

Notations :

- Options shown in **green** color and with ✓ icon are correct.
- Options shown in **red** color and with ✗ icon are incorrect.

Paper Id	Paper Name
2099638	TS ICET 2024 5th June 2024 Shift 1

Question Paper Name:	TS ICET 2024 5th June 2024 Shift 1
Subject Name:	TS ICET 2024
Creation Date:	2024-06-02 15:33:16
Number of Questions:	200
Total Marks:	200
Display Marks:	Yes
Share Answer Key With Delivery Engine:	Yes
Actual Answer Key:	Yes
Calculator:	None
Magnifying Glass Required?:	No
Ruler Required?:	No
Eraser Required?:	No
Scratch Pad Required?:	No
Rough Sketch/Notepad Required?:	No
Protractor Required?:	No
Show Watermark on Console?:	Yes
Highlighter:	No
Auto Save on Console?	Yes
Question Type For Auto Save	MCQ,COMPREHENSION
Change Font Color?:	No
Change Background Color?:	No
Change Theme?:	No
Help Button?:	No
Show Reports?:	No
Show Progress Bar?:	No
Show hint in candidate console:	No

TS ICET 2024

Group Number :	1
Group Id :	2099638
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
Show Progress Bar?:	No
Navigate To Group Summary From Last Question?:	No
Disable Submit Button During Assessment?:	No

Analytical Ability

Section Id :	20996322
Section Number :	1
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions to be attempted:	45
Section Marks:	75
Maximum Instruction Time :	0

Sub-Section Number:	1
Sub-Section Id:	209963162
Question Shuffling Allowed :	No

Question Id : 2099631457 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Question Numbers : (1 to 20)

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Note: In questions numbered from 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:

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

సూచన: 1 నుండి 20 వరకు ఇచ్చిన ప్రతి ప్రశ్నలోను ఒక ప్రశ్న, దాని క్రింద (I), (II) అని గుర్తులు గల రెండు ప్రవచనాలు దత్తాంశంగా ఇవ్వబడ్డాయి. ఇచ్చిన దత్తాంశాన్ని ఉపయోగించి, ఇచ్చిన ప్రవచనాలు ప్రశ్నకు సమాధానాన్ని ఇచ్చేందుకు పర్యాప్తాలు అవుతాయా అని మీరు నిర్ధారించాలి. ఈ నిర్ధారణకు క్రింది మార్గదర్శక సూత్రాలు ఉపయోగించి (1) నుండి (4) వరకు సరైన జవాబును ఎంపిక చేయండి.

- ప్రశ్నకు సమాధానం ఇచ్చేందుకు ప్రవచనం (I) మాత్రమే పర్యాప్తమయి (II) చే సమాధానమివ్వలేకపోతే మీ జవాబు (1) గా గుర్తించండి.
- ప్రశ్నకు సమాధానం ఇచ్చేందుకు ప్రవచనం (II) మాత్రమే పర్యాప్తమయి, (I) చే సమాధానమివ్వలేకపోతే మీ జవాబు (2) గా గుర్తించండి.
- ప్రశ్నకు సమాధానం ఇచ్చేందుకు ప్రవచనం (I), (II) కలిసి పర్యాప్తమయి అందులో ఏ ఒక్కటి కూడా పర్యాప్తం కాకపోతే మీ జవాబు (3) గా గుర్తించండి.
- ప్రశ్నకు సమాధానం ఇచ్చేందుకు ప్రవచనం (I), (II) కలిసి కూడా పర్యాప్తం కాక అదనపు దత్తాంశం అవసరమైతే మీ జవాబు (4) గా గుర్తించండి.

Sub questions

Question Number : 1 Question Id : 2099631458 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

x is an integer. Is x divisible by 18?

x ఒక పూర్ణ సంఖ్య. 18 చేత x భాగించబడుతుందా?

(I) x is divisible by 6. 6 చేత x భాగించబడుతుంది.

