Telangana State Council Higher Education

Notations:
1. Options shown in green color and with ✔️ icon are correct.
2. Options shown in red color and with ✗ icon are incorrect.

Question Paper Name: TSICET2022 28th July 2022 Shift 1
Subject Name: TS ICET 2022
Creation Date: 2022-07-28 18:23:27
Duration: 150
Total Marks: 200
Display Marks: Yes
Calculator: None
Magnifying Glass Required?: No
Ruler Required?: No
Eraser Required?: No
Scratch Pad Required?: No
Rough Sketch/Notepad Required?: No
Protractor Required?: No
Show Watermark on Console?: Yes
Highlighter: No
Auto Save on Console?: Yes
Change Font Color: No
Change Background Color: No
Change Theme: No
Help Button: No
Show Reports: No
Show Progress Bar: No

TS ICET 2022

Group Number: 1
Group Id: 63268624
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 : 63268670
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
Sub-Section Number : 1
Sub-Section Id : 632686530
Question Shuffling Allowed : Yes

Question Id : 6326864785
Question Type : COMPREHENSION
Sub Question Shuffling Allowed : Yes
Group Comprehension Questions : No
Calculator : None
Response Time : N.A
Think Time : N.A
Minimum Instruction Time : 0
Question Numbers : (1 to 20)

(i) Data Sufficiency

(Marks: 20)

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

(a) Mark choice (1) if the statement (I) alone is sufficient to answer the question, 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 : 6326864786 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
What is the value of $x + y$?

$x + y$ ఎంత విలువచేస్తుందా?

(I) $3x - 4y - 5 = 0$.

(II) $8y - 6x + 10 = 0$.

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

What is angle $A$ in triangle $ABC$?

ప్రిమిట్ పటం ABCలో A నుండి ఎంత కోణం?

(I) $\angle B = 40^\circ$.

(II) Triangle $ABC$ is isosceles.

ప్రిమిట్ పటం ABC లో కొనిగించరు ప్రిమిట్ పటం.
Is the integer $3m + 4n$ even?

$3m + 4n$ అంశం వాటిలో బాగా తక్కువ కాదు అనుకుంటుందా?

(l) $2m + n$ is an odd number.

$2m + n$ ఒక బాగా తక్కువు అనుకుంటుంది.

(ii) $m + 2n$ is an odd number.

$m + 2n$ ఒక బాగా తక్కువు అనుకుంటుంది.

Options:
1. ✗ 1
2. ✔️ 2
3. ✗ 3
4. ✗ 4

Is the integer $3m + 4n$ even?

$3m + 4n$ అంశం వాటిలో బాగా తక్కువ కాదు అనుకుంటుందా?

(l) $2m + n$ is an odd number.

$2m + n$ ఒక బాగా తక్కువు అనుకుంటుంది.

(ii) $m + 2n$ is an odd number.

$m + 2n$ ఒక బాగా తక్కువు అనుకుంటుంది.

Options:
1. ✗ 1
2. ✔️ 2
3. ✗ 3
4. ✗ 4
A sequence of integers is given by $a_n = (a_{n-1} + 1)^2$, then what is $a_5$?

ఒక వితరణ అయితే $a_n = (a_{n-1} + 1)^2$ అంటే $a_5$ ఎంతి?

(l) $a_3 = 25$.

(ii) $a_1$ is an odd integer.

$a_1$ ఒక వితరణ అయితే.
Is the perimeter of the rectangle greater than 65 cm?

(1) Its length is less than 16 cm.
    
(II) Its breadth is greater than 10cm.

Options:
1. 
2. 
3. 
4. ✓ 4

For real numbers \(a, b\) and \(c\), is \(a = b = c\)?

(1) \(a + 3b + 2c = 0\).

(II) \(a^2 + b^2 + c^2 = ab + bc + ca\).

Options:
1. 
2. ✓ 2
How much money do the persons A and B together have?

A మేరం బ మేరం లతా లతా మేరం లతా మేరం నిషీద్యుతుడు కనం

(I) B has Rs.200 less than what C has.
C లేదా B లేదా భారతం లేదా 200 లేదా జీలతం లేదా

(II) A has Rs.300 more than C has.
C లేదా A లేదా భారతం లేదా 300 లేదా జీలతం లేదా

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4
How many students passed in both Mathematics and English?

ప్రతిముగమ అభినుసారం సంఖ్యలు ఉన్నాయి?

(I) 15 failed in both Mathematics and English.

15 మాత్రం ప్రతిముగమ అభినుసారం సంఖ్యలు ఉన్నాయి.

(II) The number of failures in Mathematics exceeds the number of failures in English by 10.

అభినుసారం సంఖ్యలు ఉన్నాయి అభినుసారం సంఖ్యలు సమానం ఉండదు కాను అభినుసారం

ేందుకు అభినుసారం సంఖ్యలు సమానం ఉండదు కాను అభినుసారం సంఖ్యలు సమానం ఉండదు 10 సమానం

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
Is \( x = y = z \)?

\[ x = y = z \Rightarrow \text{??} \]

(i) \[ x^3 + y^3 + z^3 = 3xyz. \]

(ii) \[ x^2 + y^2 + z^2 = xy + yz + zx. \]

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

What is the average of \( a, b, c, d \)?

\[ a, b, c, d \Rightarrow \text{??} \]

(i) \[ a + b + c = d + 15. \]

(ii) \[ 13 - c - 3d = a + b. \]

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4
What is the GCD of the positive integers $m, n$?

(Ⅰ) LCM of $m, n$ is 165.

\[
m, n \text{ are } \text{ M.L.C. } 165.
\]

(Ⅱ) Product of $m, n$ is 165.

\[
m, n \text{ are } \text{ M.P.C. } 165.
\]

Options:
1. ☐ 1
2. ✔ 2
3. ☒ 3
4. ☒ 4

What is the area of the sector?

(Ⅰ) Radius of the circular sector is 10 cm.

\[
r = \text{radius of } \text{sector } 10 \text{ cm.}
\]

(Ⅱ) The angle of the sector is $\frac{\pi}{6}$.

\[
\theta = \text{angle of sector } \frac{\pi}{6}.
\]
What is the area of the rectangle PQRS?

**(I)**  PQ is twice of QR.
$$QR = \frac{1}{2} \text{ of } PQ \implies PQ = 2QR.$$  

**(II)**  PS = 4 cm.
$$PS = 4 \text{ cm}.$$  

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
What is the HCF of $x$ and $y$?

$x$ మేసిన $y$ లో గ.చ.చ. ఎంత?

(i) Ratio of $x$ and $y$ is 2 : 3.

$x$ మేసిన $y$ లో గ.చ.చ. $2 : 3$.

(ii) $x$ and $y$ are two consecutive positive integers.

$x$ మేసిన $y$ లో మూడు పాండిల్లు ఏకాను పదమిగిల్లాను.

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

What is the value of $x^6 - y^6$?

$x^6 - y^6$ ఎంత?

(i) $x^3 - y^3 = 10$.

(ii) $x^4 + y^4 = 5$.

Options:
1. ★★ 1
2. 2
3. 3
4. 4

Question Number: 16 Question Id: 6326864801 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

Is A a brother of B?

B ఎక్కడ తెలుగులో?

(I) B is a sister of C.
   చందిన రెండు భురు బాలీ సాగరు B.

(II) C is a brother of A.
    ఆహోరాలు సాగరు C.

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

Question Number: 17 Question Id: 6326864802 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
In how many hours did David cover 600 miles?

600 మైళ్ళు నడిచాని ఎక్కడ కాలం లేదు?

(I) David covered the first half of the distance at 40 mph.
డావిడ్ నడిచాడు ప్రపంచ పాటకు ప్రఖ్యాత 40 మైళ్ళు ప్రయాణం చేసాడు.

(II) David covered the last \(\frac{1}{4}\)th of the distance at 30 mph.
డావిడ్ నడిచాడు ప్రాంత పాటకు ప్రఖ్యాత 30 మైళ్ళు ప్రయాణం చేసాడు.

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
How many people are there in that room?

అంతర్‌నిష్పత్తి ఉండవచ్చు?

(I) If 4 persons leave the room, then there will be less than 15 persons in that room.
    4 ప్రజలు ఢవడం పుట్టినప్పటికీ, అది మరియు 15 ప్రజలును కంటే నీవు నాయకు దాటినప్పటికీ.

(II) If 3 more persons enter the room, then there will be more than 20 persons in that room.
     మరియు 3 ప్రజలు ప్రదర్శన కంటే రావాలియినప్పటికీ, అది మరియు 20 ప్రజలతో పరిసరాన్ని రావాలియినప్పటికీ.

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

Question Number : 19 Question Id : 6326864804 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
Alex and Tony started a piece of work. After working for two days, Alex left. The remaining work was completed by Tony. In how many days did Tony complete the work?

(1) Tony can complete the work in 20 days working individually.

(II) Alex and Tony can complete the work in $6\frac{2}{3}$ days working together.

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Is D a brother of F ?

F అన్ని దేవకారు? 

(I) B has two sons of which F is one.
B ని రెండు కొడుకులు రెండు వప్పులు డిఫిన్ టీ ఫి?

(II) D’s mother married to B.
D దండనా Bolt పై వస్తుంది. 

**Options :**

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

**Sub-Section Number :** 2
**Sub-Section Id :** 632686531
**Question Shuffling Allowed :** Yes

**Question Number :** 21  **Question Id :** 6326864806  **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

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 సారిగా కా హాహాహా (సూచించబడిన తొలి కథ) ఎండి చేయ (అనేటా సూచించబడిన రెండవ కథ) ఎండి చేయ. ఉండఓ రెండవ కథ నిర్ణయించిన ఎండు కథతొలి పంపాడిన పంపాడి. అందుకే రెండవ కథ నిర్ణయించిన ఎండు కథతొలి పంపాడిన పంపాడి.
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 వివిధ రెండు పాటులు లేదా రెండు సంఖ్యల యొక్క విభాగంలో (హెచ్చుగా జోన్ రెండు లేదా సంఖ్యల విభాగంలో) విధానం చేసినట్లయితే, నంబరు విభాగంలో ప్రతి పాటు విభాగంలో ఉండగా ఉంటే ప్రతి పాటు విభాగంలో ఉండగా ఉంటే, ఆ నంబరు విభాగంలో ఆ రెండు విభాగంలో ఉండగా ఉంటే ప్రతి పాటు విభాగంలో ఉండగా ఉంటే.
QRS : VWX :: ____ : MNO

(1) GHI
(2) HIJ
(3) KLM
(4) DEF

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.
Gum : Stick :: Needle : ____

(1) Cloth
(2) Prick
(3) Taylor
(4) Stitch

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.

