for Examiner? : | No |
| Examiner permission : | Cant View |
| Show Progress Bar? : | No |

---

**Analytical Ability**

| Section Id : | 78567443 |
| Section Number : | 1 |
| Section type : | Online |
| Mandatory or Optional : | Mandatory |
| Number of Questions : | 45 |
| Number of Questions to be attempted : | 45 |
| Section Marks : | 75 |
| Enable Mark as Answered Mark for Review and Clear Response : | Yes |
| Maximum Instruction Time : | 0 |
Data Sufficiency

పరిశీలన సమస్యలు
Note: In questions 1 to 20, a question is followed by data in the form of two statements labelled as (I) and (II). You must decide whether the data given in the statements are sufficient to answer the questions. Using the data make an appropriate choice from (1) to (4) as per the following guidelines.

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

Sub questions

Question Number : 1 Question Id : 7856742914 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Data Sufficiency

సమయం సమాచారం
What is the third term of that geometric progression?

అ తినీ తింటే మూడవ తలుగు ఎల్లో?

(I) The fifth term of that geometric progression is 32.

అ చవ తింటే మూడవ సంఖ్య 32.

(II) Product of the first five terms of that geometric progression is 1024.

అ చవ తింటే పాండవ సంఖ్యాల అభియుక్తి 1024.

Options:

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

Data Sufficiency

అనుమతి సంబంధం
What is the value of $\sin \theta$?

$\sin \theta \text{ ఎంతా ఉంటుందో?}$

(I) $\cos \theta = \frac{4}{5}$

(II) $\tan \theta$ is negative

$tan \theta \text{ నాగారు ఉంటూుందో}$

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 3  Question Id : 7856742916  Question Type : MCQ  Option Shuffling : No
Display Question Number : Yes  Is Question Mandatory : No  Calculator : None  Response Time : N.A  Think Time : N.A  Minimum Instruction Time : 0
Correct Marks : 1  Wrong Marks : 0

Data Sufficiency

What is the value of $x$?

$x \text{ ఎంతా ఉంటుందో?}$

(I) $x + y = 24$

(II) $x^2 + y^2 = 2^{96}$

Options:
Is $b > a$?

$b > a$ අයෝ ලබාද නේ?

(I) $x + 3$ is a factor of $x^6 - 27^b$.

\[ x + 3 \text{ divides } x^6 - 27^b \text{ exactly.} \]

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

\[ x^2 - 4a^b \text{ divides } x^2 - 4a^b \text{ exactly.} \]
What is the angle subtended by the sector at the centre of the circle?

(1) Perimeter of the sector is 16 cm.
(2) Arc length of the sector is 10 cm.

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4
What is the median of the integers in set $S$ consisting of six integers?

(1) Range of the set is 40.
   
(II) Arithmetic mean of the integers in $S$ is 15.

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

---

Is $x + y > 0$?

$I: \quad 2 \log_{10} x + 2 \log_{10} y = 10$

$II: \quad \log_{10} y = 0$

Options:
Is \( x \) a perfect square of an integer?

\( x \) ఒక పూర్ణాంకం లేని ఎక్కడ ఉండాలి?

(I) \( x \) leaves remainder 2 when divided by 4.

\( x \) మే 4 నుంచి 2 ఎక్కడ ఇచ్చిని.

(II) \( x \) leaves remainder 1 when divided by 4.

\( x \) మే 4 నుంచి 1 ఎక్కడ ఇచ్చిని.

Options:

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

If \( a, b, c \) are real numbers, are the roots of the quadratic equation
\[ ax^2 + bx + c = 0 \quad (a \neq 0) \] imaginary?

\( a, b, c \) అనే మూలాలు నీటిపడతాం అనుమానం, \( ax^2 + bx + c = 0 \quad (a \neq 0) \) పద్ధతి నీటిపడతాం?

(I) \( a + c > 0 \)

(II) \( a.c < 0 \)

Options:

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

If \( A, B \) are two sets such that \( n(A \cup B) = 75 \), then what is the number of elements in the set \( A \cap B \)? (Here \( n(S) \) denotes the number of elements in the set \( S \))

\[ A, B \text{ లో ఉన్న నాటికి } n(A \cup B) = 75 \text{ ఏమాసిందటానికి. } A \cap B \text{ దీనిని మార్గం స్థలం? (అంటే } n(S) \text{ ఎంతినా సమీకరణం మారిన స్థలం మారింది.)}\]

(I) \( n(A) = 60 \)

(II) \( n(B) = 50 \)

Options :

1. ✖️
2. ✖️
3. ✔️
4. ✖️

Data Sufficiency
What is the average of the real numbers \( a + 7, b - 3, c + 14, d - 5 \) ?

\[ a + 7, b - 3, c + 14, d - 5 \text{ మూలాల మధ్య సమాధానం ఎంత?} \]

(I) \[ a - b + c - d = 0 \]

(II) \[ a + b + c + d = 63 \]

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Data Sufficiency
పరిశీలన సమస్య–పరిస్థితి
What is the ratio of the areas of a circle and a square?

2. మూడు స్మారితులు కంటిన, దానిని ఎలయితే పొడవు కంటిన?

(I) The radius of the circle is 4 cm.
   ఎంపాడే ఎరుపు ఏడు సెంటీమీటర్లు.

(II) The circle circumscribes the square.
   గ్రంథించడం ఎంపాడే ఎరుపు చతురస్రం గ్రామం.

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
What is the rate of simple interest?

మొట్టము రేటు ఎంత? 

(I) Principal is Rs.1000.

అంశం రూ. 1000.

(II) Amount in 3 years Rs.1195.

3 సారోత్త సంవత్సరాలు రూ. 1195.

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Data Sufficiency

మొత్తం రేటు ఎంత?
What is the profit/loss percent earned/incurred by selling an article for Rs.24000?

醺. 24000 వాస్తు కేసు ఈయాగులు అమ్మిల్లు వాస్తు విడిల వాస్తు విడిలా నంది?

(I) The difference between the cost price and the selling price of the article is Rs.9600.
అమ్మించనం అమ్మించనం విడిల విడిల విడిల విడిల విడిల విడిల విడిల నంది 9600.

(II) The ratio of the selling price to the cost price of the article is 5:3.
అమ్మించనం అమ్మించనం విడిల విడిల విడిల విడిల విడిల విడిల విడిల 5:3.

Options :

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 15 Question Id : 7856742928 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Data Sufficiency
అసిస్టెన్ట్ సిఫాక్స్ మంది
If the persons $M, N, D, P$ and $K$ are arranged in the decreasing order of their earnings, then who is the last but one among them?

$M, N, D, P$ నామాగా క మరు నముంచి చిన్న ఎత్తుచేస్తున్న ఒకరు రెండవ రెండవ వల్ల ఎక్కడ ఉండాలి?

(I) $M$ earns more than $P$ who earns less than $K$.

$K$ నామాగా మరు నముంచి $P$ నామాగా $M$ నామాగా ఎత్తుచేస్తున్నాడు.

(II) $N$ earns more than $M$ and $P$ but less than only $D$.

$D$ నామాగా మరు నముంచి $M$ నామాగా $P$ నామాగా ఎత్తుచేస్తున్నాడు $N$ నామాగా ఎత్తుచేస్తున్నాడు.

Options:

1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ✗ 4
How many sons does the person P have?

బిందుస్తున్న పేరు P ని ఎన్ని పునర్జన్య కు ఉండును?

(I) S and T are brothers of M.

M యు స్యార్ అంటే, T యు అయితే.

(II) The mother of T is P and P has only one daughter.

T యు పాపియా, P యు అంటే, P యు ఎన్ని నష్టాయలు ఉండును.

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 17 Question Id : 7856742930 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Data Sufficiency

మార్కులు నష్టాంలు
Among six persons $A, B, C, D, E, F$ who is the tallest person?

$A, B, C, D, E, F$ ఎందుకు ఎత్తైన మొదటివారి? 

(I) $A$ is shorter than only two persons. $E$ is taller than $F$ and shorter than $C$. $C$ is shorter than $A$ and $B$ is shorter than $D$.

(II) $C$ is taller than only two persons. $B$ is taller than $A$ and $E$ is taller than $F$ only.

Options:

1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Data Sufficiency

మేరకు తెలుగు
What is the value of \( \frac{(x+y+z)^2}{x^2+xy+y^2} \)?

\[ \frac{(x+y+z)^2}{x^2+xy+y^2} \]

(I) \( x: y = 3: 4 \)

(II) \( y: z = 3: 4 \)

Options:

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Five persons A, B, C, D and E are sitting along a circular table facing the centre. Who is sitting to the immediate left of D?

అండెచెల ప్రతిభారితులు అనేక అన్ని మరియు సమాధానం చేయడానికి సంహిత కనబడింది. A, B, C, D మరియు E అనే అనుసంధానాన్ని తెలియజేస్తారు. D ని సమీపంలో ఉండగా ఎందుకు బట్టి ఉంది?

(I) C is sitting second to the left of A. B and D are immediate neighbours of each others.

A ను రాయమనం లేదు కాబట్టి సమీపంలో ఉండి. B మరియు 
D సమీపంలో ఉండి.

(II) D is sitting to the immediate left of B. E is not an immediate neighbour of D and B.

B ను రాయమనం లేదు కాబట్టి సమీపంలో ఉండి. D మరియు 
B సమీపంలో ఉండి. E సమీపంలో ఉండదు.

Options:

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

How is $A$ related to $B$?

$B$ ఎందు వచ్చినది $A$ వచ్చినది?

(I) $C$ is a brother of $B$.

$B$ ఒకగాని $C$.

(II) $A$ is a daughter of $C$.

$C$ ఒకగాని $A$.

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number: 2
Sub-Section Id: 785674324
Question Shuffling Allowed: Yes
Is Section Default?: null
Problem Solving
ప్రశ్నలు - నిష్ణాతి

(a) Series రెండు

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 నుండి ఎకుప్పు మేము రెండూ రెండూ రెండూ (రెండూ రెండూ రెండూ రెండూ రెండూ రెండూ) నంపించండి కీంది. ఋణ ఉంటే నంపించండి రెండో బాహ్య తోడ్డు కలిగి కలిగి నంపండి. ఇవి ఆధారాలు ఆధారాల అంశాలు ఆధారాల అంశాల నంపండి.

DBCE : QOPR :: JLIK : ______

(1) WXYV
(2) WYVX
(3) WYXV
(4) YWXU

Options :

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 22 Question Id : 7856742935 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
Problem Solving

(a) Series [పాఠాల]

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 విధాన కలిగి (పాఠాల పాఠాల) సమానమైన సమాధాన ఉండాలి. అది విధాన లో ఇది సమాధానం ఆధారంగా మరియు సమాధానం ఉండింది. అందుకే అనుగుణాన్ని నిర్ధిష్ట ప్రతి సమాధానం సమాధానం సమాధానం.