(II) x is divisible by 27. 27 చేత x భాగించబడుతుంది.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 2 Question Id : 2099631459 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Is the triangle ABC with sides of length a, b, c an isosceles triangle?

a, b, c లను భుజాలుగా కల్గిన త్రిభుజం ABC ఒక సమద్వి బాహు త్రిభుజం అవుతుందా?

(I) $a^2 + b^2 = c^2$

(II) $(a + b - c)^2 = (b + c - a)^2$

Options :

1. ✓ 1

2. ✗ 2

3. ✖ 3

4. ✖ 4

Question Number : 3 Question Id : 2099631460 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

What is the area of the square?

ఆ చతురస్రం వైశాల్యం ఎంత?

(I) The perimeter of the square is a multiple of 4.

చతురస్రం చుట్టు కొలత 4 యొక్క గుణిజం .

(II) The diagonal of the square is $17\sqrt{2}$ cm.

చతురస్రపు వికర్ణం పొడవు $17\sqrt{2}$ సెం.మీ.

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 4 Question Id : 2099631461 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Find the greatest of the numbers a , b , c and d .

a , b , c , d లలో అన్నిటికన్నా పెద్ద సంఖ్య కనుక్కోండి.

(I) $a - 40 = b - 50$

(II) $c - 60 = d - 70$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 5 Question Id : 2099631462 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Find the two digit number x .

రెండంకెల సంఖ్య x ను కనుక్కోండి.

(I) The difference between the number x and the one obtained by reversing it is 27.

x మరియు దాని అంకెలను తారుమారు చేయడం ద్వారా వచ్చిన సంఖ్యల భేదం 27.

(II) The number is greater than 5.

ఆ సంఖ్య 5 కన్న పెద్దది.

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 6 Question Id : 2099631463 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Is the positive integer x is divisible by 10 ?

ధన పూర్ణ సంఖ్య x , 10 చేత భాగించ బడుతుందా?

(I) x is the sum of five consecutive positive integers.

ఐదు వరుస ధన పూర్ణ సంఖ్యల మొత్తానికి x సమానం

(II) x is divisible by 4.

4 చేత x భాగింప బడుతుంది.

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 7 Question Id : 2099631464 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Among four friends P, Q, R, S , who is the tallest?

నలుగురు స్నేహితులు P, Q, R, S లలో పొడవైన వ్యక్తి ఎవరు?

(I) Q is taller than P .

P కన్నా Q పొడవైన వాడు.

(II) R is shorter than Q , but taller than S .

Q కన్నా R పొట్టివాడు కాని S కన్నా పొడవైన వాడు.

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 8 Question Id : 2099631465 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

What is the value of $x^2 + y^2 + z^2 + t^2$?

$x^2 + y^2 + z^2 + t^2$ విలువ ఎంత ?

(I) $x + y + z + t = 20$

(II) $xyzt = 300$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 9 Question Id : 2099631466 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Find the two consecutive natural numbers.

ఆ రెండు వరుస సహజ సంఖ్యలను కనుక్కోండి.

(I) The difference of squares of the two consecutive numbers is 201.

ఆ రెండు వరుస సంఖ్యల వర్గాల భేదం 201.

(II) The numbers are greater than 50.

ఆ సంఖ్యలు 50 కన్న పెద్దవి.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 10 Question Id : 2099631467 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Find the number of possible values of the natural number n .

సహజ సంఖ్య n కు వీలయ్యే విలువల సంఖ్యను కనుక్కోండి.

(I) n divides $31n + 2024$.

$31n + 2024$ ను n భాగిస్తుంది.

(II) n is greater than or equal to 1.

n అనేది 1 కన్న ఎక్కువ లేదా సమానం అవుతుంది.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 11 Question Id : 2099631468 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

What is the year of birth of Ramu?

రాము పుట్టిన సంవత్సరం ఏది?

(I) At present Ramu is 30 years younger to his father.