21-30 ప్రతి కూ లింగాల లింగాల సంబంధం కలిగి ఉంది (అన్ని లింగాలు ఎక్కువగా కలిగి ఉండాలి). అయినప్పటి సంఖ్యలు ఎక్కువగా ఎక్కువగా కలిగి ఉండాలి. అల్లరే సంఖ్యలు ఎక్కువగా ఎక్కువగా కలిగి ఉండాలి.
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.
In the questions 21-30, each contains two pairs of groups (of letters of 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.
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.
SEV(20) : UGX(0) :: VEG(8) : ____

1. GXHF ⑴⑸
2. XGI ⑴⑷
3. XHJ ⑴⑸
4. XEI ⑴⑺

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.
(1) 83
(2) 70
(3) 80
(4) 74

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.
\[
\frac{X}{Y} : \frac{42}{52} :: \frac{P}{Q} : _____
\]

(1) \(\frac{21}{31}\)

(2) \(\frac{41}{51}\)

(3) \(\frac{51}{61}\)

(4) \(\frac{61}{71}\)

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.
(1) HKXG₁₂
(2) HKXG₁₁
(3) KHYG₁₁
(4) HKWG₁₁

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 3
Sub-Section Id: 632686532
Question Shuffling Allowed: Yes

Question Number: 31 Question Id: 6326864816 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

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

0, 1, 2, 3, 6, 11, 20, 37, 68, ___

(1) 125
(2) 126
(3) 127
(4) 128

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 32 Question Id : 6326864817 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

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

Frog, Crocodile, Aligator, Whale, Tortoise, Toad, Turtle

(1) Tortoise
(2) Whale
(3) Crocodile
(4) Frog

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 33 Question Id : 6326864818 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

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

Frog, Crocodile, Aligator, Whale, Tortoise, Toad, Turtle

(1) Tortoise
(2) Whale
(3) Crocodile
(4) Frog
Carrot, Cauliflower, Cabbage, Capsicum, Ladies finger, Brinjal, Bottle guard

(1) Carrot
(2) Cabbage
(3) Capsicum
(4) Brinjal

Options:
1. ✔️ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

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

31, 63, 127, 257, 511, 1023, 2047

(1) 31
(2) 63
(3) 257
(4) 1023

Options:
1. ✗ 1
2. ✗ 2
3. ✔️ 3
4. ✗ 4
Note: In questions numbered 31 to 35 pick the odd thing out.

8, 50, 18, 72, 104, 128, 98

(1) 98
(2) 104
(3) 18
(4) 72

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 4
Sub-Section Id: 632686533
Question Shuffling Allowed: Yes

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

Questions: 36 మొత్తం 45 మొత్తం విషయాలతో అంతరేఖ నిర్ధారించండి. ఇటి నిర్ధారించండి ఆధునిక నిర్ధారించండి నిర్ధారించండి.
25, 20, $16\frac{2}{3}$, $12\frac{1}{2}$, $11\frac{1}{9}$, $10$, $9\frac{1}{11}$

(1) $15\frac{1}{7}$
(2) $14\frac{2}{7}$
(3) $14\frac{5}{7}$
(4) $13\frac{1}{7}$

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 37  Question Id: 6326864822  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

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

గమనికు: 36 మాత్రము 45 మాట్సే కాగాం ప్రమాణం తానాపాటిన నమ్మకం నించింది. అ నామమాపాట పంచితో ప్రమాణం నమ్మకం నాలగాంసాగారు మాట్సే నిర్ణయం

2, 3, 5, 8, 12, 17, 23, ____

(1) 28
(2) 29
(3) 30
(4) 31

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

Question 38

\[(1 - \sqrt{2}), -1, (-1 - \sqrt{2}), (-3 - 2\sqrt{2}), \ldots,\]

\[(-17 - 12\sqrt{2}), (-41 - 29\sqrt{2})\]

Options:

1. \( (-15 - 11\sqrt{2}) \)
2. \( (13 - 9\sqrt{2}) \)
3. \( (-10 - 7\sqrt{2}) \)
4. \( (-7 - 5\sqrt{2}) \)

Question 39

Correct Marks: 1 Wrong Marks: 0
Note : Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

6, 11, 18, 27, 38, ____ 66

Options :
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 40 Question Id : 6326864825 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

Note : Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.
\[2 + \sqrt{2}, 6, 6 + \sqrt{6}, 8 + 2\sqrt{2}, 10 + \sqrt{10}, \ldots, 14 + \sqrt{14}\]

(1) \(12 + 4\sqrt{2}\)
(2) \(12 + 2\sqrt{2}\)
(3) \(12 + \sqrt{2}\)
(4) \(12 + 2\sqrt{3}\)

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number: 41 Question Id: 6326864826 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

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

\[
\begin{array}{cccccc}
1 & 8 & 27 & 64 & & 216 \ 2'5'10'17' & 37'50'
\end{array}
\]

(1) \(\frac{89}{19}\)
(2) \(\frac{125}{26}\)
(3) \(\frac{132}{35}\)
(4) \(\frac{164}{35}\)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
Note: Each of the questions from 36 to 45 follows a definite pattern, observe the same and fill in the blanks with suitable ones.

64, 32, 35, 5, 22, 11, 14, ____, 16, 8, 28, 4

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

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

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

64, 32, 35, 5, 22, 11, 14, ____, 16, 8, 28, 4

(1) 1
(2) 2
(3) 3
(4) 4
2, 14, 3, 21, ___, 28, 5, 35, 6, 42

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number: 44 Question Id: 6326864829 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

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

4, 12, 48, 240, ___, 10080, 80640

(1) 1440
(2) 3650
(3) 5940
(4) 8420

Options:
1. ✓ 1
2. ✗ 2
3. 3
4. 4

Question Number : 45 Question Id : 6326864830 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

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

గమనిక : 36 నుంచి 45 వరకు ప్రతి ప్రశ్న కొనేందుకు ఒక పరిమాణం నాణికగా పనిచేసాయం. అ పరిమాణం పనిచేసి మరింత పరిమాణం
నాణికగా పనిచేసాయం.

2, 6, 20, 42, 110, 156, 272, ____

(1) 243
(2) 432
(3) 340
(4) 342

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

Sub-Section Number : 5
Sub-Section Id : 632686534
Question Shuffling Allowed : Yes

Question Id : 6326864831 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Question Numbers : (46 to 48)

(b) Data Analysis

(సంఖ్యాశాస్త్ర పరిశీలన) (Marks : 10)
The following graph shows the expenditure of a household on repairs (in hundred rupees) during January to September. Based on this, answer the questions from 46 to 48.

Sub questions

Question Number : 46 Question Id : 6326864832 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 percentage increase of the expenditure in the month of June than the month of March

మార్చు ఎక్కడ వివిధత్తులకు అందించిన ఎక్కడ వివిధత్తుల మార్చు ఎక్కడ వివిధత్తుల మార్చు ఎక్కడ వివిధత్తుల

(1) $33\frac{1}{3}$
(2) $133\frac{1}{3}$
(3) $233\frac{1}{3}$
(4) $66\frac{2}{3}$

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 47 Question Id : 6326864833 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
Which month shows highest percentage increase in expenditure over its previous month?

Which month shows highest percentage increase in expenditure over its previous month?

1. February
2. April
3. May
4. September

Options:
1. ☒
2. ☒
3. ☒
4. ☒

The average expenditure per month in the given period (in rupees)

1. 3157 \(\frac{5}{9}\)
2. 4667 \(\frac{2}{3}\)
3. 3333 \(\frac{1}{3}\)
4. 3277 \(\frac{7}{9}\)
(b) **Data Analysis**

The Pie-chart shows the number of toys of six types A, B, C, D, E, and F manufactured by a company. Based on this, answer the questions from 49 to 51.
The percentage of toys of type E in the total number of toys of all types is

మంచి దే మంచి లో ఎంతో E గానం ఏ మంచి లో ఎంతో

(1) \(19 \frac{4}{9}\)
(2) \(21 \frac{2}{9}\)
(3) \(20 \frac{4}{9}\)
(4) \(19 \frac{5}{9}\)
If the total number of toys produced is 72000, then the number of toys of type A is

(1) 13000  
(2) 12000  
(3) 24000  
(4) 14000

The ratio between the number of toys of types A and E is

(1) 4 : 5  
(2) 5 : 7  
(3) 7 : 6  
(4) 6 : 7
Options:
1. ☑️ 1
2. ☑️ 2
3. ☑️ 3
4. ☑️ 4

Sub-Section Number: 7
Sub-Section Id: 632686536
Question Shuffling Allowed: Yes

Question Id: 6326864839 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes
Group Comprehension Questions: No Calculator: None Response Time: N.A Think Time: N.A Minimum Instruction Time: 0
Question Numbers: (52 to 55)

(b) Data Analysis (Marks: 10)

పరిశీలన (పాట్లకు పంపబడిన ప్రశ్నలు: 52 to 55)
In an examination consisting of tests in three subjects Physics, Chemistry and Mathematics, the following data is obtained.

(i) Total number of candidates appeared 400.

(ii) Number of candidates failed in all the three subjects: 12.

(iii) Number of candidates failed only in Physics and Chemistry: 24.

(iv) Number of candidates failed only in Chemistry and Mathematics: 18.

(v) Number of candidates failed in Mathematics and Physics: 32.

(vi) Number of candidates failed in only Physics, only chemistry and only Mathematics are 40, 30 and 50 respectively.

Based on the above information answer the questions from 52 to 55.

Sub questions
How many candidates passed in Mathematics?

గాత్రికం కోసం ఉత్తమంచనం కనబడింది?

(1) 288
(2) 268
(3) 254
(4) 242

Options:
1. ✅ 1
2. ✘ 2
3. ✘ 3
4. ✘ 4

What is the percentage of candidates that failed in at least two subjects?

సంఖ్య సాధనాన్ని సముధతి సమక్ష సమయ నంది?

(1) 18\(\frac{1}{2}\)
(2) 20\(\frac{1}{2}\)
(3) 21\(\frac{1}{2}\)
(4) 22\(\frac{1}{2}\)

Options:
1. ✗ 1
2. ✗ 2
What is the percentage of candidates who passed in Chemistry?

3. 3
4. 4

Options:
1. 1
2. 2
3. 3
4. 4
What is the number of candidates that passed in all the three subjects?