RING : 57 :: PUSH : _____

(1) 85
(2) 80
(3) 75
(4) 70

Options:

1. 1 ✔
2. 2 ✗
3. 3 ✗
4. 4 ✗
Problem Solving
ప్రశ్నలు ప్రస్తుతి చేయడానికి
(a) Series సిస్టమ్

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 ప్రశ్నలు మూడు పాటు జోడలను (సూచించే పాటులు సంఖ్య లేదా లెటార్) మోత్రాలతో ఉంటాం. ఇవి పాటు పాటు మూడు పాటు సంఖ్య లేదా లెటార్ మోత్రాలుగా ఉంటాం. అందించిన విధానం మొదటి పాటు ఉంటాం లేదా మూడు పాటులలో సంఖ్య లేదా సంఖ్య లేదా లెటార్ మోత్రాలు ఉంటాం

624 : 48 :: 736 : _____

(1) 126
(2) 174
(3) 182
(4) 198

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

2^3 \cdot 3^3 : 12 :: 5^3 \cdot 7^3 : ___

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Problem Solving
పరమాణు పరిశీలన
(a) Series శాయామానయం

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 నుండి కాక పంటి పంటి అంటం ద్వారా (అంటే చెడ పంటి అంటం నుండి నుండి) పంపబడే వస్తు. ఇద్దరు పంటి పంపబడిన పంటి అంటం ద్వారా తేలించబడిన వస్తు. అంటే అంటం తేలించబడిన పంటి అంటం ద్వారా తేలించబడిన వస్తు. 

BC(0503) : DE(0706) :: GH(1009) : JM(______)

(1) 1312
(2) 1510
(3) 1512
(4) 1310

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Problem Solving
సిద్ధాన్తం-
టింగ్
(a) Series చివరాత్

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 నికి గా గాని పిని పిని చాలు (అంటే నికి పిని పిని చాలు) పాటుబడి యొక్కు. ఇక హది
పిని పిని చాలు పిని పిని చాలు పిని పిని చాలు పిని పిని చాలు పిని పిని చాలు
పిని పిని చాలు

ENGLISH : 130 :: SANSKRIT :

(1) 125
(2) 137
(3) 148
(4) 151

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

(a) Series

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 నంపిన గా లేక లేకుంటాం (అంటే ఎక్కడు ఎక్కడు నాణ్యమనం చాలా). 21 నం సద్భావం కొనసాగించడానికి సమయంచే సంభవిస్తుంది. అ సద్భావం అందరికి సమయంచే సమస్యాంతరం సమయంచే సంభవిస్తుంది.

4DH : 12LP :: _____ : 14NR

(1) 13DQ
(2) 14ER
(3) 6FJ
(4) 6GI

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Problem Solving

(a) Series

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 శిక్షణ గాలిలో భాగభాగుడు వాక్యాలు (అప్పటి మద్దతు వల్ల పరీక్షలో సాధారణ ఆవాసం) సమాధానం చేయగలదు. అప్పటి విధానం పుస్తకాల మధ్య కలిగిన ప్రతిధానం చేయబడింది. తప్ప విధానం పుస్తకాల మధ్య కలిగిన ప్రతిధానం చేయబడింది. 144 : 20736 : 288 : _____

1. 82941
2. 82942
3. 82943
4. 82944

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4
Problem Solving
్యాంసిచేయాలను పరిమితం చేయండి
(a) Series చదువు

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 నియంత్రిత నియామిక గణానం మద్దతను (అంతే తయారు సమానం కలిగిన సమానం) నియామికలు చేసి, ఇవి నియామిక నియామికం అందరి సమానమైన మరియు ఎంతం కట్టాడు. అంటే రెండు నియామికలు నియామికలు ఎంతం కట్టడం లేదు. 

RSab : STcd :: _____ : UVxy

(1) TUvw
(2) VWwx
(3) VWxz
(4) WXya

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving
ప్రశ్నలు
(a) Series

In the questions 21-30, each contains two pairs of groups (of letters or letters and numbers). The pattern that appears in one pair should be followed by the other pair also. Observe the pattern carefully and fill in the blanks appropriately.

21-30 నిలుతుంది పాటు విస్థాపన చేయుట మూలాలు (అంకితం
తెలుగు ఎడమ హెచ్చు కామేయం) మాత్రమే ఉండాలి. ఇది తరువాత
మూడివేయింది అందుకు ఉండాలి తరువాత తెలియంది కావు. అంటే
మూలకం ఫార్మేటు మరియు కంది టి మూలకం నిదిరించు లేదు.

257 : G :: 879 : _____

(1) J
(2) K
(3) L
(4) M

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
Problem Solving

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

(a) Series

15, 35, 143, 323, 437, 899, 1763

(1) 143
(2) 323
(3) 437
(4) 899

Options:

1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4
Problem Solving

(a) Series

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

\[ x^2 - 8x + 15, \quad x^2 - 12x + 35, \quad x^2 - 18x + 77, \]
\[ x^2 - 24x + 143, \quad x^2 - 36x + 323, \quad x^2 - 60x + 899, \]
\[ x^2 - 84x + 1763 \]

(1) \( x^2 - 84x + 1763 \)
(2) \( x^2 - 36x + 323 \)
(3) \( x^2 - 24x + 143 \)
(4) \( x^2 - 18x + 77 \)

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔️ 4
Question Number : 33 Question Id : 7856742946 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Problem Solving
సమస్య పరిశీలించడం
(a) Series శాఖలు

Note: In questions numbered 31 to 35 pick the odd thing out
అంశాలు 31 నుండి 35 వరకు ప్రత్యేకమైనది సాధారణం

125, 343, 729, 1331, 2197, 4913, 6859

(1) 4913
(2) 1331
(3) 729
(4) 125

Options :
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 34 Question Id : 7856742947 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Crowd, Union, Swarm, Team, Flock, Throng

(1) Crowd
(2) Flock
(3) Team
(4) Swarm

Options:

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

(a) Series

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

71, 73, 79, 83, 87, 89, 97

(1) 73
(2) 83
(3) 87
(4) 97

Options:

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Sub-Section Number: 4
Sub-Section Id: 785674326
Question Shuffling Allowed: Yes
Is Section Default?: null
Problem Solving

(a) Series

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

86, 2/3, 50, 40, 33 2/3, 28 4/7, ____, 22 2/9, 20

(1) 27
(2) 26
(3) 25
(4) 24
Problem Solving

(a) Series

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

500, 333\(\frac{1}{3}\), 200, 142\(\frac{6}{7}\), 90\(\frac{10}{11}\), 76\(\frac{12}{13}\), ____________

(1) \(67\frac{13}{15}\)

(2) \(58\frac{14}{17}\)

(3) \(63\frac{8}{15}\)

(4) \(55\frac{13}{17}\)

Options:

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

(a) Series

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

36 0, 4, 18, 48, 100, _____, 294, 448

1. 160
2. 180
3. 210
4. 214

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
Problem Solving
ప్రశ్నలు సాధనం
(a) Series శఖలు

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

Qn. 36: 5, 14, 30, _____, 91, 140

Options:
1. 45
2. 55
3. 65
4. 75

Question Number: 40 Question Id: 7856742953 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 Correct Marks: 1 Wrong Marks: 0
Problem Solving

(a) Series

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

1, 6, 20, 56, 144, _____, 832, 1920

(1) 352
(2) 496
(3) 532
(4) 768

Options:

1. ✔
2. ✗
3. ✗
4. ✗

Question Number : 41 Question Id : 7856742954 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
Problem Solving
ప్రశ్నాభిప్రాయం
(a) Series

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

質問 36 ถึง 45 แต่ละตัวถูกล้อมรอบด้วยสัญลักษณ์ที่กำหนดไว้ เมื่อคิดถึง ให้瞧去 พร้อมๆกับที่กำหนดไว้

\[
\frac{1}{3}, -\frac{1}{6}, -\frac{2}{3}, -1\frac{1}{6}, -1\frac{2}{3}, \ldots, -2\frac{2}{3}, -3\frac{1}{6}
\]

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

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving

(a) Series

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

23, 20, 14, 5, ____ , -22, -40

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving
సమస్యాపట్ల ఉపయోగం
(a) Series ఉపయోగం

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

36 మాత్రమే 45 సమాధానాలకు వచ్చును ఇవి లేదు,
వీటి భాగాన్ని తట్టుకుంటాలి, ఆ భాగంగా నిష్పత్తి కలిగి ఉండతాం దిక్షలు ప్రమాణం ఉంటాం.

\[
\frac{4}{2}, \frac{8}{3}, \frac{9}{5}, \frac{17}{7}, \underline{\phantom{0}}, \frac{22}{13}, \frac{21}{17}
\]

(1) \(\frac{15}{11}\)

(2) \(\frac{18}{11}\)

(3) \(\frac{19}{11}\)

(4) \(\frac{21}{11}\)

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 44 Question Id : 7856742957 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
Problem Solving

(a) Series

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

7, 13, 31, 57, 133, _____, 307

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Correct Marks: 1 Wrong Marks: 0
Problem Solving
ప్రపంచ-సంపాదన
(a) Series చివరి

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

36. 1, 4, 12, 32, 80, 192, _____

(1) 264
(2) 324
(3) 448
(4) 542

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number: 5
Sub-Section Id: 785674327
Question Shuffling Allowed: No
Is Section Default?: null

Question Id: 7856742959 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Pattern Type: NonMatrix Calculator:
A candidate is expected to calculate the missing value if it is required to answer the question. On the basis of the given information answer the questions from 46 to 48.

Sub questions

Question Number : 46 Question Id : 7856742960 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
If the average number of qualified candidates from State M in 2018, 2019, 2020 is 180, what is the number of qualified candidates from State M in 2019?

(1) 173  
(2) 169  
(3) 177  
(4) 167

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 47 Question Id : 7856742961 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
If the respective ratio between the number of qualified candidates from State N in 2018 and 2019 is 11 : 7, what is the number of qualified candidates from State N in 2019?

(1) 196
(2) 210
(3) 252
(4) 224

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Correct Marks: 1 Wrong Marks: 0
The number of appeared candidates from State M increased by 100% from 2021 to 2022. If the total number of qualified candidates from State M in 2021 and 2022 together is 405, what is the number of appeared candidates from State M in 2021?