ప్రస్తుతం రాము అతని తండ్రి కన్నా 30 సంవత్సరాలు చిన్నవాడు.

(II) Ramu's sister who was born in 1970 is 25 years is younger to her father.

1970 లో జన్మించిన రాము యొక్క సోదరి ఆమె తండ్రి కన్నా 25 సంవత్సరాలు చిన్నది.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 12 Question Id : 2099631469 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

A number x is what percent of another number y ?

ఒక సంఖ్య x ఇంకో సంఖ్య y లో ఎంత శాతం ?

(I) x and y are in the ratio $7 : 5$.

x, y లు $7 : 5$ నిష్పత్తిలో ఉన్నాయి.

(II) $x = y + 40$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 13 Question Id : 2099631470 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

What is the sum of two natural numbers?

ఆ రెండు సహజ సంఖ్యల మొత్తం ఎంత ?

(I) The sum of those two numbers added to their product is equal to 402.

ఆ రెండు సంఖ్యల మొత్తాన్ని వాటి లబ్ధానికి కలుపగా 402 కు సమానమగును.

(II) The two numbers are greater than 3.

ఆ రెండు సంఖ్యలు 3 కన్న పెద్దవి.

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 14 Question Id : 2099631471 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Is the integer K is an odd ?

పూర్ణసంఖ్య K అనేది ఒక బేసిసంఖ్య అవుతుందా ?

(I) $5K + 3$ is even.

$5K + 3$ అనేది సరిసంఖ్య.

(II) $4K + 2$ is even.

$4K + 2$ అనేది సరిసంఖ్య.

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 15 Question Id : 2099631472 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

Find the polynomial $f(x)$ of degree 3 in which coefficient of x^3 is one.

x^3 గుణకం ఒకటి గాగల 3 వ తరగతి బహుపది $f(x)$ ను కనుక్కోండి.

- (I) $f(x)$ leaves remainder 1 when divided by $x - 1$.
 $f(x)$ ను $x - 1$ చే భాగించగా వచ్చు శేషం 1.
- (II) $f(x)$ leaves the same remainder 1 when divided by $x - 2$ and $x - 3$.
 $f(x)$ ను $x - 2$, $x - 3$ లచే భాగించిననూ ఒకే శేషం 1 వస్తుంది.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 16 Question Id : 2099631473 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

What is the two digit number?

ఆ రెండంకెల సంఖ్య ఏది ?

(I) The sum of the two digits is 15.

ఆ రెండంకెల మొత్తం 15.

(II) The ratio of the two digits is 3 : 2.

ఆ రెండంకెల నిష్పత్తి 3 : 2.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 17 Question Id : 2099631474 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Is x positive?

x ధనాత్మకమా?

(I) $3x + y > 0$

(II) $x - y > 0$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 18 Question Id : 2099631475 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Find the middle number of 11 consecutive integers.

11 వరుస పూర్ణసంఖ్యల మధ్యనున్న సంఖ్యను కనుక్కోండి.

(I) The product of the eleven consecutive integers is zero.

ఆ పదకొండు వరుస పూర్ణసంఖ్యల లబ్ధం సున్నా.

(II) The sum of those 11 consecutive numbers is zero.

ఆ 11 వరుస సంఖ్యల మొత్తం సున్నా.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 19 Question Id : 2099631476 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

Are the ΔABC and ΔPQR of same perimeter?

ΔABC , ΔPQR లు సమానమైన పరిధిని కలిగి ఉన్నాయా?

(I) $\angle B = \angle C = 90^\circ$

(II) ΔABC and ΔPQR are of same area.

ΔABC మరియు ΔPQR లు సమానమైన వైశాల్యాలను కలిగి ఉన్నాయి.

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 20 Question Id : 2099631477 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

1. Data Sufficiency

దత్తాంశ పర్యాప్తత

For real x , is $|x - 4| < 3$?

ఏదేని వాస్తవ సంఖ్య x కు $|x - 4| < 3$ అవుతుందా?