(1) 208
(2) 194
(3) 182
(4) 176

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number : 8
Sub-Section Id : 632686537
Question Shuffling Allowed : Yes

Question Id : 6326864844 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group
Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction
Time : 0
Question Numbers : (56 to 60)

Coding and Decoding Problems (Marks: 10)
The letters of the English alphabet A, B, C, ..., Z are given ranks 1, 2, 3, ..., 26 respectively. Then they are coded as follows:

(i) A letter with rank 'n' is coded to the letter with rank r, where r is the remainder when 7n is divided by 26, here 1 ≤ r ≤ 26.
(ii) For decoding reverse process is followed.

Based on this coding process, answer the questions 56-60.

అనే సంఖ్యలకే అంకేకు A,B,C,..., Z అనే సంఖ్యల 1, 2, 3, ..., 26 చేతిలో అడుగుతాయి. అతని సంఖ్య కు అడుగు చేయవచ్చు.

(i) సంఖ్య n కు అడుగు చేస్తే సంఖ్య r కు అడుగు చేయవచ్చు. అంకీ నీరు 7n ను 26 చేతిలో విభజించగా నీటి సంఖ్య అడుగు చేయండి 1 ≤ r ≤ 26.

(ii)అడుగు చేసిన సంఖ్య నీటి అంకేకు అడుగు చేయవచ్చు.

ఆ సంఖ్య అంకేకు అడుగు 56 ను గుణించి 60 ను వాటిలో విభజించండి అంకేకు అడుగు చేయవచ్చు.

Sub questions

Question Number : 56 Question Id : 6326864845 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 word FINE is coded as

FINE ఫినీ సంఖ్యలు

(1) PJTI
(2) PKTI
(3) PJSK
(4) PKSJ

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number: 57 Question Id: 6326864846 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 code for the word PRISM is

PRISM ప్రిసంఖ్యలు తయారీ చేస్తుంది

(1) HVJEM
(2) HVLDM
(3) HVKCM
(4) HVIFM

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
The string of letters that are coded as NEST is

NEST నేస్ట్ 

(1) BWYN
(2) BVXL
(3) TICJ
(4) TJDK

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
The number of letters in the alphabet that are coded to themselves as under the given code is

వంద లేదా సూదం ప్రతిభ సంఖ్యలో రెంటే రెంటే సంఖ్యలో రెంటే సంఖ్య

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

Options :
1. ✗ 1
2. ✗ 2
3. ☑ 3
4. ✗ 4

Question Number : 60 Question Id : 6326864849 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 are coded as CRISP is

CRISP కా పాడి చెప్పడాలి అధికం ఉమాయాం

(1) SKFYE
(2) SJFXG
(3) SKEXH
(4) SJEYF
Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ✗ 4

Sub-Section Number: 9
Sub-Section Id: 632686538
Question Shuffling Allowed: Yes

Question Number: 61 Question Id: 6326864850 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

Coding and Decoding Problems (Marks: 10)
రండింగి, టండింగి అంచనాలు (మార్క్స్: 10)

If SOLAR is coded as QMJYP, then the code for EIGHT is

SOLAR అంచనా తరువాత ఈ కార్యం పొడి

(1) CGEIR
(2) CGEFR
(3) BGEFR
(4) CGEFQ

Options:
1. ✗ 1
2. ☒ 2
3. ✗ 3
4. ✗ 4

Question Number: 62 Question Id: 6326864851 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

Coding and Decoding Problems (Marks: 10)
రండింగి, టండింగి అంచనాలు (మార్క్స్: 10)
If TENDER is coded as SDMCDQ, then the code for PURCHASE is

TENDER అంటే SDMCDQ అంటే చేసి PURCHASE అంటే

(1) OSRCHYQD
(2) OTQBZGZR
(3) ORSCHASD
(4) OQBHCZRD

Options :
1. ✗ 1
2. ✅ 2
3. ✗ 3
4. ✗ 4
In a certain code language, if the word DISTANCE is coded as EDCINSAT, then in that language ACQUIRE is coded as

ధర్మాని రిండ్యసి వ్యాఖ్యించిన డిస్టాన్స్ అంటే ఇది క్రింది ఏడు శాస్త్రంలో ఆక్రిష్ట్రే అంటే ఇది క్రింది

(1) EACIQUR
(2) EACRIUQ
(3) EARCIQU
(4) ERCIAQU

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 64 Question Id : 6326864853 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

Coding and Decoding Problems (Marks: 10)
చడివి యే, చడివి పండితాయా పండితాయా (మార్క్స్ : 10)
If PICTURE is coded as QEDVOSA, then ELEVEN is coded as

PICTURE అలా కొనసాగుతుంది, ELEVEN అలా కొనసాగుతాయం?

(1) ANAWAP
(2) AMAWAP
(3) AMAVAP
(4) AMAWAQ

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Coding and Decoding Problems

(Marks: 10)
In a code language, if GATE is coded as 10042308, then LURE is coded in that language as

(1) 15212108
(2) 15241805
(3) 15242108
(4) 12182105

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number: 10
Sub-Section Id: 632686539
Question Shuffling Allowed: Yes

Question Number: 66 Question Id: 6326864855 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

(c) Date, Time & Arrangement Problems

( Marks: 10)
If April 1st, 2022 is Friday, which day will it be after 208 days?

1 మార్చి 2022 నంబర్ అయితే, 208 దినాల పట్టివేత ఉంది దిని ఎది?

(1) Monday
(2) Wednesday
(3) Tuesday
(4) Friday

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 67 Question Id : 6326864856 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

(d) Date, Time & Arrangement Problems (Marks : 10)
At what time between 7’o clock and 8’o clock will the two hands of the clock be at 120° angle with each other?

రెండు రాఖులు 7 రోగింది మరియు 8 రోగింది ఉండాలి ముందు రెండు రాఖులు 120° డిగ్రీ అయించి ఉంటాయి?

(1) 15 minutes after 7’o clock
(2) 16 minutes after 7’o clock
(3) $16\frac{4}{11}$ minutes after 7’o clock
(4) $15\frac{5}{11}$ minutes after 7’o clock

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 68 Question Id : 6326864857 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
What will be the angle between the minute and hour hands when the clock shows the time as 5:15 (in degrees)?

(1) $72\frac{1}{2}^\circ$
(2) $70^\circ$
(3) $67\frac{1}{2}^\circ$
(4) $64^\circ$

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 69 Question Id : 6326864858 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

(d) Date, Time & Arrangement Problems (Marks : 10)

ఇస్ప్టకి, సమయాన్ని, కార్డీ సంహర్ణం (మార్క్స్ : 10)
E is the mother of the brother of a sister of A’s father, then E related to A as

A మామె బొయ్య్యె భార్తి భార్తి భార్తి కండే మామె, అ కండే E కండే, A కండే E కండే మామె

1. Aunt మామె
2. Grand daughter గ్రాండ్ డాటర్
3. Grand mother గ్రాండ్ మామె
4. Sister-in-law మామె

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

(d) Date, Time & Arrangement Problems (Marks: 10)
A daily train is scheduled 12:15 pm at Station A. It came 15 minutes late on Sunday, another 20 minutes late on Monday, another 25 minutes late on Tuesday, and another 30 minutes late on Wednesday. Then the time of arrival of the train at station A on Wednesday is

(1) 12:45 pm
(2) 1:15 pm
(3) 1:30 pm
(4) 1:45 pm

Options:
1. ☐ 1
2. ☐ 2
3. ☒ 3
4. ☑ 4

Question Number: 71 Question Id: 6326864860 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

(d) Date, Time & Arrangement Problems (Marks: 10)

(టీమ, సమయం, అంశాలను సమాధానం చేయడానికి) (మార్క్స్: 10)
A local train arrives at station A for every 45 minutes when Mr X came to station A, an announcement says that a local train has departed from station A, 18 minutes back and the next train will come at 11:41 AM. Then the time of the arrival of Mr.X to station A is

(1) 9:11:23 am
(2) 10:56 am
(3) 11:14 am
(4) 11:59 am

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 72 Question Id : 6326864861 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

(d) Date, Time & Arrangement Problems  (Marks : 10)
      తిరిగి, సమయపరంపర, అంశవ్యాప్త సమయానికచా బట్టి పరిస్థితి  (స్పష్టిక : 10)
Five persons A, B, C, D, E are sitting around a table facing the centre. A sits to the left of E and C sits to the right of B. D is between A and C then the person on the right of E is

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

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 73 Question Id : 6326864862 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

(d) Date, Time & Arrangement Problems (Marks : 10)

(సంవత్సరం, సమయం, క్రమం) (మార్క్స్ : 10)
For real numbers \(a\) and \(b\), define \(a \Delta b = a^2 - b^2 + ab\). Then the number of real values of \(a\) such that \(a \Delta a = 4\) is

\(a \Delta a = 4\) అతినిమయం ఉన్నా సమీపం హెచ్ అంటే 4 అంటే లభించే సంఖ్య

1. 1
2. 2
3. 0
4. 3

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 74 Question Id : 6326864863 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

(d) Date, Time & Arrangement Problems (Marks : 10)
For the natural numbers $x$ and $y$, define

$$x \cdot y = \sqrt{xy} + \frac{1}{\sqrt{xy}}$$

and

$$x \odot y = \sqrt{xy} - \frac{1}{\sqrt{xy}}$$

Then

$$\frac{(3+4) \cdot (3 \odot 4)}{(3 \cdot 4) \odot (3 \odot 4)} =$$

(1) 1

(2) $\frac{37}{36}$

(3) $\frac{62}{61}$

(4) $\frac{155}{131}$

Options :

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 75 Question Id : 6326864864 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

(d) Date, Time & Arrangement Problems (Marks : 10)
If \( x \oplus y = (x + y + 1)^2 \) and \( x \ominus y = (x - y + 2)^2 \), then

\[(1 \oplus 4) \ominus (2 \oplus 5) = \]

\[x \oplus y = (x + y + 1)^2 \text{ and } x \ominus y = (x - y + 2)^2 \text{ as well,} \]

\[(1 \oplus 4) \ominus (2 \oplus 5) = \]

1. 576
2. 2116
3. 676
4. 2500

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Mathematical Ability
Section Id : 63268671
Section Number : 2
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 75
Number of Questions to be attempted : 75
Section Marks : 75
Enable Mark as Answered Mark for Review and Clear Response : Yes
Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 632686540
Question Shuffling Allowed : Yes

Question Number : 76 Question Id : 6326864865 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
Options:
1.  
2.  
3.  
4.  