2021 లో సంవత్సరము 2022 లో రాష్ట్రం M నకిలి శాఖలు అభివృద్ధి చెందింది 100 ప్రతి. 2021 లో సంవత్సరము 2022 లో రాష్ట్రం M నకిలి శాఖలు అభివృద్ధి చెందింది మరియు ఒక్క అభివృద్ధి సంఖ్య 405. అందువలసం, రాష్ట్రం M లో 2021 లో రాశిల్పాల అభివృద్ధి సంఖ్య ఎంత?

(1) 360
(2) 330
(3) 270
(4) 250

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Sub-Section Number : 6
Sub-Section Id : 785674328
Question Shuffling Allowed : No
Is Section Default? : null

Question Id : 7856742963 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (49 to 51)
The given Pie-chart shows the scoring / run pattern of a cricket team in an innings score of 540 runs. Based on the data shown in the chart, answer the questions 49 to 51.
The number of extra runs included in the score is

(1) 24  
(2) 26  
(3) 27  
(4) 36

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
How many sixers are hit in the innings?

ఐ సెక్సీ త్రి నించబడింది తాడి గడా మాత్రమే?

(1) 54
(2) 36
(3) 18
(4) 9

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✔ 4

Question Number : 51 Question Id : 7856742966 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Problem Solving
ప్రశ్నాసాధన

(b) Data Analysis
పరిమాద విశ్లేషణ
The number of twos in the innings is

1. 54
2. 64
3. 72
4. 108

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 7
Sub-Section Id: 785674329
Question Shuffling Allowed: No
Is Section Default?: null

Question Id: 7856742967 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Pattern Type: NonMatrix Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Question Numbers: (52 to 55)

Problem Solving

Data Analysis
In a school of 250 students, 78 play cricket, 83 play hockey, 97 play football, 41 play both cricket and hockey, 53 play hockey and football, 37 play football and cricket and 27 play all the 3 games. Based on this information answer the questions from 52 to 55.

Sub questions

**Question Number : 52 Question Id : 7856742968 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Problem Solving

ప్రభావం సంఖ్యలు

(b) Data Analysis

మంత్రుడి విద్యారథులు

The number of students who play a single game is

లో పలు ప్రతిమ కొమెట్‌పే పాటు

(1) 77
(2) 87
(3) 97
(4) 107
The number of students who do not play any of the three games is

(1) 108
(2) 102
(3) 96
(4) 90
Problem Solving
ైపానింది-ఇప్పటి

(b) Data Analysis
సంఖ్యాశాస్త్ర

The number of students who play exactly two games is

స్వప్నాల దానికి అభి విధితం లేదు

(1) 75
(2) 67
(3) 63
(4) 50

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4
The number of students who play hockey or football or both is

(1) 43
(2) 120
(3) 127
(4) 180

Options:

1. ✗ 1
2. ✗ 2
3. ✔️ 3
4. ✗ 4

Sub-Section Number : 8
Sub-Section Id : 785674330
Question Shuffling Allowed : No
Is Section Default? : null

Question Id : 7856742972 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (56 to 60)
The letters of English alphabet taken in order are arranged around a circle in clockwise direction and are coded as per the following guidelines:

1. A vowel is coded as the second vowel from it taken in the anti-clockwise direction.
2. A consonant is coded as the fifth consonant from it taken in the anti-clockwise direction.
3. For decoding the reverse process is to be followed.

Using the coding and decoding process answer the questions from 56 to 60.

Sub questions

Question Number : 56 Question Id : 7856742973 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
Problem Solving
విశ్లేషక సమస్యలు

(c) Coding and Decoding Problems
సంకోచించిన సంస్థల బాధ్యతలు

What is the code for ICET?
ICET యొక్క కొడు ఎలా?

1. AXUN
2. EHUO
3. AHUN
4. AWUN

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 57 Question Id : 7856742974 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time
: N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0
The string of letters that is coded as FAIL is

FAIL ఫైలు చేస్తే ఉంచడానికి ఉంచడం
(1) LIRU
(2) YOIL
(3) LIUR
(4) YOFI

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 58 Question Id : 7856742975 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Problem Solving
వామాండయ లేదా

(c) Coding and Decoding Problems
చదువులు, చదువులు నమోదు
NEIZB is a code of the word

NEIZB ఎంపిక ఒక శాసనంలు?

(1) TOUGH
(2) TONES
(3) TOURS
(4) TOUCH

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

(c) Coding and Decoding Problems
రికించిని, రికించిని పాటించుంటే
The string of letters that is coded as LOVELY is

LOVELY లేవేల్ లేవేల్ లేవేల్ లేవేల్

1. RAOBREF
2. RABORF
3. QABOUF
4. RAOUFS

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

(c) Coding and Decoding Problems
చదువులు, చదువులు చదువులు
DOING WELL is coded in this code language as

చేసిన యెసి ఎండి DOING WELL లీ ఎండి చేసిన యెసి.

1. YIATM RIFF  
2. YEASM QIFF  
3. XIATN QOFF  
4. XEATM QUFF

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

Question Number: 61  Question Id: 7856742978  Question Type: MCQ  Option Shuffling: No
Display Question Number: Yes  Is Question Mandatory: No  Calculator: None  Response Time: N.A
Think Time: N.A  Minimum Instruction Time: 0
Correct Marks: 1  Wrong Marks: 0

Problem Solving
ప్రభావాల్లో వరదలు

(c) Coding and Decoding Problems
ప్రశస్తికి, ప్రశస్తికి నామాంజగలు
Using the coding and decoding process answer the questions from 61 to 65.

If PLACEMENT is coded in a language as MIXZBJBKQ, then the word that is coded as JLRPB is

(1) MOULD
(2) MOUSE
(3) MONEY
(4) MOPED

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 62 Question Id : 7856742979 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
Problem Solving
ప్రశ్నాలు-సమస్యలు

(c) Coding and Decoding Problems
చికిత్స అంశాలు, చేయ చేయి సమస్యలు

Using the coding and decoding process answer the questions from 61 to 65.
హుక్కు సమస్య 61 నుంచి 65 వరకు చికిత్స అంశాలు లభించగలిగితే, వాడవాలి.

If HOCKEY is coded as FMAICW, then the code for PENALTY is
HOCKEY అనేది చికిత్స అంశాలు, PENALTY అనేది అనేది చికిత్స అంశాలు

1. NDMZKSW
2. NCLYJRW
3. MBKXIQV
4. MCLYJRV

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 63 Question Id : 7856742980 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Problem Solving

(c) Coding and Decoding Problems

Using the coding and decoding process answer the questions from 61 to 65.

In a certain code the word CALENDER is coded as MCDQDBMF, then in the same code the word EQUATION is coded as

(1) UIPODPTZ  
(2) UIPOFRVB  
(3) SHNMFRTVB  
(4) SHNMDPTZ

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Using the coding and decoding process answer the questions from 61 to 65.

If QUESTION is coded as UYIWXMSR, then the word that is coded as RYQFIV is

**QUESTION** is coded as **UYIWXMSR**, so the word that is coded as **RYQFIV** is **SPACES**.

**Options:**

1. **SPACES**
2. **ANSWER**
3. **NUMBER**
4. **TSICET**
Problem Solving

(c) Coding and Decoding Problems

Using the coding and decoding process answer the questions from 61 to 65.

In a certain code language COMPUTER is written as RFUVQNPD. Then how is MEDICINE written in the same code language?

Options:

1. EJOJDEFJM
2. MFEDJIFN
3. EJOJDEFN
4. MEFDJIOE

Options:

1. ✗ 1
2. ✗ 2
Problem Solving

(d) Date, Time and Arrangement Problems

If 16th March 2023 is Thursday, the day on 24th February 2008 is

16 మార్చి 2023 గా గుర్తించాడు, 24 ఫిబ్రవరి 2008 డిచ్చర్ కాదు?

(1) Sunday
నంది

(2) Monday
అప్రిల్

(3) Wednesday
వంది

(4) Friday
ప్రియ

Options :

1. ✔ 1
If a clock shows 15 minutes past 5 O' clock, then the angle between the hands of that clock is

(1) $58\frac{1}{2}^\circ$

(2) $64^\circ$

(3) $67\frac{1}{2}^\circ$

(4) $72\frac{1}{2}^\circ$
At which time between 8 o’clock and 9 o’clock, the hours hand and minutes hand coincide is

(8 మండ్లి న కోరి మండ్లు మండ్ల పోషన్ కంప్రొండ్ గా ఉండి కావాలి సమయం ఎందే ఉండాలి?)

(1) 8 hours $\frac{9}{11}$ min       8 న. $\frac{9}{11}$ మన.
(2) 8 hours $\frac{7}{11}$ min       8 న. $\frac{7}{11}$ మన.
(3) 8 hours $\frac{5}{11}$ min       8 న. $\frac{5}{11}$ మన.
(4) 8 hours $\frac{3}{11}$ mi       8 న. $\frac{3}{11}$ మన.

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
Problem Solving

(d) Date, Time and Arrangement Problems

Seetha’s father’s mother-in-law’s only daughter’s son is B. How is Seetha related to B?

Options:

1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Problem Solving
ప్రశ్నాంశం

(d) Date, Time and Arrangement Problems
అండాలు, సమయం, అంకంతో అంశాలు

The departure of a local train at a station is every 45 minutes. A person A arrives at the station and found that the train left 5 minutes ago and the next train is at 7.45 am.

What is the arrival time of A at the station?

అడుగు వాటి ఇంటికేసి 45 మినుటులు. ఒకర్మాని A ఎందుకంటే స్టేషన్ లో ఉంది, ఆహా వాటి ఇంటికేసి 5 మినుటులు ఉంది. అందుకే ప్రింటు ఇంటికేసి 7 నాటికే 45 ఎందుకంటే వాటి ఇంటికేసి రాని. అలాంటి అందుకే పరిస్థితిలో A ఎందుకంటే స్టేషన్ లో ఉంది?