(I) $|x + 2| > 3$

(II) $|x - 3| < 4$

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number:

2

Sub-Section Id:

209963163

Question Shuffling Allowed :

Yes

Question Number : 21 Question Id : 2099631478 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

AG 8 : DH 12 :: CN 17 : IO _____

(1) 20

(2) 24

(3) 32

(4) 40

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 22 Question Id : 2099631479 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

$$\frac{AHO}{120} : \frac{ELS}{1140} :: \text{————} : \frac{FMT}{1560}$$

(1) $\frac{BIP}{144}$

(2) $\frac{BIP}{432}$

(3) $\frac{BIP}{288}$

(4) $\frac{BIP}{576}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 23 Question Id : 2099631480 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

BFJ (324) : EIM (729) :: _____ : KOS (2025)

- (1) HLP (1296)
- (2) HPL (1024)
- (3) LHP (689)
- (4) LPH (1156)

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 24 Question Id : 2099631481 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

(3, 4, 73) : (4, 5, 141) :: (5, 6, 241) : _____

- (1) (6, 7, 379)
- (2) (6, 7, 265)
- (3) (6, 7, 85)
- (4) (6, 7, 559)

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 25 Question Id : 2099631482 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

A(17)D : E(89)H :: I(225)L : M(425)_____

(1) P

(2) Q

(3) R

(4) O

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 26 Question Id : 2099631483 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

CHAIR : IRACH :: CROWN : _____

- (1) WNORC
- (2) WNPCR
- (3) WNOCR
- (4) VNOCR

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 27 Question Id : 2099631484 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

AGENT : 25 :: PAINT : _____

(1) 36

(2) 49

(3) 64

(4) 81

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 28 Question Id : 2099631485 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

$$\text{BIRD} : 8\frac{1}{4} :: \text{_____} : 7\frac{1}{4}$$

- (1) BATH
- (2) CALM
- (3) EVEN
- (4) DOAR

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 29 Question Id : 2099631486 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

M 961 : P 3721 :: S 8281 : V _____

(1) 343

(2) 441

(3) 225

(4) 484

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 30 Question Id : 2099631487 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Analogies/a:b::c:d relationships)

శ్రేణులు

CABLED (DALBEC) : ELOINS (ESOINL) :: DEWILY (YELIWD) :

_____(RIGNEH)

(1) HONGIR

(2) HINGER

(3) HJNGIR

(4) HINGOR

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 3
Sub-Section Id: 209963164
Question Shuffling Allowed : Yes

Question Number : 31 Question Id : 2099631488 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Odd things out)

శ్రేణులు

84, 120, 92, 105, 104, 85, 118

(1) 118

(2) 84

(3) 105

(4) 92

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 32 Question Id : 2099631489 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

A. Series (Odd things out)

సమస్య సాధన

శ్రేణులు

2, 6, 15, 28, 55, 76, 119

(1) 15

(2) 28

(3) 76

(4) 2

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 33 Question Id : 2099631490 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Odd things out)

శ్రేణులు

$$\frac{3}{2}, 4, \frac{11}{2}, 7, \frac{17}{2}, 10, \frac{25}{2}$$

(1) 4

(2) 7

(3) $\frac{25}{2}$

(4) $\frac{11}{2}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 34 Question Id : 2099631491 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Odd things out)

శ్రేణులు

MOON, MERCURY, JUPITER, SATURN, MARS, URANUS, NEPTUNE

(1) JUPITER

(2) SATURN

(3) MOON

(4) MERCURY

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 35 Question Id : 2099631492 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

A. Series (Odd things out)

శ్రేణులు

2, 3, 5, 13, 21, 43, 85

(1) 13

(2) 2

(3) 5

(4) 85

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number:

4

Sub-Section Id:

209963165

Question Shuffling Allowed :

Yes

Question Number : 36 Question Id : 2099631493 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

35, 48, 80, 120, 168, 224, _____

(1) 144

(2) 255

(3) 194

(4) 285

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 37 Question Id : 2099631494 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