Correct Marks : 1 Wrong Marks : 0
\[
\frac{(a + \frac{1}{b})^x (a - \frac{1}{b})^y}{(b + \frac{1}{a})^x (b - \frac{1}{a})^y} =
\]

(1) \( \left(\frac{a}{b}\right)^{x-y} \)

(2) \( \left(\frac{a}{b}\right)^{x+y} \)

(3) \( a^x \cdot b \)

(4) \( a^y \cdot b^x \)

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 78 Question Id : 6326864867 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

\( \text{ספקיתון סכמטי} \) (Marks : 35)

If \( x : y = 3 : 4 \), then \( (4x + 5y) : (5x - 2y) = \)

\( x : y = 3 : 4 \) \( \Rightarrow \) \( 4x + 5y = \), \( (4x + 5y) : (5x - 2y) = \)

(1) \( \frac{37}{8} \)

(2) \( \frac{33}{8} \)

(3) \( \frac{32}{7} \)

(4) \( \frac{29}{7} \)
i) Arithmetical Ability (Marks: 35)

The sum of the cubes of three positive integers is 8072. If the ratio of the first and the second as also of the second and the third is as 3 : 2. Then the sum of the three numbers is

(1) 36
(2) 38
(3) 40
(4) 42

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
If \( \frac{4+3\sqrt{3}}{7+4\sqrt{3}} = a + \sqrt{b} \), then \( a - \sqrt{b} = \)

\[ \frac{4+3\sqrt{3}}{7+4\sqrt{3}} = a + \sqrt{b} \]

(1) \( 8 + \sqrt{75} \)
(2) \( -8 + \sqrt{75} \)
(3) \( -8 - \sqrt{75} \)
(4) \( 8 - \sqrt{75} \)
If \( \left( \frac{a}{b} \right)^{x-1} = \left( \frac{b}{a} \right)^{x-3} \), then the value of \( x \) is

\[ \left( \frac{a}{b} \right)^{x-1} = \left( \frac{b}{a} \right)^{x-3} \]

\( x = \frac{7}{2} \)

Options:
1. \( \frac{1}{2} \)
2. 1
3. 2
4. \( \frac{7}{2} \)

Question Number : 82 Question Id : 6326864871 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

(_marks: 35)

(ప్రాతిపదిక దృశ్యములు: 35)
The product of divisors of 127 is

127 అంశాల గుణాను

(1) 635  
(2) 508  
(3) 127  
(4) 762

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

The number of positive divisors of 680 other than one and itself is

రెండు మధ్య ప్రతి సంఖ్య 680 కంటే అంశాల ఎంతవి?
Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 84 Question Id : 6326864873 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
(అరధానియా శాస్త్రీయం)
(Marks : 35)

LCM of \( m = 17.23^2 .43, n = 31^2 .23 \cdot 47 \) is

\[ m = 17.23^2 .43, n = 31^2 .23 \cdot 47 \]

(1) \( 17.23^2 \cdot 43 \cdot 47 \cdot 31^2 \)
(2) \( 17.23 \cdot 43 \cdot 47 \cdot 31 \)
(3) \( 17.43 \cdot 47 \)
(4) \( 23 \)

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 85 Question Id : 6326864874 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
(అరధానియా శాస్త్రీయం)
(Marks : 35)
The number among the following which leaves the remainder 3 when divided by 5, 6 and 8 is

5, 6 మధ్యం 8 వల్ల మిగిలివచ్చు, అలాగే సమాధానం తినాలని మాటించిన

అంశం

(1) 243
(2) 245
(3) 256
(4) 265

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 86 Question Id : 6326864875 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 (Marks : 35)
అధ్యాపకార్థ పండిత్య (మాధ్యమాలు : 35)
The sum of 5 consecutive even integers is 50. What is the sum of their squares?

5 సారాంశ ఎక్కడ సరిహొదం 50. అతిని ఎండి సమాధానాధికా�మ్యాం?

(1) 480
(2) 540
(3) 720
(4) 960

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 87 Question Id : 6326864876 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
అర్థానిక సామర్థ్యం
(Marks : 35)
(మార్క్స్ : 35)
If the numerator and the denominator of a fraction are increased by 10% and 20% respectively, the number becomes \( \frac{22}{45} \). What was the original number?

వరుసాధనాలు అంశాల మాత్రమే పెరగిన జాతికి 10% మదించింది 20% జాతికే ఔషధ లోపములు పెరగి ఉండి. అంశాలం ఎలా?

(1) \( \frac{11}{15} \)
(2) \( \frac{8}{15} \)
(3) \( \frac{7}{5} \)
(4) \( \frac{3}{5} \)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 88 Question Id : 6326864877 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
అర్థశాస్త్ర పరిశీలన (Marks : 35)
(మారచింది : 35)
Which of the following fractions is largest?
\[
\frac{5}{7}, \frac{7}{11}, \frac{9}{13}, \frac{4}{9}
\]

శ్రేణిలో ప్రతి పాటలు జాతి ఉంటుందే?
\[
\frac{5}{7}, \frac{7}{11}, \frac{9}{13}, \frac{4}{9}
\]

(1) \(\frac{4}{9}\)
(2) \(\frac{9}{13}\)
(3) \(\frac{5}{7}\)
(4) \(\frac{7}{11}\)

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 89 Question Id : 6326864878 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
అధికార్య శాస్త్రం
(Marks : 35)

(Marks : 35)
The descending order of the following fractions is

\[
\frac{9}{10}, \frac{5}{14}, \frac{7}{9}, \frac{6}{11}, \frac{8}{13}
\]

Options:
1. \( \frac{5}{14}, \frac{7}{11}, \frac{9}{13}, \frac{8}{10} \)
2. \( \frac{9}{10}, \frac{7}{9}, \frac{6}{13}, \frac{5}{11} \)
3. \( \frac{6}{11}, \frac{9}{10}, \frac{7}{13}, \frac{5}{8} \)
4. \( \frac{8}{13}, \frac{7}{9}, \frac{6}{11}, \frac{9}{10} \)

Question Number : 90 Question Id : 6326864879 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
( Marks : 35)
If $x$ is 16% less than $y$, then $y$ is what percent more than $x$?

$y$ ఎందుకు 16% విస్తీర్ణంగా $x$ యొక్క, $x$ రెండు $y$ సంఖ్య ఎంటి విశేషాలు ఉంటాయా?

(1) 16

(2) $17 \frac{2}{3}$

(3) $18 \frac{1}{19}$

(4) $19 \frac{1}{21}$

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 91 Question Id : 6326864880 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 (Marks : 35)
In the year 1990 the population of cities X and Y were same. From 1990 to 2000 the population of X increased by 60%, while population of Y decreased by 60%. In the year 2000 the population of Y is what percent of population of X?

1990 లో నియోజకత్వాన్ని తొలగిసే X, Y ని తన జనగణన సమాంతంగా కటూరు. 1990 నుండి 2000 వరకు X తోద్ద 60% మరియించి Y తోద్ద 60% కుటుంబం. 2000 లో నియోజకత్వాన్ని తొలగిసే Y తన జనాభం X తో ఎంత పరిశ్రమి చేసినది?

(1) 60
(2) 40
(3) 50
(4) 25

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 92 Question Id : 6326864881 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
అంధకార యోగ్యత పరిమిత సంఖ్యల (Marks : 35)
Cost price of first article is thrice the cost price of second article. If there is gain of \( x\% \) on second article and loss of \( 3x\% \) on first article, then gain percent or loss percent, in the total transaction is

(1) \( x\% \) gain

(2) \( 2x\% \) gain

(3) \( x\% \) loss

(4) \( 2x\% \) loss

Options:

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

Question Number : 93 Question Id : 6326864882 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

(Marks : 35)

(Marks : 35)
By selling an article for Rs.6800 a trader loses 15%. For how much should he sell to get a profit of 25% (in rupees)?

<table>
<thead>
<tr>
<th>Option</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>9500</td>
</tr>
<tr>
<td>(2)</td>
<td>9750</td>
</tr>
<tr>
<td>(3)</td>
<td>10000</td>
</tr>
<tr>
<td>(4)</td>
<td>10500</td>
</tr>
</tbody>
</table>

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 94 Question Id : 6326864883 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 (Marks : 35)
 ii) అరైథమిటికల్ సాధనాలు (మార్క్స్ : 35)
A, B and C enter into partnership. A invests some money at the beginning, B invests double the amount that of A after 6 months and C invests thrice the amount that of A after 8 months. If the annual profit is Rs.27000, then C's share is (in rupees)

A, B, C యొక్క అంశాలను వ్యుత్పాదన గణనీయంగా పరిగణించండి. A తరువాత 6 మందులు మరియు B 8 మందులు మరియు C తరువాత 3 మందులు నిలబెట్టారు. వచ్చిన బండపాటు రూ.27000, C యొక్క అంశం (రూ.సం)

(1) 8625
(2) 9000
(3) 10800
(4) 11250

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 95 Question Id : 6326864884 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
(అర్ధంశ శక్తి)
(Marks : 35)
A, B, C enter into a business with capitals Rs.8000, 9000, 12000 respectively. After 3 months D joins the business with a capital of Rs.18000. If there is a profit of Rs.2550 at the end of the year, then the difference between the shares of A and D in the profit, in rupees, is

A, B, C వాస్తవంగా రూ.8000, రూ.9000, రూ.12000 యొక్క భాగమత్తులుగా వినియోగించారు. 3 మోందులపాటు D వాస్తవంగా రూ.18000 యొక్క భాగమత్తుడుగా వినియోగించాడు. 30 మంది సంవత్సరం ముగిసిన రూ.2550 వినియోగించానికి, A, D యొక్క భాగమత్తుల విభాగం రూ.సా. (రూ.సా.)

(1) 330
(2) 440
(3) 220
(4) 385

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 96 Question Id : 6326864885 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 (Marks : 35)
అరిథ్మెటికల్ ప్రశ్నలు (మార్క్స్ : 35)
Pipe A can fill a tank in 5 hours, pipe B in 10 hours and pipe C in 30 hours. If all the pipes are opened at a time, in how many hours will the tank be filled?

పపి ఏ కనికట్టులు 5 గణితాలు, పపి B, 10 గణితాలు మరియు పపి C 30 గణితాలు ప్రస్తుతం. అయితే కావాల సత్యాంశం, పపి గణితాలు ఎ గణితాలు ప్రస్తుతం?