1. 7.00 am  
2. 7.05 am  
3. 7.10 am  
4. 7.15 am

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 71  Question Id : 7856742988  Question Type : MCQ  Option Shuffling : No
Display Question Number : Yes  Is Question Mandatory : No  Calculator : None  Response Time : N.A
Think Time : N.A  Minimum Instruction Time : 0
Correct Marks : 1  Wrong Marks : 0
Anil reached a meeting place 32 minutes before 10.20 am and he is 55 minutes earlier to Sunil who was 38 minutes late to that meeting. Then the scheduled meeting time is

(1) 10.10 am

(2) 10.15 am

(3) 10.05 am

(4) 10.18 am
Problem Solving
ప్రశ్నాపత్రికలు

(d) Date, Time and Arrangement Problems
సమయానుగు, తరువాతిచేత సమస్యలు

6 persons A, B, C, D, E, F sit on one side of a long table B and E are immediate neighbours of A. D is between E and F. B is not at the extreme places. Then the person/persons adjacent to C is/are __

వెయింటనీ వాటిని తెచ్చిన వ్యక్తులు A, B, C, D, E, F ఎందుకు ఎక్కడు రావడంతో ఎందుకు ఎక్కడు రావడంతో ఉన్నారు. D ఎందుకు ఉంచిన వ్యక్తితో ఎందుకు ఉంచిన వ్యక్తితో ఉన్నారు. B ఎందుకు ఎందుకు ఉన్నారు ఉంది. తేన వాని వ్యక్తి ఎందుకు ఉన్నారు?

(1) A, B
(2) B
(3) D
(4) D, F

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 73 Question Id : 7856742990 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

**Problem Solving**

(d) Date, Time and Arrangement Problems

\[ a \times b = (a + b - 1)^2 - 1 \Rightarrow (1 \times 2) \times (3 \times 3) = \]

(1) 675  
(2) 575  
(3) 371  
(4) 71

**Options:**

1. ✅ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4

Question Number : 74 Question Id : 7856742991 Question Type : MCQ Option Shuffling : No  
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0
Problem Solving

(d) Date, Time and Arrangement Problems

For $a, b \in \mathbb{R}$, define $a \otimes b = 2a - 3b$ and $a \perp b = 3a + 4b$, then $(5 \otimes 1) \perp (3 \otimes 4) =$

$a, b \in \mathbb{R}$, తీసుకునే $a \otimes b = 2a - 3b$ మరియు $a \perp b = 3a + 4b$ కాబట్టి,
$(5 \otimes 1) \perp (3 \otimes 4) =$

(1) $-3$
(2) $3$
(3) $24$
(4) $-24$

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Correct Marks: 1 Wrong Marks: 0
Consider the series
$E5\!6 * I4 < 0U7 ? H\sim8LQ\Lambda A2G / 1V + 9W - 3$.

How many vowels are there that are immediately proceeded by a symbol?

$E5\!6 * I4 < 0U7 ? H\sim8LQ\Lambda A2G / 1V + 9W - 3$ ప్రత్యేక విశేషణాల ముఖ్యంగా ఎల్లపెట్టుందా?

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

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Mathematical Ability
I. Arithmetical Ability

అంగాన శక్తి
If \( a^x = b^y = c^z \) and \( b^3 = ac^2 \), then \( 9xy - 2xz = \)

\[ a^x = b^y = c^z \Rightarrow b^3 = ac^2 \Rightarrow 9xy - 2xz = \]

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

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 77 Question Id : 7856742994 Question Type : MCQ Option Shuffling : No  
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability  
అరిథ్మెటిక్ మూలిక
If \( 2^{mn^2} = (2^m)^n \), then \( m \) in terms of \( n \) is

\[ 2^{mn^2} = (2^m)^n \]

\[ m = \frac{2}{n^{n^2 - 1}} \]

Options:

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number: 78  Question Id: 7856742995  Question Type: MCQ  Option Shuffling: No
Display Question Number: Yes  Is Question Mandatory: No  Calculator: None  Response Time: N.A  Think Time: N.A  Minimum Instruction Time: 0
Correct Marks: 1  Wrong Marks: 0

I. Arithmetical Ability

అరిథ్మెటికల్ సమస్యలు
In a party the ratio of gents and ladies is 2 : 3. If 3 gents left and 3 more ladies joined the party, then the ratio is 1 : 3, then the number of ladies in the party at the end is

(1) 15
(2) 12
(3) 20
(4) 18

Options:

1. ✓ 1
2. 2
3. 3
4. 4
Two numbers are in the ratio 3 : 5. If 25 is added to both the numbers, then the ratio between them becomes 2 : 3. The smallest of the two numbers is

(1) 65  
(2) 75  
(3) 25  
(4) 45

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 80 Question Id : 7856742997 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
    అనిధియ నామిందులు
If \( x = \frac{\sqrt{3}+1}{\sqrt{3}-1} \) and \( y = \frac{\sqrt{3}-1}{\sqrt{3}+1} \), then \( x^3 + y^3 = \)

\[ x = \frac{\sqrt{3}+1}{\sqrt{3}-1}, \quad y = \frac{\sqrt{3}-1}{\sqrt{3}+1} \]

\[ x^3 + y^3 = \]

(1) \( 14 \)

(2) \( 28 \)

(3) \( 42 \)

(4) \( 52 \)
\[ \sqrt{11 + 2\sqrt{7} + 2\sqrt{3} + 2\sqrt{21}} = \]

(1) \ 1 + \sqrt{5} + \sqrt{11}
(2) \ 1 + \sqrt{5} + \sqrt{7}
(3) \ 1 + \sqrt{3} + \sqrt{7}
(4) \ 1 + \sqrt{3} + \sqrt{5}

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
The least (positive) remainder obtained when $17^{30}$ is divided by 5 is

$17^{30}$ లేదా వద్ద ఇది మిత్రం లేదా మిత్రం సంఖ్య మిత్రం

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

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 83 Question Id : 7856743000 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability

అరిథ్మెటికల్ ఆఘాతం
What is the least number to be added to 4259 to make it a multiple of 35?

4259 ను సంఖ్యలు కూడా మిని వచ్చిన సంఖ్యను నిషిద్ధించడం వల్ల వచ్చిన 35 ను పూర్తిచేసిన 
నంతర ఎంత సంఖ్య ఎదుర్కొనుక ఉండాలి?

(1)  16
(2)  11
(3)  6
(4)  1

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 84 Question Id : 7856743001 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
అరిథ్మెటికల్ బాయిలిటీ
The least positive integer to be subtracted from 10000, so that remaining number is exactly divisible by 7, 9, 11 is

10000 నందు కొని నైగాంధి తయారిపై విశ్లేషించింది అదినంత నాలుగు‌నే
7, 9, 11 ని విభజించగలిగి కావాలి?

(1)  79
(2)  158
(3)  298
(4)  437

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

I. Arithmetical Ability
అరిథ్మెటికల్ ఆబిలిటీ
The largest 4-digit number that leaves remainder 7 in each case when divided by 36, 60, 96 is 

36, 60, 96 ని హింసకుంది వచ్చినందు నింపినందు యొక్కం యొక్క యొక్క 

(1) 8767 
(2) 8647 
(3) 9217 
(4) 9837 

Options:

1. ☒ 1 
2. ✗ 2 
3. ☒ 3 
4. ✗ 4 

I. Arithmetical Ability 
అరిథ్మెటికల్ ఆధారం
\[
\left(1+\frac{1}{2}\right)\left(1-\frac{1}{2}\right)\left(1+\frac{1}{3}\right)\left(1-\frac{1}{3}\right)\left(1+\frac{1}{4}\right)\left(1-\frac{1}{4}\right)\left(1+\frac{1}{5}\right)\left(1-\frac{1}{5}\right) =
\]

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

(2) \(\frac{5}{8}\)

(3) \(\frac{8}{11}\)

(4) \(\frac{11}{14}\)

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

I. Arithmetical Ability

అంధకార శక్తి
If $\frac{1}{24}$ of a number is subtracted from $\frac{3}{8}$ of the same number, we get 210, then that number is ___.

(1) 5040
(2) 2520
(3) 1260
(4) 630

**Options:**

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
The difference between the largest and the smallest of the following rational number is

\[
\begin{align*}
13 & \quad 5 & \quad 19 & \quad 6 \\
18 & \quad 6 & \quad 36 & \quad 11
\end{align*}
\]

Options:

1. \( \frac{17}{36} \)
2. \( \frac{13}{36} \)
3. \( \frac{11}{36} \)
4. \( \frac{7}{36} \)

---

**Question Number : 89 Question Id : 7856743006 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0**

I. Arithmetical Ability

అరిథ్మెటిక్ నియమాలు
If $77 < x < 123$ and $45 < y < 62$, then the interval in which $x - y$ lies is

$77 < x < 123$ మధ్యమం $45 < y < 62$ ఎమమం, $x - y$ మధ్యమం

(1) (32, 61)
(2) (32, 78)
(3) (15, 61)
(4) (15, 78)

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 90 Question Id : 7856743007 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
అధికారితమైన విశుభూషణ
In an election contested by two candidates A and B, A got 68% of the votes and won by 7200 votes. What is the strength of the electorate?

(1) 17000
(2) 18000
(3) 19000
(4) 20000

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

I. Arithmetical Ability

అరిథ్మెటికల్ అధ్యయన
The population of a city increases constantly at the rate of 5% every year. If the current population of the city is 8379, then the population of the city two years back was

(1) 7000
(2) 7300
(3) 7600
(4) 7800

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 92 Question Id : 7856743009 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
   అరిథ్మెటికల్ స్పర్శం
If the cost price of 20 articles is equal to selling price of 16 articles, then the percentage of profit is

20 కౌశల విద్య ఇంద 16 విద్య విద్య ఇంద గామకా ఆవాహన ఉండాలి
కొంచి వంటలో

(1) 15
(2) 20
(3) 25
(4) 30

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
By allowing a discount of 15% on the marked price of an article a dealer gets 20% profit. Then the ratio of marked price to the cost price of that article is

1. \( \frac{17}{24} \)
2. \( \frac{17}{20} \)
3. \( \frac{20}{17} \)
4. \( \frac{24}{17} \)

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 94 Question Id : 7856743011 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
   అరిథ్మెటికి బిందువు
In a business A invests half as much as B and B invests thrice as much of C. At the end of the year, if C gets Rs.52800 as his share in the year end profit, then A’s share in the profit, in rupees, is

A, B, C లు విభాగిన బాండుల లో పాటు విశేషాడి. C తన విస్తీర్ణానికి మరియు బాండుల అంశాన్ని మూడికి B మారి B తన విస్తీర్ణానికి మరియు A తన విస్తీర్ణానికి మరియు. పొందుతున్న సంహద్దం యొక్క నష్టాత్మక C తన ఆదా యొక్క రూ.52800 అయితే, A తన ఆదా (రూ.సి) యొక్క యొక్క తెలుగు పాత్ర

(1) 79200
(2) 105600
(3) 24600
(4) 13200

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

I. Arithmetical Ability
అరిథ్మెటికల్ యొక్క పాత్ర
Three persons A, B, C started a partnership business in which A invested \( \frac{3}{4} \) of the total investment of B and C; and B invested \( \frac{1}{3} \) of the total investment of A and C. If the total profit at the end of the year is Rs.17.5 lakhs, then the share of the profit of C (in lakhs of rupees) is

\[
\text{మేము మార్యము A, B, C ఎ కర్పర్టేషన్ నినాకండి అంతటుంది సానాటుడు B}
\]

\[
\text{మేము ఎ మార్యము అంతటుంది మామిడి A ఎ సానాటుడు}
\]

\[
\text{ఎల్లారు, A ఎ మార్యము అంతటుంది మామిడి B}
\]

\[
\text{ఎల్లారు, C ఎ మార్యము అంతటుంది మామిడి B}
\]

\[
\text{తిలిస్తూ తిలిస్తూ ఇద్దరు సమాంత 17.5 వెలుగు పరీసాహార ఎల్లారు, C ఎ మార్యము ఎల్లారు (స్స్స్స్ స్స్స్ స్స్స్)}
\]

Options:

1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

**Question Number : 96 Question Id : 7856743013 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**
Two taps A, B can fill a tank in 15 min. and 20 min. respectively, while tap C can empty it in 30 min. If all the three Taps are opened simultaneously, then how much time (in minutes) it will take to fill the tank.