9, 12.6, 16.2, 19.8, 23.4, 27, _____

(1) 28.6

(2) 30.2

(3) 28.9

(4) 30.6

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 38 Question Id : 2099631495 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಕ್ರೀಡಲು

362880, 181440, 60480, 15120, 3024, 504, _____

(1) 72

(2) 70

(3) 68

(4) 66

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 39 Question Id : 2099631496 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

204, 140, 91, _____, 30, 14, 5

(1) 50

(2) 55

(3) 60

(4) 65

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 40 Question Id : 2099631497 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

$$3, \frac{9}{\sqrt{2}}, \text{—————}, \frac{81}{2\sqrt{2}}, \frac{243}{4}, \frac{729}{4\sqrt{2}}$$

- (1) $\frac{27}{\sqrt{2}}$
- (2) 27
- (3) $\frac{27}{2}$
- (4) $27\sqrt{2}$

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 41 Question Id : 2099631498 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

$$4\sqrt{3}, 8\sqrt{3}, 4\sqrt{30}, 8\sqrt{15}, 4\sqrt{105}, \underline{\hspace{2cm}}$$

(1) $8\sqrt{84}$

(2) $8\sqrt{40}$

(3) $8\sqrt{42}$

(4) 48

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 42 Question Id : 2099631499 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

$$10, 5\sqrt{2}, 5, \frac{5}{\sqrt{2}}, \frac{5}{2}, \frac{5}{2\sqrt{2}}, \text{ ————— }, \frac{5}{4\sqrt{2}}$$

- (1) 10
- (2) $5\sqrt{2}$
- (3) $\frac{5}{8}$
- (4) $\frac{5}{4}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 43 Question Id : 2099631500 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

3, 9, 8, 28, 15, 65, 24, _____

(1) 102

(2) 98

(3) 105

(4) 126

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 44 Question Id : 2099631501 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

AD4, AF9, _____, BB5, BE6, BH9, CB4

- (1) AI6
- (2) AB5
- (3) AB1
- (4) AE9

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 45 Question Id : 2099631502 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

A. Series (Missing numbers in sequence or series)

ಶ್ರೇಣಿಗಳು

7, 26, 124, 342, _____, 2196, 4912

- (1) 958
- (2) 1730
- (3) 1431
- (4) 1330

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Sub-Section Number: 5
Sub-Section Id: 209963166
Question Shuffling Allowed : No

Question Id : 2099631503 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Question Numbers : (46 to 48)

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

An article A is produced by five machines whose efficiencies are shown in the following table.

ఐదు యంత్రాలచే ఉత్పత్తి అయిన ఒక వస్తువు A మరియు ఆ యంత్రాల దక్షతలను క్రింది పట్టిక చూపుతుంది

Machine యంత్రం	No. of articles A produced ఉత్పత్తి అయిన A వస్తువుల సంఖ్య	% of Defective articles లోపభూయిష్టమైన వస్తువుల శాతం
M_1	1200	10
M_2	900	12
M_3	960	5
M_4	720	15
M_5	1500	18

Based on this information answer the questions from 46 to 48.

ఈ సమాచారం ఆధారంగా 46 నుండి 48 వరకు గల ప్రశ్నలకు సమాధానాలిమ్ము.

Sub questions

Question Number : 46 Question Id : 2099631504 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

B. Data Analysis

సమస్య సాధన

దత్తాంశ విశ్లేషణ

Total number of defective articles produced by all the machines is

అన్ని యంత్రాలచే ఉత్పత్తి అయిన లోపభూయిష్టమైన వస్తువుల సంఖ్య

(1) 652

(2) 653

(3) 654

(4) 655

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 47 Question Id : 2099631505 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

Ratio of defective articles to the ones non defective is

లోపభూయిష్టమైన వస్తువులకు, లోపభూయిష్టం కాని వస్తువులకు గల నిష్పత్తి

- (1) 109 : 771
- (2) 327 : 2640
- (3) 109 : 773
- (4) 327 : 771

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 48 Question Id : 2099631506 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

Approximately what percent of total articles produced are defective?