(1) 2
(2) 2.5
(3) 3
(4) 3.5

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 97 Question Id : 6326864886 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 (Marks : 35)
అరిధమియిటికల్ ఆఫిచిటిస్త్ ప్రయోగిక్షులు (మార్క్స్ : 35)
Two taps A and B can fill a tank in 2 hours and 3 hours respectively. Both taps are turned on and after 45 minutes turned off due to power cut. After 30 Minutes, only tap A is turned on. Time taken by Tap A to fill the remaining tank is

(1) 42 minutes  
(2) 48 minutes  
(3) 38 minutes  
(4) 45 minutes

Options:
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 98  Question Id : 6326864887  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  
అంధకార శక్తి  
(Marks : 35)
Murali travelled from city A to city B at a speed of 40 kmph and from city B to city C at 60 kmph. What is the average speed of Murali from A to C given that the ratio of distances between A to B and B to C is 2 : 3 (in kmph) is

(1) 48
(2) 50
(3) 52
(4) 56

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 99 Question Id : 6326864888 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 (Marks : 35)
అధికారిణీ తినించడానికి (మార్క్స్ : 35)
A started running towards south at 7:00 am, B started running towards south at 11:00 am. At what time will they meet if the speeds of A and B are in ratio 3 : 7?

(1) 9.1 pm
(2) 9.2 pm
(3) 9.12:30 pm
(4) 9.1:30 pm

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 100 Question Id : 6326864889 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
( Marks : 35)
A alone can complete a job in 12 days. After working for 2 days A is joined by B and they completed the job in 6 days. Had B worked alone how many days are needed to complete the job?

A alone గా సాధించవచ్చు 12 దినాలలో జాబులి నిర్మాణం. A తో డి తిదాళ మరియు వదిలి కమైకపోయిన బ్యాల్సి లో 6 దినాలలో జాబులి నిర్మాణం. B వదిలి కమై ది తిదాళ మరియు తెరచి ప్రాంగణం నిర్మాణం అనేక దినాలలో నిర్మాణం చేయవచ్చు?

1. 14
2. 16
3. 18
4. 20

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✔ 4

Question Number : 101 Question Id : 6326864890 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 (Marks : 35)
అరిత్మెటికల్ ప్రశ్నాంశ (మార్క్స్ : 35)
A works twice as fast as B. working together they complete a job in 14 days. In how many days will B, working alone complete the job?

B రాకు తూరుగా రెండుగా A ని భయందా. ఐదుగా త్రిదంతకు అవకాశం 14 దశలి చేసేందు. B రాకు తూరుగా మాత్రమే ఎంత దశలి చేసేందు?

(1) 12  
(2) 18  
(3) 26  
(4) 42

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

Question Number : 102  Question Id : 6326864891  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  
   అగ్రభాగం శాస్త్రం  
   (Marks : 35)  
   (మాటలు : 35)
ABCD is a quadrilateral in which the length of the diagonal $AC = 1.4$ meters and the lengths of the perpendiculars drawn from B and D on AC are 80 cm and 50 cm respectively. The area of ABCD (in sq. m.) is

$$ABCD \text{ అనే చతురస్రము, ఉండగా AB లో ఆయామం 1.4 మీ. మరియు AC లో BD లో ఆయామం}
$$
$$D లో 80 సెంటీ. భాగం మరియు B లో 50 సెంటీ. భాగం అయితే}
$$
$$అంటే ABCD అనే చతురస్రము (చ.మ.యం)
$$

1. 0.91
2. 9.1
3. 91
4. 91.1

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
A rectangular lawn of dimension 80m x 60m has two roads each of 10m wide are made in the middle and parallel to its length and breadth. Then the area of the roads in sq. m is

80 మీటర్ల x 60 మీటర్ల రైతువలం రెగియన్ 80 మీటర్ల రైతువలం మేదారులు రెగియన్ 60 మీటర్ల రైతువలం మేదారులు 10 మీటర్ల వైశాల్యం లేదు. ఇలా ఆధారం మేదారులు ఆధారం, 1600 మీటర్ల వైశాల్యం, 6000 మీటర్ల వైశాల్యం

(1) 4800
(2) 3500
(3) 1400
(4) 1300

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 104 Question Id : 6326864893 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
అంధకార శక్తి
(Marks : 35)

(Mohanadheya : 35)
Volume of a right circular cone having base radius 70 cm and curved surface area 40040 cm$^2$ is

(1) 823400
(2) 824000
(3) 840000
(4) 862400

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
A wall of dimensions 25m × 2m × \(\frac{3}{4}\)m is to be built by using bricks each of whose dimensions are 20cm × 10 cm × 7.5 cm. The number of bricks are needed to build this wall is

20 चौ.म. × 10 चौ.म. × 7.5 चौ.म. चूल्लांबि लील तलरोजँ
25 म. × 2 म. × \(\frac{3}{4}\) म. चूल्लांबि लील गोळी चूल्लांनी तलरोजँ तलरोजँ

\[ \text{(1) } 32000 \]
\[ \text{(2) } 30000 \]
\[ \text{(3) } 28000 \]
\[ \text{(4) } 25000 \]

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 106 Question Id : 6326864895 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

(_marks : 35)

(Marks : 35)
A solid consists of a circular cylinder with a right circular cone exactly fitted on the top. The height of the cone is $h$. If the total volume of the solid is three times the volume of the cone, then the height of the circular cylinder is

1. $\frac{1}{3}h$
2. $\frac{1}{2}h$
3. $\frac{2}{3}h$
4. $\frac{3}{5}h$

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 107 Question Id : 6326864896 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
( Marks : 35)

అరిథ్మెటిక్ చారిత్రకం  (మంది మరోక మారివు) : 35
A metallic solid cylinder of 14 cm diameter and 32 cm height is cast into 77 solid cubes of equal size. Then the length of side of the cube (in cm) is

(1) 6  
(2) 4  
(3) 5  
(4) 9

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 108 Question Id : 6326864897 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 (Marks : 35)
అరిథ్మెటికల్ కౌల్సినేషన్ (మార్క్స్ : 35)
If the diagonals of a rhombus are 30 cm and 24 cm. Then its area, in sq. cm. is

(1) 180
(2) 720
(3) 360
(4) 1440

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 109 Question Id : 6326864898 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
(Marks : 35)
అంధకార శాస్త్ర సమస్యలు
(మాధ్యమికం : 35)
The remainder when $33^{32}$ leaves upon division by 7 is

$33^{32}$ ని 7 వలసి వచ్చిన ఉపాశాల సంఖ్య ఉండండి

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

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 110 Question Id : 6326864899 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
అరిధ్యమతి

(Marks : 35)

The digit in the units place of $7^{300}$ is

$7^{300}$ లో దశమ స్థానానికి అంశం

(1) 7
(2) 4
(3) 3
(4) 1
ii) Algebraic and Geometrical Ability

If $A, B, C$ are three subsets of a set $X$, then

$$\{(A - B) - C\} - \{A - (B - C)\} =$$

(Here $A' = X - A$)

A, B, C ఆ మూడు విభాగాలు X చే కూడా విభాగాలుగా ఉంటాయి,

$$\{(A - B) - C\} - \{A - (B - C)\} =$$

($A' = X - A$)

(1) $\emptyset$

(2) $X$

(3) $A \cup B \cup C$

(4) $A \cap B \cap C'$

Options:

1. ☑ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Let \( U = \{x \mid x \text{ is a natural number } \leq 20\} \). Define
\[ A = \{x \mid x \in U \text{ and } x \text{ is a prime number}\}, \]
\[ B = \{x \mid x \in U \text{ and } x \text{ is an even number}\}, \]
and \( C = \{x \mid x \in U \text{ and } x \text{ is a multiple of } 3]\). Then \((A \cup B) \cap C = \)

\[ U = \{x \mid x \text{ ఎక్కువ సంఖ్య సంఖ్యలు నుండి నాలుగు సంఖ్య కాగా ఉంది}\}, \]
\[ A = \{x \mid x \in U \text{ ఎక్కువ సంఖ్య కాగా ఉంది}\}, \]
\[ B = \{x \mid x \in U \text{ ఎక్కువ సంఖ్య కాగా ఉంది}\} \text{ ఎక్కువ సంఖ్య,} \]
\[ C = \{x \mid x \in U \text{ ఎక్కువ సంఖ్య } 3 \text{ సంఖ్య కాగా ఉంది} x\} \text{ ఎక్కువ సంఖ్య కాగా ఉంది,} \]
\((A \cup B) \cap C = \)

\[ \begin{align*}
(1) & \quad \{3, 6, 9, 12, 18\} \\
(2) & \quad \{3, 6, 9, 15, 18\} \\
(3) & \quad \{2, 3, 12, 18\} \\
(4) & \quad \{3, 6, 12, 18\} 
\end{align*} \]

Options:
1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4
ii) Algebraic and Geometrical Ability (Marks : 30)

If the roots of the equation \( x^4 - 10x^3 + 35x^2 - 50x + 24 = 0 \) are 1, 2, 3 and 4, then the roots of the equation \( 24x^4 - 50x^3 + 35x^2 - 10x + 1 = 0 \) are

\[
x^4 - 10x^3 + 35x^2 - 50x + 24 = 0 \quad \text{has roots 1, 2, 3, 4}
\]
\[
24x^4 - 50x^3 + 35x^2 - 10x + 1 = 0 \quad \text{has roots 1, 2, 3, 4}
\]

Options:

1. \( -1, -2, -3 \text{ and } -4 \)
2. \( -\frac{1}{2}, -\frac{1}{3}, -\frac{1}{4} \text{ and } -1 \)
3. \( -1, 2, -\frac{1}{3} \text{ and } \frac{1}{4} \)
4. \( 1, -\frac{1}{2}, \frac{1}{3} \text{ and } \frac{1}{4} \)

Question Number : 114
Question Id : 6326864903
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 (Marks : 30)

How much is to be added to the polynomial

\((x + 2)(x + 4)(x + 6)(x + 8)\) to make it a perfect square?