చివరిని చూపుకోవడానికి A, B తక్కువ తుంగి మాత్రమే 15 సారిగా మాత్రమే 20 సారిగా మాత్రమే 30 సారి జనాథం కరుచితం. మాత్రమే చూపుకోవడానికి అడవి ఆగి తెలిసిన పంటులు (తెలుగు)

(1) 18
(2) 12
(3) 15
(4) 17

Options :

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 97 Question Id : 7856743014 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
     అంగానికి సమయం
A cistern has 3 pipes A, B and C. The pipes A and B can fill it independently in 4 and 5 hours respectively, while C can empty a full tank in 2 hours. If the 3 pipes A, B and C are opened at 5 am, 6 am and 7 am respectively, the time at which the cistern will be empty is

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

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 98  Question Id : 7856743015  Question Type : MCQ  Option Shuffling : No
Display Question Number : Yes  Is Question Mandatory : No  Calculator : None  Response Time : N.A
Think Time : N.A  Minimum Instruction Time : 0
Correct Marks : 1  Wrong Marks : 0

I. Arithmetical Ability
   అరథమెటికల్ సాఫ్ట్ సిల్వర్
Two persons A, B start from the same point at 7 am and move at the rate of 5 kmph and 8 kmph respectively in the opposite directions. Then the time at which they will be 78 km apart is

Options:

1. 11 am ✓ 1
2. 12 noon ✓ 2
3. 1 pm ✓ 3
4. 2 pm ✓ 4

Question Number : 99 Question Id : 7856743016 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
   అందాలు గణితశాస్త్రం
A car travels $\frac{1}{3}$rd of the journey at 20 kmph, next $\frac{1}{3}$rd of journey at 40 kmph and the rest of the journey at 60 kmph. If it takes $7\frac{1}{3}$ hours to complete the journey, then the length of the journey, in kms, is

(1) 240
(2) 210
(3) 180
(4) 150

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 100 Question Id : 7856743017 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
   అరిథ్మెటికల్ ఆపాదనం
If 15 men can prepare 40 toys in 8 days by working 9 hours a day, then the number of days required for 12 men to prepare 60 toys working 9 hours per day is

15 మంది మనదపుల ద్వారా 9 ఘణ్టల పనిచేస్తున్నాలు కాగా 8 దినాలలో 40 ఖారికాల తయారు చేస్తున్నారు. 12 మంది మనదపుల ద్వారా 9 ఘణ్టల పనిచేస్తున్నాలు కాగా 60 ఖారికాల తయారు చేస్తున్నారు.

(1) 15
(2) 12
(3) 9
(4) 18

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 101 Question Id : 7856743018 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability

అరిథ్మెటికల్ ఆధ్యాత్మికిత్తు
Persons P and Q together can do a piece of work in 18 days. Q and R together can do that work in 24 days. P and R together can do that work in 36 days. The time taken (in days) by P alone to do that work is

P మరియు Q ఏ సంయోగం ద్వారా వే 18 దినాలుగా ఆచ్ఛించేందుకు. Q మరియు R ఏ సంయోగం 24 దినాలుగా. P మరియు R ఏ సంయోగం 36 దినాలుగా ఆచ్ఛించేందుకు. P ఏ సంయోగం ద్వారా యొక్క

(1) 51
(2) 48
(3) 45
(4) 42

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 102 Question Id : 7856743019 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
అరిథ్మెటికల్ ఆధిక్య
Taking $\pi = \frac{22}{7}$, the perimeter of the sector of a circle of area $38\frac{1}{2} \text{ cm}^2$, that makes an angle $60^\circ$ at the centre, in cms. is

$$38\frac{1}{2} \text{ cm. లోపం. వృత్తం కు మేఖల సరిహద్దు రేఖ వుంటుంది 60^\circ రేఖ వుంటుంది వృత్తం చర్య రేఖు -- (లోపం.వృత్తం) (ఆమె పై \pi = \frac{22}{7})$$

Options:

1. $\frac{16}{3}$
2. $\frac{24}{3}$
3. $\frac{32}{3}$
4. $\frac{48}{3}$

Question Number : 103 Question Id : 7856743020 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability

అరీధమేతిక శక్తి
A rectangle whose length is 5 times its breadth and a square have same perimeter. Then the ratio of their areas, in that order, is

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

Options :

1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

I. Arithmetical Ability
   అరిధ్యాంశాల శక్తిపేషన్
If the volume of a cuboid whose length, breadth, height are in the ratio 4 : 3 : 2 is 648 cm³, then the total surface area of that cuboid (in cm²) is

(1) 117
(2) 234
(3) 351
(4) 468

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 105 Question Id : 7856743022 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability
   అధిగ్రహ్య సిద్ధాంతం
If the volume of a sphere and a cube are equal, then the ratio of their respective surface area is

(1) \( \sqrt[3]{11} : 1 \)
(2) \( \sqrt[3]{11} : \sqrt{21} \)
(3) \( \sqrt[3]{11} : \sqrt[3]{21} \)
(4) \( 3 : 7 \)

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Correct Marks: 1 Wrong Marks: 0
A road roller is in the shape of a cylinder (horizontal) of radius 25 cm and height 75 cm. Then the area covered by it in 112 revolutions, in $m^2$, is (take $\pi = \frac{22}{7}$)

(2) 132
(3) 66
(4) 198

Options:
1. ✓ 1
2. ✓ 2
3. ✓ 3
4. ✓ 4

I. Arithmetical Ability
అంకేష్ఠ సంఖ్యా శ之势
The total surface area of a solid hemisphere of radius 12 cm (in sq.cm.) is

12 సీ.మంత్రి రెకవాటి నిందన సమూహం నారకం నామానికి స్థిరం కొనితే (సీ.మంత్రి రెకవాటి)

1. 144π
2. 288π
3. 432π
4. 576π

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
If the base radius and the height of a cylinder are increased by 20% each, then the percentage increase in its volume is

(1) 48.75
(2) 72.8
(3) 113.75
(4) 172.8

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 109 Question Id: 7856743026 Question Type: MCQ Option Shuffling: No
Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A
Think Time: N.A Minimum Instruction Time: 0
Correct Marks: 1 Wrong Marks: 0

I. Arithmetical Ability

అరిత్మెటికల్ అబిలిటీ
The remainder when \(2^{71}\) is divided by 13 is

\[2^{71} \mod 13 = \text{remainder}\]

(1) 7
(2) 8
(3) 9
(4) 10

Options:

1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 110 Question Id : 7856743027 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

I. Arithmetical Ability

అంశాంశాత్మక శక్తి

The digit in the units place of the number \(13^{131}\) is

\[13^{131} \mod 10 = \text{last digit}\]

(1) 1
(2) 3
(3) 5
(4) 7
II. Algebraic and Geometrical Ability

If A is the set of all natural numbers from 1 to 100 both inclusive and B is the set of composite numbers in A, then the number of elements in $A - B$ is

(1) 23  
(2) 24  
(3) 25  
(4) 26
Question Number : 112 Question Id : 7856743029 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability

If A has 8 elements, then the number of subsets of A, which have at least two elements is

\text{If A has 8 elements, then the number of subsets of A, which have at least two elements is}

(1) 254
(2) 247
(3) 124
(4) 510

Options :

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 113 Question Id : 7856743030 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
II. Algebraic and Geometrical Ability

\[
\frac{(x^2-y^2)^3+(y^2-z^2)^3+(z^2-x^2)^3}{(x-y)^3+(y-z)^3+(z-x)^3} =
\]

(1) \(x + y + z\)
(2) \(x^2 + y^2 + z^2\)
(3) \(x^3 + y^3 + z^2\)
(4) \((x + y)(y + z)(z + x)\)

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
If \( ax^4 + bx^3 + 2x^2 + 4 \) is exactly divisible by \( x^2 - x - 2 \), then \( a : b = \)

\[ x^2 - x - 2 \Bigg| ax^4 + bx^3 + 2x^2 + 4 \]

\( a : b = \)

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

**Options:**

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 115 Question Id : 7856743032 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
If a polynomial in $x$ leaves a remainder -2 and 19 respectively when divided by $x + 3$ and $x - 4$, then the remainder left when it is divided by $x^2 - x - 12$ is

(1) $3x + 7$

(2) $3x - 7$

(3) $2x + 5$

(4) $2x - 1$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

II. Algebraic and Geometrical Ability

మీదిత్యము, అగలుగా దానిగా లేదా పదానికిని నిపుణ్యమైన నవంషాత్మక సాధనాలు ఉంటే అవి ఒక విశ్లేషణ పదానికి అవలంబించాలి.
A polynomial \( p(x) \) leaves remainders 7, 1 when divided by \( x + 4, x - 2 \) respectively. If \( f(x) \) is the remainder when \( p(x) \) is divided by \( x^2 + 2x - 8 \), then the remainder when \( f(x) \) is divided by \( x + 6 \) is

\[
x + 4, x - 2 కి హాస్యం ఆవిష్కరించడానికి \( p(x) \) యొక్క వంపువల్ల స్పేరా 7, 1 ఎలా చేసేందుంది. \( p(x) \) యొక్క \( x^2 + 2x - 8 \) కి హాస్యం ఆవిష్కరించడానికి \( f(x) \) యొక్క వంపు ఎలా చేసేందుంది. \( f(x) \) యొక్క \( x + 6 \) కి హాస్యం ఆవిష్కరించడానికి ఎలా చేసేందుంది.