ఉత్పత్తి అయిన మొత్తం వస్తువులలో రమారమి ఎంత శాతం వస్తువులు లోపం కలవి?

- (1) 10.4
- (2) 9.4
- (3) 8.4
- (4) 12.4

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 6
Sub-Section Id: 209963167
Question Shuffling Allowed : No

Question Id : 2099631507 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Question Numbers : (49 to 51)

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

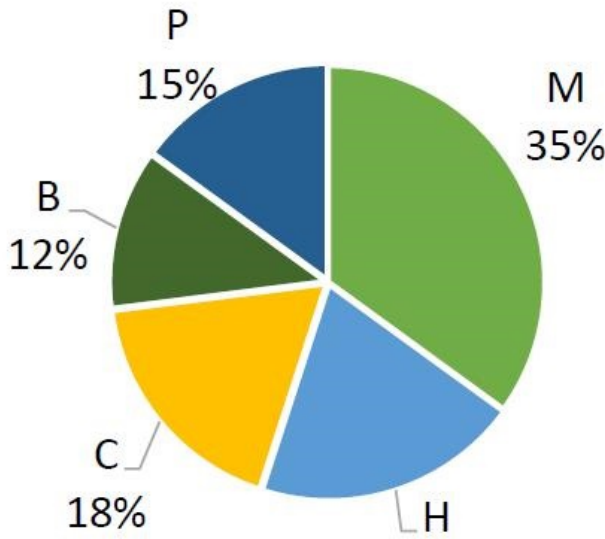
B. Data Analysis

సమస్య సాధన

దత్తాంశ విశ్లేషణ

The following pie chart shows the percentages of number of students studying five courses Mathematics (M), Humanities (H), Physics (P), Biology(B), Chemistry (C) in a college for the year 2023.

ఈ క్రింది పీ చిత్రం ఒకానొక కళాశాలలో 2023వ సంవత్సరములో ఐదు కోర్సులు గణితం(M), మానవీయ శాస్త్రాలు (H), భౌతిక శాస్త్రం (P), జీవశాస్త్రం (B), రసాయన శాస్త్రం (C) లను చదివే విద్యార్థుల శాతాలను సూచిస్తుంది.



Based on the above information, answer the questions from 49 to 51.

పై సమాచారం ఆధారంగా 49 నుండి 51 వరకు గల ప్రశ్నలకు సమాధానాలిమ్ము.

Sub questions

Question Number : 49 Question Id : 2099631508 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

If the total number of students of that college is 3800, then how many students are studying Humanities?

ఆ కాలేజీలో మొత్తం విద్యార్థుల సంఖ్య 3800 అయితే, మానవీయశాస్త్రాన్ని చదువుతున్న విద్యార్థులు ఎంత మంది ఉన్నారు?

- (1) 570
- (2) 380
- (3) 760
- (4) 950

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 50 Question Id : 2099631509 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

What is the sectorial angle in (degrees) corresponding to the number of students studying Physics in that college?

ఆ కళాశాలలో భౌతిక శాస్త్రాన్ని చదివే విద్యార్థుల సంఖ్యను సూచించే సెక్టారు కోణం (డిగ్రీలలో)

(1) 126

(2) 54

(3) 72

(4) 60

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 51 Question Id : 2099631510 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

What is the ratio between the number of students studying Physics and the total number of students studying Chemistry and Biology ?

భౌతిక శాస్త్రం చదివే విద్యార్థుల సంఖ్యకు, రసాయన శాస్త్రం మరియు జీవ శాస్త్రాలు చదివే విద్యార్థుల మొత్తం సంఖ్యకు గల నిష్పత్తి

(1) 10 : 9

(2) 2 : 1

(3) 9 : 10

(4) 1 : 2

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Sub-Section Number:

7

Sub-Section Id:

209963168

Question Shuffling Allowed :

No

Question Id : 2099631511 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Question Numbers : (52 to 55)

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

A survey conducted on 210 persons about the readership of three dailies I, H, J, revealed the following information.