\((x + 2)(x + 4)(x + 6)(x + 8)\) ఒక ప్రమాణం కాబట్టి మిసిం మిసిం తపస్సు ఉండాలి నుండి మిసిం మిసిం తపస్సు ఉండాలి నుండి

1. 16
2. 12
3. 8
4. 4

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 115 Question Id : 6326864904 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 \((x - 1)\) and \((x - 2)\) are the factors of \(x^4 - 5x^3 + 4x^2 + ax + b\) then, \(\frac{a}{b} = \)

\((x - 1) \; \text{and} \; (x - 2) \; \text{of} \; x^4 - 5x^3 + 4x^2 + ax + b\) తెలుగులో, \(\frac{a}{b} = \)

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

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 116 Question Id : 6326864905 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

విభాష సంఖ్యాశాస్త్ర సాధనాలు

(Marks : 30)
If \((x^2 - 3x + 2)\) is a factor of \(x^3 - 6x^2 + ax + b\) then \(a^2 + b^2 =\)

\[x^3 - 6x^2 + ax + b \text{ वाण (}x^2 - 3x + 2\text{) वर भविष्यवाणी} \text{ आपसे} \text{शास्त्रीय,}
\]

\[a^2 + b^2 =\]

(1) 157
(2) 85
(3) -85
(4) -157

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 117 Question Id : 6326864906 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

ప్రాంలియాలు, ఆధునిక శాస్త్రపటాలు (Marks : 30)
The digits of a 3 digit number are in strict descending order. Then the largest prime that always, divides the difference of the given 3-digit number and the 3 digit number obtained by reversing the digits of the given number is

(1) 3
(2) 11
(3) 79
(4) 97

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 118 Question Id : 6326864907 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  (Marks : 30)
విభావన, వస్త్రానికి సహాయం  (విభావనం : 30)
If length and breadth are reduced by 2 units each, area of rectangle reduces by 22 sq. units, then the perimeter of the rectangle is

(1) 26 units
(2) 24 units
(3) 28 units
(4) 30 units

Options:
1. ✓
2. ✗
3. ✗
4. ✗

Question Number : 119 Question Id : 6326864908 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 (Marks : 30)
సమాధానాన్య జిబలియాం పరమాణు (Marks : 30)
If the solution of the system of equations
\[ \frac{x}{4} + 2y = 7; \quad \frac{19}{x + \left( \frac{y}{4} \right)} = 4 \] is \( x = \alpha \) and \( y = \beta \) then, \( \alpha^2 + \beta^2 = \)

(1) 29
(2) 34
(3) 25
(4) 169

Options:
1. ✗ 1
2. ✗ 2
3. ✔️ 3
4. ✗ 4

Question Number: 120 Question Id: 6326864909 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

(Marks: 30)

(ᵗెలుగు: 30)
The third term of Geometric Progression is 4; then the product of its first 5 terms in that Geometric Progression is

మూడవ సమాంతా పదం 4 అవుతో, పదాల సమాంతా పదాలు 5 గా బయలుతున్నాయి

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

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 121 Question Id : 6326864910 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 (Marks : 30)
సంఖ్యాశాస్త్ర మరియు జెమాటిఅల క్షేత్రాలు (బిస్మాద్ : 30)
If the ratio of the sum of the first 3 terms of a geometric progression to the sum of the first 6 terms is 8 : 35, then the common ratio of that geometric progression is

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

Options:
1. ✅ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4
The radius of the circle is 21 cms. The angle subtended by an arc of the circle at the centre is 60°. The length of its arc is

(1) 30
(2) 35
(3) 22
(4) 20

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

ii) Algebraic and Geometrical Ability

4(sin^4 30° + cos^4 60°) - 3 (cos^2 45° - sin^2 90°) =

(1) \frac{\sqrt{3}}{2}
(2) -1
(3) 1
(4) 2
Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 124 Question Id : 6326864913 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 (Marks : 30)

If $A + B = \frac{\pi}{4}$, then $(1 + \tan A) (1 + \tan B) =$

$A + B = \frac{\pi}{4}$, $(1 + \tan A) (1 + \tan B) =$

(1)    −2
(2)    −1
(3)    1
(4)    2

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 125 Question Id : 6326864914 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 (Marks : 30)

If $A + B = \frac{\pi}{4}$, then $(1 + \tan A) (1 + \tan B) =$

$A + B = \frac{\pi}{4}$, $(1 + \tan A) (1 + \tan B) =$

(1)    −2
(2)    −1
(3)    1
(4)    2
If the angles of a triangle ABC are in arithmetic progression then
\[
\frac{\cos C - \cos A}{\sin A - \sin C} =
\]

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

(2) 1

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

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

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

Question Number : 126 Question Id : 6326864915 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
(Marks : 30)

(విశేషాలు, అనుసంధాన సాధనాలు) (విద్యాసాధన : 30)
The angle of elevation of top of a mountain cliff from a point 200 m from its foot is 45°. The height of the cliff (in meters) is

_options:
1. 175
2. 200
3. 220
4. 250

Question Number : 127 Question Id : 6326864916 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 (Marks : 30)
అధికారిక రంగారేషి శాస్త్రానికి (మాచరీ : 30)
The area of an equilateral triangle is $256\sqrt{3}$ sq. cm., then the perimeter of that triangle is

(1) 32
(2) 64
(3) 96
(4) 128

Options :
1. 1
2. 2
3. 3
4. 4
If the perimeter of a right angled triangle is 60 cm and its hypotenuse is 26 cm, then the area of the triangle, in cm², is

60 సెమీ. పైసింది రెండవ రెండు రెండు శతాబ్ది రెండు రెండు సమాంతర పైసింది 26 సెమీ. పైసింది, అంతే విభిన్న (సెమీ²).

(1) 60
(2) 120
(3) 180
(4) 240

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
If the angles of a quadrilateral are in the ratio $4 : 5 : 10 : 11$, then the angles are

$4 : 5 : 10 : 11$ నిర్ధారించబడిన రేఖీ వాంధానాలు ఉన్నాయి

(1) $36^\circ, 60^\circ, 108^\circ, 156^\circ$
(2) $48^\circ, 60^\circ, 120^\circ, 132^\circ$
(3) $52^\circ, 60^\circ, 122^\circ, 126^\circ$
(4) $60^\circ, 60^\circ, 120^\circ, 120^\circ$

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 130 Question Id : 6326864919 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 (Marks : 30)
అంకేకు, ఆధునికాన్ని విశ్లేషణ (మార్క్స్ : 30)
ABCD is a parallelogram in which $AB = 2x + 5; \ CD = y + 1;
AD = y + 5$ and $BC = 3x - 4$. Then the lengths of the sides of the ABCD are

$AB = 2x + 5; \ CD = y + 1; \ AD = y + 5$
$BC = 3x - 4$. Therefore, ABCD is a parallelogram.

(1) 13, 30
(2) 13, 35
(3) 31, 30
(4) 31, 35

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4
In the following circle with center O, if \( \angle AOB = 30^\circ \), then the area of the shaded region (in sq.cm.) is

0 రేఖాంధర కాగల్లో \( \angle AOB = 30^\circ \) అంటేనీ, ఇది చాలాంధర రేఖాంధర రాళ్ళ విలువు (చ.సమీపం)

\[
\begin{align*}
(1) & \quad \frac{13}{3} \\
(2) & \quad \frac{11}{3} \\
(3) & \quad \frac{7}{3} \\
(4) & \quad \frac{9}{4}
\end{align*}
\]

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

ii) Algebraic and Geometrical Ability
వింతల లేదా రాళ్చ విస్తారం
(Marks: 30)

(Marks: 30)
If a semi-circle is drawn on the side of a square, which has a diagonal of length 12 cm, the area of the semi-circle, in cm², is

(1) $72\pi$
(2) $36\pi$
(3) $18\pi$
(4) $9\pi$

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 133 Question Id : 6326864922 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

(_marks : 30)
If the triangle with the vertices $A(2, x), B(2, 6), C(2 + \sqrt{3}, 5)$ is equilateral then value of $x$ is

\[ A(2, x), B(2, 6), C(2 + \sqrt{3}, 5) \text{ అనే సమాధానా రేఖించి వాటి మధ్యం}
\[ \text{లేనందుండి} \text{ నిర్ధిష్టం నాలుగుతో} \text{ మాలె,} \text{ x విలువ} \]

(1) 0
(2) 2
(3) 4
(4) 5

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✔ 4

Question Number : 134 Question Id : 6326864923 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 (Marks : 30)
సంఖ్యా మేధావిత్తి అధ్యయనం (మార్క్స్ : 30)

The point which divides the line segment $\left(3, 5\right), \left(4, 7\right)$ in the ratio $2 : 3$ internally is

\[ \left(3, 5\right), \left(4, 7\right) \text{ రేఖాంటి రేఖాంటి} \text{ మధ్యం లేదా} \text{ 2 : 3 సాంఖ్యికంతో} \text{ ఉన్నది} \text{ విస్తీర్ణం}

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

Let A (-2, -2), B (3, 6) and C (8, 2) be three points. Let the slope of AB = \( m_1 \) and the slope of AC = \( m_2 \). Then \( m_1 : m_2 = \)

\[
A (-2, -2), B (3, 6), C(8, 2) \text{ మూడు రేఖాంశుల వల్ల మిగిలిన రేఖాంశాలు. AB రేఖ = } m_1
\text{ మరుమూడు AC రేఖ = } m_2 \text{ తో భిన్నమైనాం. తాండు, } m_1 : m_2 =
\]

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

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
The Y-intercept made by the straight line passing through the point (3, 2) and perpendicular to the line \( y = x \) is

\( \text{(3, 2) యొక్క యింటిను వెలుగుడు } y = x \text{ తీసుకో యొక్క యెంతు నుంచి మీదు నడిన నైను} \)

\[ Y- అంకట్టుంది \]

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

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4
The equation of the line passing through the point \((1, 2)\) and perpendicular to the line \(x + y + 1 = 0\) is

\((1, 2)\) నియంత్రించడానికి, \(x + y + 1 = 0\) మొత్తం వాణించిన విధానాన్ని సంఖ్య వంటి ఉంచడానికి

\[(1)\] \(y - x + 1 = 0\)
\[(2)\] \(y - x - 1 = 0\)
\[(3)\] \(y - x + 2 = 0\)
\[(4)\] \(y - x - 2 = 0\)

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

ii) Algebraic and Geometrical Ability

హింతేని, అగ్స్ట్టియన్ సింగినతి

(Marks: 30)
Equation of the line perpendicular to the line $y = 3x + 17$ and which makes an intercept of length 6 units on positive Y-axis is

\[ y = 3x + 17 \]  
\[ \text{ఇది నిష్పాంశ్యాన్ని బదులు చేయు యు-కోణు నుండి 6 ఎంటుంది యు అంశాన్ని} 

\[ (1) \quad x - 3y + 18 = 0 \]
\[ (2) \quad x + 3y - 18 = 0 \]
\[ (3) \quad 3x - y + 6 = 0 \]
\[ (4) \quad 3x + y - 6 = 0 \]

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 139 Question Id : 6326864928 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

అంకేకులు మరియు వ్యాఖ్యాతి శక్తి ( Marks : 30)
The equation of a line which is parallel to X-axis and cuts the positive side of the Y-axis at 7 units from the origin is

\[ x = 7 \]