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

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
\( r \) is a fraction such that if 2 is added to its denominator, its value is \( \frac{1}{2} \). If 5 is subtracted from its numerator, its value is \( \frac{1}{3} \). Then \( \frac{1+r}{1-r} = \)

\( r \) అంశం యొక్క దశాబ్దులో 2 శారీరికంగా ఉండాలి, తోట లేదా దశాబ్దులో \( \frac{1}{2} \). తోటాను లభించి నాట్లు 5 శారీరికంగా ఉండాలి, తోట లేదా దశాబ్దులో \( \frac{1}{3} \). అంటే, \( \frac{1+r}{1-r} = \)

(1) \( \frac{13}{24} \)
(2) \( \frac{18}{25} \)
(3) \( \frac{37}{11} \)
(4) \( \frac{26}{11} \)

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 118 Question Id : 7856743035 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability గణితశాస్త్ర మతం మరియు వ్యాసిక శక్తి
If \( \frac{6}{x+y} + \frac{1}{x-y} = 1 \) and \( \frac{24}{x+y} + \frac{6}{x-y} = 5 \), then \( xy = \)

\( \frac{6}{x+y} + \frac{1}{x-y} = 1 \)  \( \text{and} \)  \( \frac{24}{x+y} + \frac{6}{x-y} = 5 \), \( xy = \)

(1) 24  
(2) 30  
(3) 32  
(4) 35  

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 119 Question Id : 7856743036 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability సంఖ్యాశాస్త్రం, ఆకృతిశాస్త్రం పయ్యా పట్టిక
\[ x^4 + \frac{1}{x^4} = 194 \quad \Rightarrow \quad x^3 + \frac{1}{x^3} = \]

(1) 62  
(2) 72  
(3) 52  
(4) 42

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

II. Algebraic and Geometrical Ability

అరేబియా రంగాల గణితాల పయ్యాంకాలు
If the sum of first 27 terms of an A.P. is 189, then the 14th term of that A.P. is

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

Options:

1. ✗ 1
2. ✅ 2
3. ✗ 3
4. ✗ 4

Question Number : 121 Question Id : 7856743038 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability

చిత్రాలను, శాస్త్రాలను వాడగలడు
If the 4th and 7th terms of a Geometric Progression are respectively the 5th and 47th terms of the Arithmetic Progression whose first term is 12 common difference is 6, then the first term of the Geometric Progression is

(1) 6
(2) \(\frac{9}{2}\)
(3) 12
(4) \(\frac{15}{2}\)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
\[
\frac{\sec 45^\circ \cdot \csc 60^\circ \cdot \sin^2 30^\circ \cdot \cot 30^\circ}{\sec 60^\circ \cdot \cos^2 45^\circ \cdot \tan^2 60^\circ} =
\]

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

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

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

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

Options:

1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 123 Question Id : 7856743040 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability

హిమాలకు అంగస్సం నిభావితం


deer, అంగస్సం నిభావితం
If \( \frac{\sec^2 30^\circ + \tan^2 60^\circ}{\cos^2 45^\circ + \sin^2 90^\circ} = \frac{p}{q} \) and G.C.D. of \( p, q \) is 1, then \( \frac{p^2 + q^2}{p^2 - q^2} = \)

\( \frac{\sec^2 30^\circ + \tan^2 60^\circ}{\cos^2 45^\circ + \sin^2 90^\circ} = \frac{p}{q} \) \( \Rightarrow \) p, q \( \perp \). \( \therefore \) 1 \( \Rightarrow \) p, q \( \perp \) \( \Rightarrow \) \( p^2 + q^2 \), \( p^2 - q^2 \)

\begin{align*}
(1) & \quad \frac{173}{165} \\
(2) & \quad \frac{657}{495} \\
(3) & \quad \frac{757}{595} \\
(4) & \quad \frac{685}{667}
\end{align*}

Options:

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

II. Algebraic and Geometrical Ability

\( \text{వింతెన్న, సంఖ్యాశాస్త్ర నియంత్రణం} \)
7 \sin \theta + 24 \cos \theta = 25 \implies 7 \csc \theta - 24 \tan \theta =$

(1) 18  
(2) 17  
(3) 31  
(4) 32  

Options :

1. ✅ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4  

If \sec \theta + \tan \theta = k, then \frac{k^2+1}{k^2-1} =$

\sec \theta + \tan \theta = k \quad \therefore \quad \frac{k^2+1}{k^2-1} =$

(1) \cos \theta  
(2) \csc \theta  
(3) \tan \theta  
(4) \sec \theta
II. Algebraic and Geometrical Ability

B is the foot of a pole AB. Two points C, D on the ground are such that C, D, B are collinear and the distance between C and D is 20 m. If the angles of elevation to the top of the pole from C and D are respectively 30° and 45°, then height of the pole AB (in meters) is

\[ AB = \sqrt{3} \times 20 \]
\[ = 10(\sqrt{3} + \sqrt{3}) \]
\[ = 10(\sqrt{3} + 1) \]

Options:

1. \( 10(\sqrt{3} + 1) \)
2. \( 20(\sqrt{2} + 1) \)
3. \( 10(\sqrt{3} - 1) \)
4. \( 30 \)
Question Number : 127 Question Id : 7856743044 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability

D is the mid point of the side BC of \( \triangle ABC \). If \( AB = 5 \) cm, \( AC = 11 \) cm, \( BC = 6 \) cm, then the length of \( AD \) (in cm) is

\( \triangle ABC \) యొక్క BC యొక్క మధ్యసమాంత వంటి బిగిన్టే దిశలో D. AB = 5 సేంటీమీటర్ల.. AC = 11 సేంటీమీటర్ల.. BC = 6 సేంటీమీటర్ల.. అందుకె వంటి.. AD యొక్క అంతర్జోంటు దిశలో ఉండాం

(సేంటీమీటర్లు)

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

Options :

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
II. Algebraic and Geometrical Ability

In \( \triangle ABC \), if \( AB^2 + BC^2 + CA^2 = AB \cdot BC + BC \cdot CA + CA \cdot AB \), then that triangle is

\[ \triangle ABC \text{ रे, } AB^2 + BC^2 + CA^2 = AB \cdot BC + BC \cdot CA + CA \cdot AB \text{ आतो है} \]

1. A scalene triangle
2. An isosceles triangle
3. A right angled triangle
4. An equilateral triangle

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4
II. Algebraic and Geometrical Ability

If the perimeter and diagonal of a rectangle are 34 cm and 13 cm respectively, then the area of that rectangle (in sq. cm) is

(1) 24
(2) 60
(3) 30
(4) 34

Options:

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Correct Marks : 1 Wrong Marks : 0
If the ratio between the exterior and the interior angles of a regular polygon is 2 : 3, then the number of sides of that polygon is

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

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

II. Algebraic and Geometrical Ability

చక్రవర్తి వస్త్రాలు ప్రత్యేకించడానికి సంఖ్యలను విశేషాలు విస్తరించడానికి అవసరం.
The number of common tangents that can be drawn to circles when
(a) they intersect each other
(b) they do not intersect each other and, then
(c) they touch each other externally are respectively

(a) వంటింది ఉండాలేదా వంటింది వంటింది
(b) ఇంతింటి ఉండాలేదా వంటింటి వంటింటి
(c) వంటింది ఉండాలేదా వంటింటి వంటింటి వంటింటి

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

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
\[ \triangle ABC \text{ is right angled. A circle with } AB \text{ as diameter is drawn to intersect the hypotenuse } AC \text{ in } P. \text{ If the tangent at } P \text{ to the circle meets } BC \text{ in } Q, \text{ then } BQ : BC = \]

\[ \triangle ABC \text{ యొక్క వైపున సమీశీయం. } AB \text{ లక్షణం గొప్ప వంటి పైలు } AC \text{ లో } P \text{ పై మిశ్రం పంచిక. } P \text{ పై కోట్టడి కూడా వంటి వైపు } BC \text{ లో } Q \text{ వంటి మిశ్రం పంచిక. అంటే } BQ : BC = \]

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 133 Question Id : 7856743050 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability సమీప పరిశీలన సమరాఖి

\[ \text{ } \]

\[ \text{ } \]
If the distance between the points $A(x, 3)$ and $B(7,9)$ is 10 units, then the sum of the squares of the possible values of $x$ is

$A(x, 3)$ మీది $B(7,9)$ లు నుండి 10 రేటులో ఉన్న నష్టానికి, $x$ యొక్క సంఖ్య లెంటు సంచలనీ మంచు

(1) 65
(2) 74
(3) 130
(4) 226
If the points $A(2,1), B(5,x)$ and $C(-4,5)$ are collinear, then the ratio in which $C$ divides $AB$ is

$$A(2,1), B(5,x) \text{ and } C(-4,5)$$

(1) 1 : 3 internally
(2) 1 : 3 externally
(3) 2 : 3 internally
(4) 2 : 3 externally

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 135 Question Id : 7856743052 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability

పిల్లడి, గణితశాస్త్ర సాధనాలు
The slope of the line passing through the point which divides the line segment joining the points $(3, -8)$ and $(-5, 8)$ in the ratio $3 : 1$ internally and the point that divides the line segment joining the points $(-2, 7)$ and $(6, -1)$ in the ratio $1 : 3$ externally is

$$(3, -8) \text{ and } (-5, 8) \text{ are divided in the ratio } 3 : 1 \text{ internally.}$$

$$( -2, 7) \text{ and } (6, -1) \text{ are divided in the ratio } 1 : 3 \text{ externally.}$$

Options:

1. $\frac{7}{3}$
2. $-\frac{8}{7}$
3. $-\frac{7}{3}$
4. $\frac{8}{7}$

Question Number: 136  Question Id: 7856743053  Question Type: MCQ  Option Shuffling: No  Display Question Number: Yes  Is Question Mandatory: No  Calculator: None  Response Time: N.A  Think Time: N.A  Minimum Instruction Time: 0  Correct Marks: 1  Wrong Marks: 0

II. Algebraic and Geometrical Ability
If $\theta$ is the acute angle between the lines $2x + 3y = 0$ and $x = 2y$, then $\tan \theta =$ 

$2x + 3y = 0 \quad \text{and} \quad x = 2y$  

So, $\tan \theta =$

1. $\frac{7}{4}$
2. $\frac{1}{2}$
3. 7
4. 2

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 137 Question Id : 7856743054 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

II. Algebraic and Geometrical Ability
If the line $y = 7x$ is rotated about origin in anti clock wise direction through an angle of $45^0$, then the equation of the line in final position is

$y = 7x \text{ అంచిన తొడిగి వించి వించి ఆధారం పైన కడుపు వేయడం నుండి } 45^0 \text{ ప్రతి నుండి వించి వించి వించి వించి, దానిచే వించి ప్రతి ప్రతి ప్రతి ప్రతి}$

(1) $3x - 4y = 0$
(2) $2y - 5x = 0$
(3) $4x + 3y = 0$
(4) $5y + 2x = 0$

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
The equation of the straight line passing through the intersection of the lines
\[2x - 5y + 1 = 0, 3x + 2y - 8 = 0\] and making equal intercepts on the coordinate axes is

\[3x + 2y - 8 = 0\] व \\[2x - 5y + 1 = 0, \]

\[y = 2x - 3\]
\[y = x - 1\]
\[y = -x + 3\]
\[y = \frac{2}{3}x - \frac{1}{3}\]

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Correct Marks: 1 Wrong Marks: 0

II. Algebraic and Geometrical Ability
సహితానికి, గణిత శాస్త్ర సాధారణతులు
The equation of the line passing through the point $(2, 7)$ and parallel to the line $3x + 8y - 7 = 0$ is

$(2, 7)$ పోస్టం నిలిచి ఉంది, $3x + 8y - 7 = 0$ ల పరాభవంత కత్తి

(1) $3x + 8y - 13 = 0$
(2) $3x + 8y - 62 = 0$
(3) $3x + 8y - 26 = 0$
(4) $3x + 8y - 9 = 0$

Options :

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

II. Algebraic and Geometrical Ability
అగ్ట్రాల్ మరియు జెమియియల్ అబిలిటి
The equation of the line passing through the points (5, 3) and (2, 1)

\[(5, 3), (2, 1) \text{ ఖేడు స్థానాలు చేస్తుంది స్థానం మార్పు}

1. \[7x + 3y + 3 = 0\]
2. \[6x - 8y + 2 = 0\]
3. \[2x - 3y - 1 = 0\]
4. \[3x + 2y + 5 = 0\]

Options:

1. \[\times \ 1\]
2. \[\times \ 2\]
3. \[\checkmark \ 3\]
4. \[\times \ 4\]

Sub-Section Number: 3
Sub-Section Id: 785674335
Question Shuffling Allowed: Yes
Is Section Default?: null

Question Number: 141 Question Id: 7856743058 Question Type: MCQ Option Shuffling: No
Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0

Correct Marks: 1 Wrong Marks: 0

III. Statistical Ability

సంస్థానిక సంయోగకత పరిస్థితులు
The mean of the following data is

<table>
<thead>
<tr>
<th>x</th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>7</th>
<th></th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>f</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

1. 55
2. \(\frac{103}{7}\)
3. \(\frac{110}{7}\)
4. 100

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
The arithmetic mean of the measures of the angle of pentagon is

(1) 72°
(2) 90°
(3) 108°
(4) 144°

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number: 143 Question Id: 7856743060 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 Correct Marks: 1 Wrong Marks: 0

III. Statistical Ability

మధ్యమం తోల్లు విభాగాలు
If the means of marks obtained in Mathematics of 3 sections containing 120, 100, 80 students are \( x \), \( 2x \), \( 3x \) respectively and if the mean of the 3 sections combined is 112, then \( x = \)

\[
\frac{120 \times 120 + 100 \times 100 + 80 \times 80}{120 + 100 + 80} = 112
\]

\[
x = \frac{120 \times 120 + 100 \times 100 + 80 \times 80}{120 + 100 + 80} - 112
\]

\[
x = \frac{14400 + 10000 + 6400}{300} - 112
\]

\[
x = \frac{30800}{300} - 112
\]

\[
x = 102.67 - 112
\]

\[
x = -9.33
\]

(1) 30
(2) 40
(3) 50
(4) 60

Options:

1. [ ] 1
2. [ ] 2
3. [ ] 3
4. [x] 4
A data consists of the first 20 odd integers with frequencies $1^2, 2^2, \ldots, 20^2$ respectively, then the median of the data is

ఒక పరిస్థితిలో 20 అంతర్భావాల వంటిది $1^2, 2^2, \ldots, 20^2$ ఎంపాలబుతున్నాయి. వాస్తవంలో అంతర్భావం

(1) 29
(2) 31
(3) 33
(4) 35

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

III. Statistical Ability
సంఖ్య సాంకేతిక కౌశల
The following observations are in descending order.
94, 84, 74, $x + 2$, $x$, 68, 64, 58.
If the median of this data is 72, then the value of $x =$

<table>
<thead>
<tr>
<th>Option</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>68</td>
</tr>
<tr>
<td>(2)</td>
<td>69</td>
</tr>
<tr>
<td>(3)</td>
<td>71</td>
</tr>
<tr>
<td>(4)</td>
<td>73</td>
</tr>
</tbody>
</table>

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 146 Question Id : 7856743063 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

III. Statistical Ability

సంఖ్య శాస్త్రం నిర్ణయం
The mode for the following frequency distribution is

<table>
<thead>
<tr>
<th>Class Interval</th>
<th>52-55</th>
<th>55-58</th>
<th>58-61</th>
<th>61-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>10</td>
</tr>
</tbody>
</table>

(1) 56.75
(2) 62.25
(3) 58.75
(4) 68.25

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
If the Mean and Median of a frequency distribution are 20 and 15 respectively, then the Mode is

విభాగంలోని మధ్యమం మరియు మద్యం మూలం మూలం మూలం మూలం మూలం మూలం మూలం మూలం మూలం 20
మూలం 15 అంటే, మూలం మూలం

(1) 30
(2) 25
(3) 5
(4) 4

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
If three coins are tossed, then the probability of getting at least one head is

మూడు కొమ్ములను విడించి, తొలినాంలే ఖండపడించడానికి సాధ్యం

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. √ 4

Question Number : 149 Question Id : 7856743066 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

III. Statistical Ability
సాంఘాతిక సామర్థ్యం
If the letters of the word TSICET are arranged at random, then the probability that the T's do not come together is

1. \( \frac{1}{3} \)
2. \( \frac{2}{3} \)
3. \( \frac{1}{12} \)
4. \( \frac{1}{120} \)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 150 Question Id : 7856743067 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

III. Statistical Ability

పరిస్థితి మేల రాసకు ప్రయత్నం
When a fair coin is tossed 5 times, the probability that head appears at least two times is

(1) \( \frac{13}{16} \)
(2) \( \frac{5}{16} \)
(3) \( \frac{3}{16} \)
(4) \( \frac{17}{32} \)

Options:

1. ✔ 1
2. × 2
3. × 3
4. × 4

Communication Ability

Section Id: 78567445
Section Number: 3
Section type: Online
Mandatory or Optional: Mandatory
Number of Questions: 38
Number of Questions to be attempted: 38
Section Marks: 50
Enable Mark as Answered Mark for Review and: Yes
Clear Response :  
Maximum Instruction Time : 0  
Sub-Section Number : 1  
Sub-Section Id : 785674336  
Question Shuffling Allowed : Yes  
Is Section Default? : null  

Question Number : 151 Question Id : 7856743068 Question Type : MCQ Option Shuffling : No  
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0  

Part 1: Meanings (sentences with dashes)  

Existing everywhere  

(1) omnipresent  
(2) omnivorous  
(3) omniscient  
(4) omnibus  

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

Question Number : 152 Question Id : 7856743069 Question Type : MCQ Option Shuffling : No  
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0
Part 1: Meanings (sentences with dashes)

Something that has not been included

(1) commission
(2) permission
(3) omission
(4) remission

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 153 Question Id : 7856743070 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 1: Meanings (sentences with dashes)

Relating to an authority.

(1) officious
(2) official
(3) unofficial
(4) private

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Part 1: Meanings (sentences with dashes)

Big and strong or heavy

(1) hefty
(2) lean
(3) emaciated
(4) tall

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Accepting different opinions or kinds of behaviour

(1) conservative
(2) revolutionary
(3) opinionated
(4) liberal

Options:
1. ☒ 1
2. 2
3. ☒ 3
4. ☒ 4

Sub-Section Number: 2
Sub-Section Id: 785674337
Question Shuffling Allowed: Yes
Is Section Default?: null

Question Number: 156 Question Id: 7856743073 Question Type: MCQ Option Shuffling: No
Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0
Correct Marks: 1 Wrong Marks: 0

Part 2: Synonyms and Antonyms

'perspective' means

(1) plucking
(2) viewpoint
(3) idealism
(4) phenomenon

Options:
Part 2: Synonyms and Antonyms

‘Cosy’ means

(1) comfortable
(2) uncomfortable
(3) sorrowful
(4) distracted

Options:

1. 1
2. 2
3. 3
4. 4
Part 2: Synonyms and Antonyms

Antonym of ‘grateful’

1. careful
2. careless
3. thankless
4. thankful

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

Question Number : 159 Question Id : 7856743076 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 2: Synonyms and Antonyms

Give the antonym of ‘eager’.

1. indifferent
2. incoherent
3. inconsistent
4. inappropriate

Options:
1. ☑  1
2. ☒  2
Part 2: Synonyms and Antonyms

Antonym of 'unique'

(1) great
(2) accomplished
(3) common
(4) pleasant

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✔ 4

Sub-Section Number: 3
Sub-Section Id: 785674338
Question Shuffling Allowed: Yes
Is Section Default? null

Question Number: 161 Question Id: 7856743078 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0
Part 3: Verb (Tense & Voice)

Ramya _____ ill for three weeks. She is still in hospital.

(1) had been
(2) has been
(3) is
(4) was

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 162 Question Id : 7856743079 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Part 3: Verb (Tense & Voice)

Rarely _____ so heavily in the month of March.

(1) did it rain
(2) has it rain
(3) had it raining
(4) does it rain

Options:
Had they _____ earlier they would have come prepared for the test.

(1) being told
(2) been told
(3) told
(4) tell

Options:

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4
Part 3: Verb (Tense & Voice)

The office _____ lists of the eligible candidates and then send them letters for the interviews.

(1) will prepared  
(2) has prepare  
(3) will prepare  
(4) is prepared  

Options:

1. ✗ 1  
2. ✗ 2  
3. ✓ 3  
4. ✗ 4

Question Number : 165 Question Id : 7856743082 Question Type : MCQ Option Shuffling : No  
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

Part 3: Verb (Tense & Voice)

As you can see, the guest rooms _____ cleaned and kept ready for the visitors.

(1) are been  
(2) has been  
(3) have being  
(4) have been  

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Sub-Section Number: 4
Sub-Section Id: 785674339
Question Shuffling Allowed: Yes
Is Section Default?: null

Question Number: 166 Question Id: 7856743083 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0 Correct Marks: 1 Wrong Marks: 0

Part 4: Phrasal Verbs & Idioms

He failed to understand how the leader ___ the crime.