Options:
1. x = 7
2. y = 7
3. \( x + y = 7 \)
4. \( y = x + 7 \)

Question Number : 140 Question Id : 6326864929 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 (Marks : 30)

(సంఖ్యా వైద్య సాధారణాత్మకతకు) (మార్క్స్ : 30)
The equation of the line passing through \((p, q)\) and having slope as \(\sqrt{3}\) is

\[
\sqrt{3} = \text{тамаа} \ (p,q) \ 	ext{мозге} \ x \ \text{самлаа} \ y
\]

(1) \quad y - p = \frac{1}{\sqrt{3}} (x - q) \\
(2) \quad y - q = \frac{1}{\sqrt{3}} (x - p) \\
(3) \quad y - q = \sqrt{3} (x - p) \\
(4) \quad y - p = \sqrt{3} (x - q)

Options:

1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Sub-Section Number : 3
Sub-Section Id : 632686542
Question Shuffling Allowed : Yes

Question Number : 141 Question Id : 6326864930 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

( Marks : 10)

( Marks : 10)
In a statistical data 2, 4, 6, 8, 10 occur with frequencies 1, 3, 5, 7, 9 respectively, then the arithmetic mean is

ఒక సంఖ్యా శాఖలు 2, 4, 6, 8, 10 మేనియన్ 1, 3, 5, 7, 9 హయంగా వచ్చిన రెండు నమూనల్లో అత్యంత కూడా మార్గం

(1) 6.8
(2) 7.6
(3) 6.7
(4) 7.8

Options :
1. ✗ 1
2. ✅ 2
3. ✗ 3
4. ✗ 4

Question Number : 142 Question Id : 6326864931 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
సంఖ్యాశాఖ సమాధానీ (Marks : 10)

(మాధ్యమిక : 10)
The average age of 4 boys A, B, C, D is 13 years, while the average age of B, C, D is 14 years then the age of A is

A, B, C, D ల వచ్చెన్నను తమ్ముడు నాలుగు సంఖ్యలు 13 వచ్చెన్నను పెంచాలం, B, C, D ల నాలుగు సంఖ్యలు 14 వచ్చెన్నను పెంచాలం, A అయితే కచేరి

(సంఖ్య 7)

(1) 10
(2) 12
(3) 14
(4) 16

Options :
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 143 Question Id : 6326864932 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 సహా శక్తి (Marks : 10)
The arithmetic mean of a data of 100 observations is 23. If each of the observations is multiplied by 5 and then 2 is added to each observation, then the arithmetic mean of the new data is

100 విభిన్న సంఖ్యల సమాధానం అయితే మధ్యమం 23. ఇవి
పెండుతున్న 5 సారిగా నిలిచింది, 2 ను రాశుకునే అడుగు
పెండుతున్న విభిన్న సంఖ్యల సమాధానం అయితే మధ్యమం

(1) 125
(2) 121
(3) 117
(4) 51

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 144 Question Id : 6326864933 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
సంఖ్యా శాస్త్రం మాధ్యమిక పరిమితి (Marks : 10)
A data consists of the natural numbers of the form $2k + 1$ with frequency $k$ for $1 \leq k \leq 15$, then the median of the data is

$1 \leq k \leq 15$ for $2k + 1$ గొప్పత్తి $k$ మూలంగా $k$ మిలియనుగా ఉంది $1 \leq k \leq 15$ లో $2k + 1$

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

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 145 Question Id : 6326864934 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
సంఖ్యాగణిక కౌన్సిల్
(Marks : 10)
The median value for the following data is

<table>
<thead>
<tr>
<th>x</th>
<th>12</th>
<th>16</th>
<th>10</th>
<th>14</th>
<th>17</th>
<th>20</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>f</td>
<td>4</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>

(1) 14  
(2) 15  
(3) 12  
(4) 20

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 146 Question Id : 6326864935 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  
(Marks : 10)
The arithmetic mean and median of a frequency distribution are 20 and 30 respectively. The mode of this distribution is

(1) 25
(2) 29
(3) 40
(4) 50

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Correct Marks : 1 Wrong Marks : 0
The mode of the following data is

<table>
<thead>
<tr>
<th>$x$</th>
<th>2</th>
<th>5</th>
<th>7</th>
<th>9</th>
<th>12</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative frequency</td>
<td>6</td>
<td>8</td>
<td>13</td>
<td>17</td>
<td>20</td>
<td>22</td>
</tr>
</tbody>
</table>

Options:
1. ✅ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 148 Question Id : 6326864937 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

( Marks : 10)
The probability of getting at least one head on a toss of five coins is

5 వరకు పైరిస్తూ ఖాళీ గానే రెండు అనే బహితశాస్త్ర నిపుణత

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

(2) \(\frac{5}{32}\)

(3) \(\frac{7}{32}\)

(4) \(\frac{31}{32}\)

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 149 Question Id : 6326864938 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  
పైరిస్తూ ఖాళీ గానే బహితశాస్త్ర నిపుణత (Marks : 10)
While shuffling a pack of 52 playing cards, 2 are accidentally dropped. Then the probability that missing cards to be of different colours is

52 మార్చడానికి ఈండి రహీంది స్వాభావికుడంతో వద్ద ఈండి మార్చడానికి స్వాభావికుడా స్థిరం. స్వాభావికం అ వద్ద ఈండి మార్చడానికి రహీంది స్వాభావికుడా స్థిరం అంటే తప్పా తప్పం నిర్ణయం

(1) $\frac{22}{52}$
(2) $\frac{1}{2}$
(3) $\frac{26}{51}$
(4) $\frac{27}{51}$

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 150 Question Id : 6326864939 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
స్టాటిస్టికల్ అబిలిటీ
(Marks : 10)
(Mయాసం : 10)
When 5 boys and 6 girls sit at random in a row, then the probability that boys and girls sit alternatively is

5 కూడా స్టయ్ అయితే 6 స్టయ్ స్టయ్ అయితే ఆతిథేయం రానికయితే అక్కడ స్తరాస్తే అక్కడ స్తరాస్తే ఆతిథేయం రానికయితే ఆతిథేయం రానికయితే

(1) \( \frac{1}{231} \)
(2) \( \frac{1}{462} \)
(3) \( \frac{1}{132} \)
(4) \( \frac{1}{990} \)

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Communication Ability

Section Id : 63268672
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 Clear Response : Yes
Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 632686543
Question Shuffling Allowed : Yes

Question Number : 151 Question Id : 6326864940 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 company is obliged to give a refund if the tour is ______.

(1) cancelled
(2) completed
(3) pleasant
(4) lengthy

Options :
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 152 Question Id : 6326864941 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 monks are expected to live a life of ______.

(1) luxury
(2) austerity
(3) conundrum
(4) iconoclast

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 153 Question Id : 6326864942 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
______ in the idea of democracy is the notion of individual liberty.

(1) Coherent
(2) Implicit
(3) Inchoate
(4) Inert

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Have you heard of the ten-year old mathematical ______ who can solve the toughest problems in the shortest amount of time?

(1) prodigal
(2) protégé
(3) prodigy
(4) parody

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4
Air strikes against military bases _____ a full scale invasion.

(1) prattle  
(2) placate  
(3) mollify  
(4) presage

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Sub-Section Number : 2
Sub-Section Id : 632686544
Question Shuffling Allowed : Yes

Question Number : 156 Question Id : 6326864945 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

Synonyms and Antonyms Q.No.156 to Q.No.160

Choose the antonym for ‘Despicable’

(1) inevitable  
(2) worthy of esteem  
(3) unprejudiced  
(4) belittle

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 157 Question Id : 6326864946 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

Synonyms and Antonyms Q.No.156 to Q.No.160
Select the most appropriate synonym for ‘abeyance’

(1) obedience
(2) meekness
(3) suspension
(4) deference

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 158 Question Id : 6326864947 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

Synonyms and Antonyms Q.No.156 to Q.No.160

Antonym of ‘sparse’

(1) meagre
(2) scant
(3) thin
(4) abundant

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 159 Question Id : 6326864948 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

Synonyms and Antonyms Q.No.156 to Q.No.160
Synonym of ‘manifest’

(1) faulty
(2) limited
(3) clear
(4) varied

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Antonym of ‘pusillanimous’

(1) tremulous
(2) timorous
(3) cautions
(4) fearless

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✓ 4

Verb (Tense and Voice)
Passive voice of ‘People say there is a secret tunnel near the village.’ is

(1) There is a secret tunnel near the village, said people.
(2) It was said that there was a secret tunnel near the village.
(3) It is said that there is a secret tunnel near the village.
(4) It is said that there was a secret tunnel near the village.

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

When ______ you start for the party?

(1) do
(2) does
(3) were
(4) was

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
Active form of the sentence ‘Let the window be closed.’

(1) Allow me to close the window.
(2) Make him close the window.
(3) Can anyone close the window?
(4) Close the window.

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 164 Question Id : 6326864953 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

Passive voice of ‘Read the newspaper report.’

(1) Newspaper report must be read.
(2) Let you read the newspaper report.
(3) Let the newspaper report be read.
(4) Newspaper report may be read.

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 165 Question Id : 6326864954 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

Verb (Tense and Voice) Q.No.161 to Q.No.165
One of my friends ______ broken his fingers and is in a lot of pain.

(1) is
(2) has
(3) had
(4) have

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 4
Sub-Section Id: 632686546
Question Shuffling Allowed: Yes

Question Number: 166 Question Id: 6326864955 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
Phrasal Verbs & Idioms Q.No.166 to Q.No.170

Let us not ______ this issue any more.

(1) delve in
(2) delve for
(3) delve into
(4) delve to

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number: 167 Question Id: 6326864956 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
Phrasal Verbs & Idioms Q.No.166 to Q.No.170
The director is **riding high** on the huge success of his film. The underlined part means.

1. jubilant  
2. earning money  
3. showing attitude  
4. appreciative

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

Question Number : 168 Question Id : 6326864957 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

Phrasal Verbs & Idioms Q.No.166 to Q.No.170

He always **abides by** the decision of his parents. The underlined expression implies:

1. refuses  
2. requests  
3. rejects  
4. accepts

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

Question Number : 169 Question Id : 6326864958 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

Phrasal Verbs & Idioms Q.No.166 to Q.No.170
Life is not a bed of roses.

The given idiom means:

(1) typical  
(2) difficult  
(3) hard  
(4) carefree

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

Question Number : 170 Question Id : 6326864959 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
Phrasal Verbs & Idioms Q.No.166 to Q.No.170

He was in fine feather joking with his employees.