(1) got over with
(2) got up with
(3) got under
(4) got away with

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number: 167 Question Id: 7856743084 Question Type: MCQ Option Shuffling: No Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A
Part 4: Phrasal Verbs & Idioms

With practice, typing becomes_____.

(1) first nature
(2) second nature
(3) second thought
(4) second in nature

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Laxmi is _____ to opt for the job.

(1) on pressure
(2) in pressure
(3) under pressure
(4) over pressure

Options:
The car stopped as it _____ fuel.

(1) ran out of
(2) ran out on
(3) ran of
(4) ran off

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 170 Question Id : 7856743087 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
He had butterflies in his stomach before he began his performance on the stage. The underlined idiom means:

1. He was confident.
2. He was irritable.
3. He was hungry.
4. He was nervous.

Options:

1. ☒
2. 
3. ☒
4. ✗

Sub-Section Number: 5
Sub-Section Id: 785674340
Question Shuffling Allowed: Yes
Is Section Default?: null

Question Number: 171 Question Id: 7856743088 Question Type: MCQ Option Shuffling: No
Display Question Number: Yes Is Question Mandatory: No Calculator: None Response Time: N.A
Think Time: N.A Minimum Instruction Time: 0
Correct Marks: 1 Wrong Marks: 0

Part 5: Articles & Prepositions
The more he talks, _____ less they understand.

(1) a
(2) an
(3) the
(4) in

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

‘The Princes’ is _____ historical novel.

(1) an
(2) the
(3) a
(4) of

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
He has taken a fancy ____ growing vegetables.

(1) on
(2) upon
(3) to
(4) of
You are not cut _____ for this job.

1. out
2. off
3. in
4. up

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

---

There has been slight misunderstanding, but we cleared it _____ now.

1. of
2. up
3. on
4. upon

Options:

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4
Part 6: Computer Terminology

A small symbol or picture that represents a program or other things.

(1) icon  
(2) GIF  
(3) logo  
(4) image

Options:

1. ✓ 1  
2. ✗ 2  
3. ✗ 3  
4. ✗ 4

Part 6: Computer Terminology
What is the full form of e-mail?

(1) Electric mail
(2) Exchange mail
(3) Electronic mail
(4) Engaging mail.

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Part 6: Computer Terminology

Which one of the following is not an operating system (OS)?

(1) Windows 10
(2) Linux
(3) POS
(4) Ms Excel

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
A byte is equal to

(1) 8 bits
(2) 16 bits
(3) 32 bits
(4) 64 bits

Options:

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
RAM is a memory of this type:

(1) Volatile
(2) Non-volatile
(3) Short
(4) Long

Part 7: Business Terminology

Which of the following is not an element of delegation?

(1) informal organisation.
(2) responsibility.
(3) authority.
(4) accountability.

Options:
Question Number : 182 Question Id : 7856743099 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 7: Business Terminology

Which of the following is correct?

(1) Sales management subsumes marketing management  
(2) Marketing management subsumes sales management  
(3) Both are independent  
(4) Marketing management has nothing to do with sales management

Options :

1. ✗ 1  
2. ✔ 2  
3. ✗ 3  
4. ✗ 4

Question Number : 183 Question Id : 7856743100 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0
Part 7: Business Terminology

Who is the originator of POSDCORB?

1. Henri Fayal
2. Luther Gullick
3. Koontz and O'donnell
4. Newman and summer

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Part 7: Business Terminology

All else being equal an organisation can increase supply by _____.

1. rise in income of the consumer.
2. increase in the income of the producer.
3. rise in the price of the product.
4. improvement in techniques of production.

Options:

1. ✗ 1
2. ✔ 2
Question Number : 185 Question Id : 7856743102 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0
Part 7: Business Terminology

Who is known as the father of scientific management?

(1) Max Weber
(2) Henry Fayol
(3) F.W. Taylor
(4) S. George

Options:

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Sub-Section Number : 8
Sub-Section Id : 785674343
Question Shuffling Allowed : No
Is Section Default? : null

Question Id : 7856743103 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Question Numbers : (186 to 190)
Part 8: Comprehension

It is said that the strongest chain is no stronger than its weakest link. In the Southern part of our country there are twenty-two millions of your brethren who are bound to you by ties which you cannot tear asunder if you would. The most intelligent man in your community has his intelligence darkened by the ignorance of a fellow citizen in the Mississippi bottoms. The wealthiest in your city would be wealthier but for the poverty of a fellow being in the Carolina rice swamps. The most moral and religious among you has his religion and morality modified by the degradation of the man in the South whose religion is a mere matter of form or emotionalism.

The vote in your state that is cast for the highest and purest form of government is largely neutralized by the vote of the man in Louisiana whose ballot is stolen or cast in ignorance. When the South is poor, you are poor; when the South commits crime, you commit crime. My friends, there is no mistake; you must help us to raise the character of our civilization or yours will be lowered.

Sub questions

Question Number : 186 Question Id : 7856743104 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension

What does the statement ‘The strongest chain is no stronger than its weakest link’ mean in the context of the passage?

(1) The need for coordination among the races.
(2) The need for manufacturing stronger chains.
(3) The need to remove weak links in the chain.
(4) The need to divide the nation.

Options :

1. ✔ 1
2. ✗ 2
3. 3
4. 4

Question Number : 187 Question Id : 7856743105 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension

How many people were there in the South part of USA as mentioned in the passage?

(1) Twenty-two lakhs
(2) Twenty-two thousand
(3) Two crore twenty lakhs
(4) Twenty-two crores

Options :

1. 1
2. 2
3. ✓ 3
4. ✗ 4

Question Number : 188 Question Id : 7856743106 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension
The expression ‘When the South is poor, you are poor’ suggests

1. Both the Northern and Southern parts of the country are poor.
2. Without balanced development, the country cannot progress.
3. Northern part is poorer than the South.
4. There is uniform development in the country.

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

The phrase ‘the highest and purest form of government’ indicates

1. Bureaucracy
2. Dictatorship
3. Democracy
4. Religious state

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. 4.
Part 8: Comprehension

According to the author, the Blacks in the South are

(1) ignorant
(2) well-educated
(3) honest
(4) intelligent

Options:

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Today the world is home to a transformative generation of 900 million adolescent girls and women poised to shape the future of work and growth. If this cohort of young women could be equipped with the right resources and opportunities to nurture the 21st century skills, they would become the largest segment of women leaders, change makers, entrepreneurs, and innovators in history. India, home to one of the largest generations of girls and young women, has undertaken wide-ranging initiatives across the critical domains of education, health, digital and financial inclusion to help in the achievement of Sustainable Development Goal 5, which envisions the world to be a more gender equal place by 2030. To unleash the gender dividend and create conditions for female leadership to flourish women at all levels of society must have inclusion in the Information and Communication Technology (ICT), bodily autonomy and safety, shared responsibility within the household and equal participation in decision-making spaces. The World Bank notes that over 43% of Indian STEM (Science, Technology, Engineering and Mathematics) graduates are women. However, not all of them are represented in the work force and tech leadership. STEM education appears to have picked up pace but there are prevailing stereotypes that characterise it as a traditionally masculine domain.

Sub questions

Question Number : 191 Question Id : 7856743110 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension

The passage is about:

(1) 21st century skills.
(2) STEM
(3) women’s failure to keep pace with men.
(4) female leadership.

Options :

1. 1
Question Number : 192 Question Id : 7856743111 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension

For shaping future growth, what do men need?

(1) Resources and opportunities.
(2) Domestic responsibilities.
(3) Restrictions to work.
(4) Parental guidance.

Options :

1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 193 Question Id : 7856743112 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension
Sustainable Development Goal 5 envisions the world to be a

(1) Peaceful federation.
(2) Gender equal place.
(3) Female dominated world.
(4) Male-dominated society.

Options:

1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 194 Question Id : 7856743113 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension

Critical domains include

(1) Education and financial inclusion.
(2) Freedom and healthy practices.
(3) Liberty in decision-making.
(4) Becoming champions of change.

Options:

1. ✔ 1
2. ✗ 2
Part 8: Comprehension

For female leadership to flourish, women need to have inclusion in

(1) Sustainable development.
(2) STEM.
(3) Masculine domain.
(4) ICT.

Options:

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Sub-Section Number: 10
Sub-Section Id: 785674345
Question Shuffling Allowed: No
Is Section Default?: null
Interpersonal communication refers to the sharing of information among people. To compare it with other forms of communication, such as intrapersonal, organizational, etc., we need to examine how many people are involved, how close they are to one another physically, how many sensory channels are used, and the feedback provided. Interpersonal communication differs from other forms of communication in that there are few participants involved, they in close physical proximity to each other, many sensory channels are used, and feedback is immediate. Also, the roles of the sender and receiver keep alternating. This form of communication is advantageous because direct and immediate feedback is possible. If a doubt occurs, it can be instantly clarified. Note that non-verbal communication plays a major role in the interpretation of a message in this form of communication due to proximity of the people involved. Interpersonal communication can be formal and informal. For example, your interaction with a sales clerk in a store is different from that with your friends and family members; the interaction between the panel members and the candidate appearing at an interview is different from the conversation between two candidates waiting outside. Hence, depending on the formality of the situation, interpersonal communication takes on different styles.

Sub questions

Question Number : 196 Question Id : 7856743116 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Part 8: Comprehension

Interpersonal communication is communication between

(1) one to many.
(2) one to none.
(3) one to a few.
(4) one to oneself.

Options:
Part 8: Comprehension

Intrapersonal communication takes place ____.

(1) between one and many.
(2) within oneself.
(3) between human beings and non-human entities.
(4) between a person and an organization.

Options:

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4
Part 8: Comprehension

Non-verbal communication involves _____.

(1) signs and gestures.
(2) close conversation
(3) distant communication.
(4) absence of communication.

Options:

1. √ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Part 8: Comprehension

Doubts can be clarified instantly in _____

(1) intrapersonal communication.
(2) extrapersonal communication.
(3) interpersonal communication.
(4) non-verbal communication.

Options:

1. ✗ 1
Question Number : 200  Question Id : 7856743120  Question Type : MCQ  Option Shuffling : No
Display Question Number : Yes  Is Question Mandatory : No  Calculator : None  Response Time : N.A  Think Time : N.A  Minimum Instruction Time : 0
Correct Marks : 1  Wrong Marks : 0

Part 8: Comprehension

Which of the following involves formal communication?

(1) Conversation with your uncle.
(2) Interaction with your friend.
(3) Interaction with your Bank Manager.
(4) Interaction with your fiancée

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4