(1) In disappointment  
(2) In excitement  
(3) In excellent form  
(4) In ironical mood

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

Sub-Section Number : 5  
Sub-Section Id : 632686547  
Question Shuffling Allowed : Yes

Question Number : 171 Question Id : 6326864960 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 WrongMarks : 0
Articles & Prepositions Q.No.171 to Q.No.175
He is hard ____ hearing.

(1) off  
(2) of  
(3) at  
(4) in

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

He may not be brilliant but he is good _____ English.

(1) at  
(2) on  
(3) for  
(4) with

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4
We had to walk _____ the forest to reach the village.

(1) to
(2) through
(3) across
(4) for

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 174 Question Id : 6326864963 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
Articles & Prepositions Q.No.171 to Q.No.175

Spread the quilt _____ the bed. Don’t just put it there.

(1) above
(2) in
(3) on
(4) for

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 175 Question Id : 6326864964 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
Articles & Prepositions Q.No.171 to Q.No.175
________ the conversation, she left the room at once.

(1) During  
(2) Over  
(3) On  
(4) At

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number: 6  
Sub-Section Id: 632686548  
Question Shuffling Allowed: Yes

Question Number: 176  
Question Id: 6326864965  
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

Computer Terminology Q.No.176 to Q.No.180

The process of dividing a disk into tracks and sectors is called ____ .

(1) Tracking  
(2) Sorting  
(3) Formatting  
(4) Allotting

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number: 177  
Question Id: 6326864966  
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

Computer Terminology Q.No.176 to Q.No.180
The file extension of MS-WORD document in office 2007 is _____.

(1)  .pdf
(2)  .doc
(3)  .ppt
(4)  .txt

Options :
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 178 Question Id : 6326864967 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

Computer Terminology Q.No.176 to Q.No.180

MOOCs stands for

(1) Media Online Open Courses
(2) Media Offline Open Courses
(3) Massive Open Offline Courses
(4) Massive Open Online Courses

Options :
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 179 Question Id : 6326864968 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

Computer Terminology Q.No.176 to Q.No.180
Which of the following is not a memory device?

(1) HDD
(2) SSD
(3) Flash Drive
(4) HUB

Options:
1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✔ 4

Question Number : 180 Question Id : 6326864969 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

Computer Terminology Q.No.176 to Q.No.180

The full form of URL is _______.

(1) Uniform Resource Locator
(2) Uniform Resource link
(3) Uniform Registered Link
(4) Uniform Required Link

Options:
1. ✔ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number : 7
Sub-Section Id : 632686549
Question Shuffling Allowed : Yes

Question Number : 181 Question Id : 6326864970 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

Business Terminology Q.No.181 to Q.No.185
‘Pareto’ principle is also known as _______.

1. 80/20 Rule
2. 50/50 Rule
3. 20/80 Rule
4. 75/25 Rule

Business Terminology

A start-up that is valued at a billion dollars or more is called ______.

1. lion’s share
2. mega project
3. unicorn
4. emerging phenomenon
An ordered list of topics to be considered at a meeting, along with the name of the person responsible for each topic, is known as _____.

(1) agenda  
(2) business etiquette  
(3) notice  
(4) documentation

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

Question Number : 184  Question Id : 6326864973  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
Business Terminology  Q.No.181 to Q.No.185

A legal document that protects a company’s secrets by holding the employees responsible is _____.

(1) Non-official secrets Act  
(2) Non-disclosure Agreement  
(3) Disclosure Agreement  
(4) Non-governmental Secrets Act

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

Question Number : 185  Question Id : 6326864974  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
Business Terminology  Q.No.181 to Q.No.185
Export import policy of the government is formulated by

(1) Finance Ministry.
(2) Commerce Ministry
(3) RBI
(4) EXIM bank

Options :
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Sub-Section Number : 8
Sub-Section Id : 632686550
Question Shuffling Allowed : Yes

Question Id : 6326864975 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (186 to 190)
Read the Passage and answer the questions Q.No.186 to Q.No.190
Conservation technology is a growing field, and right up in the forefront are drones, or unmanned aerial vehicles, which are either operated by a remote controller or programmed to fly unaided. Drones have had a long history of use in the military and by large tech companies in mapping roadways, and their applications in conservation and ecology are growing.

Drones have various uses in wildlife conservation and monitoring, especially given the smaller sizes and more-affordable costs associated with this technology in modern times. Examples include using drones for elephant population monitoring and in measuring forest biodiversity. They are also widely used in monitoring illegal activities such as poaching or deforestation. Kaziranga National Park was the first protected area in India to utilize drones in targeting rhino-poachers.

UAVs are also used to track wildfires and their spread, playing a role in disaster mitigation. Recent applications include the use of drones in pest management, where pesticides are loaded into drones for spraying large swaths of cropland, as seen during the locust swarm.

Drones can help counter issues related to safety of manned aerial surveys since there is no pilot involved and they can be flown into remote locations which might otherwise be inaccessible. In the event of a crash scenario, their smaller sizes are likely to cause less damage which means ground staff who operate them do not face the risk of injury.

Sub questions

Question Number : 186 Question Id : 6326864976 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
Read the Passage and answer the questions Q.No.186 to Q.No.190
This passage is mainly about using drones for _____.

(1) spotting enemy aircraft
(2) making roads and highway
(3) wildlife conservation and monitoring
(4) spying and warfare

Options:
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Question Number : 187 Question Id : 6326864977 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
Read the Passage and answer the questions Q.No.186 to Q.No.190

The first use of drones by Kaziranga National Park was in observing _____

(1) elephants
(2) rhino-poachers
(3) deforestation
(4) locust swarms

Options:
1. ✗ 1
2. ✔ 2
3. ✗ 3
4. ✗ 4

Question Number : 188 Question Id : 6326864978 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
Read the Passage and answer the questions Q.No.186 to Q.No.190
Which of the following is NOT the use of drones?

(1) disaster management  
(2) conservation and ecology  
(3) elephant population monitoring  
(4) population census

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

Question Number : 189 Question Id : 6326864979 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  
Read the Passage and answer the questions Q.No.186 to Q.No.190

UAV stands for _____

(1) Unidentified Air Vehicle  
(2) Universal Aerial Vehicle  
(3) Unmanned Aerial Vehicle  
(4) Unaided Air Vehicle

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

Question Number : 190 Question Id : 6326864980 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  
Read the Passage and answer the questions Q.No.186 to Q.No.190
The Risk of crashes while using drones is lower because of their ______.

(1) technology  
(2) accessibility  
(3) range  
(4) size

Options:
1. ☑ 1
2. ☑ 2
3. ☑ 3
4. ☑ 4

Sub-Section Number: 9  
Sub-Section Id: 632686551  
Question Shuffling Allowed: Yes

Although nature must supply the initial force of desire, nature is not, in the civilised man, the spasmodic, fragmentary, and yet violent set of impulses that is in the savage. Each impulse has its constitutional ministry of thought and knowledge and reflection, through which possible conflicts of impulses are foreseen, and temporary impulses are controlled by the unifying impulse which may be called wisdom. In this way education destroys the crudity of instinct, and increases through knowledge the wealth and variety of the individual’s contacts with the outside world, making him no longer an isolated fighting unit, but a citizen of the universe, embracing distant countries, remote regions of space, and vast stretches of past and future within the circle of his interests. It is this simultaneous softening in the insistence of desire and enlargement of its scope that is the chief moral end of education.
Read the Passage and answer the questions Q.No.191 to Q.No.195

‘Spasmodic’ in the passage stands for a / an

(1) Endemic
(2) Truce
(3) Outburst
(4) Dance

Options:
1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 192 Question Id : 6326864983 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

Read the Passage and answer the questions Q.No.191 to Q.No.195

Nature in the civilised men does not share the _____ of the savage.

(1) Impulses
(2) Glory
(3) Wisdom
(4) Discretion

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 193 Question Id : 6326864984 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
Wisdom is an impulse that

(1) unites
(2) divides
(3) confuses
(4) disintegrates

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 194 Question Id : 6326864985 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
Read the Passage and answer the questions Q.No.191 to Q.No.195

Education makes man a _____ citizen.

(1) bad
(2) universal
(3) greedy
(4) questionable

Options:
1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 195 Question Id : 6326864986 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 moral purpose of education is

(1) softening
(2) exaggerating
(3) vitiating
(4) decimating

Options:
1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Read the Passage and answer the questions Q.No.191 to Q.No.195

Question Numbers: (196 to 200)
Theorists adopting psychodynamic approach hold that inner conflicts are crucial for understanding human behaviour, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. Yet children, also fearing their parents’ punishment and loss of potential love, come to repress most aggressive impulses. The Freudian perspective, in a sense, sees us as ‘steam engines’. By holding in rather than venting ‘steam’, we set the stage for future explosions. Pent up aggressive impulses demand outlets. They may be expressed towards parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

Sub questions

Question Number : 196 Question Id : 6326864988 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
Read the Passage and answer the questions Q.No.196 to Q.No.200

The word 'inevitable' in the passage is closest in meaning to

(1) unavoidable
(2) regrettable
(3) controllable
(4) unsuitable

Options :
1. ✔ 1
2. ✗ 2
3. ☒ 3
4. ☒ 4

Question Number : 197 Question Id : 6326864989 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

Read the Passage and answer the questions Q.No.196 to Q.No.200

The word 'they' in the passage refers to

(1) future explosions
(2) pent up aggressive impulses
(3) outlets
(4) indirect ways

Options :
1. ☒ 1
2. ☒ 2
3. ☒ 3
4. ☒ 4

Question Number : 198 Question Id : 6326864990 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

Read the Passage and answer the questions Q.No.196 to Q.No.200

According to the passage, Freud believed that children experience conflict between a desire to vent aggression on their parents and

(1) A frustration that their parents do not give them everything they want.
(2) A fear that their parents will punish them and stop loving them.
(3) A desire to take care of their parents.
(4) A desire to vent aggression on other family members.

Options :
1. ☒ 1
2. ☒ 2
3. ☒ 3
The word ‘gratify’ in the passage is closest in meaning to

(1) identify
(2) modify
(3) satisfy
(4) simplify

Options :
1. ✗ 1
2. ✗ 2
3. ✔ 3
4. ✗ 4

Freud describes people as ‘steam engines’ in order to make the point that people

(1) Deliberately build up their aggression to make themselves stronger
(2) Usually release aggression in explosive ways
(3) Must vent their aggression to prevent it from building up
(4) Typically lose their aggression if they do not express it.

Options :
1. ✗ 1
2. 2
3. 3
4. 4