80 read I, 95 read H, 85 read J. The number of people who read H and J but not I is three times that of who read all the three. The number of people who read only J is 40. The number of people who read J and I is 5 more than that who read all the three. The number of people who read I and H but not J is 5 less than that of who read all the three.

Using this information answer the following questions from 52-55

మూడు దిన పత్రికలు I, H, J లను చదివేవారికి సంబంధించి 210 వ్యక్తుల పై నిర్వహించిన ఒక సర్వే లో క్రింది సమాచారం లభించింది. ఇందులో 80 మంది I ని చదువుతారు, 95 మంది H ని చదువుతారు, 85 మంది Jని చదువుతారు. H మరియు J లను చదువుతూ I చదవని వారి సంఖ్య అన్ని మూడింటిని చదివే వారి సంఖ్య కు మూడు రెట్లు. J మాత్రమే చదివే వారి సంఖ్య 40. J మరియు I లను చదివే వారి సంఖ్య మూడింటినీ చదివే వారి సంఖ్య కన్నా 5 ఎక్కువ. I మరియు H లను చదువుతూ J ని చదవని వారి సంఖ్య మూడింటినీ చదివే వారి సంఖ్య కన్నా 5 తక్కువ.

ఈ సమాచారాన్ని ఉపయోగించి 52 నుండి 55 వరకు గల ప్రశ్నలకు సమాధానాలివ్వండి.

Sub questions

Question Number : 52 Question Id : 2099631512 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

The number of people who do not read any of three papers is
మూడు దిన పత్రికలలో వేటినీ చదవని వారి సంఖ్య

- (1) 8
- (2) 9
- (3) 10
- (4) 11

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 53 Question Id : 2099631513 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

B. Data Analysis

దత్తాంశ విశ్లేషణ

The number of people who read all the three is

అన్ని మూడు పత్రికలను చదివే వారి సంఖ్య

- (1) 9
- (2) 10
- (3) 11
- (4) 12

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 54 Question Id : 2099631514 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

B. Data Analysis

సమస్య సాధన

దత్తాంక విశ్లేషణ

The number of people who read only H is

H ను మాత్రమే చదివేవారి సంఖ్య

(1) 35

(2) 40

(3) 45

(4) 50

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 55 Question Id : 2099631515 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

B. Data Analysis

సమస్య సాధన

దత్తాంశ విశ్లేషణ

The number of people who read only I is

I ను మాత్రమే చదివే వారి సంఖ్య

(1) 60

(2) 65

(3) 68

(4) 69

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Sub-Section Number: 8

Sub-Section Id: 209963169

Question Shuffling Allowed : No

Question Id : 2099631516 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Question Numbers : (56 to 60)

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

Letters of the English alphabet are coded as follows. Denote the letters A, B, C, ..., Z by the numbers 1, 2, 3, ..., 26.

For $1 \leq k \leq 13$, code k^{th} letter to $(27 - k)^{\text{th}}$ letter. For $14 \leq k \leq 26$, code k^{th} letter to $(k - 13)^{\text{th}}$ letter.

Using this coding pattern answer the questions from 56 to 60.

ఆంగ్ల వర్ణమాల లోని అక్షరాలను క్రింది విధంగా కోడ్ చేసిరి. వర్ణమాల లోని అక్షరాలైన A, B, C, ... Z లను 1, 2, 3, ..., 26 లతో సూచించండి. $1 \leq k \leq 13$ అయినపుడు, k వ అక్షరాన్ని $(27 - k)$ వ అక్షరంగా కోడ్ చేయండి. $14 \leq k \leq 26$ అయినపుడు, k వ అక్షరాన్ని $(k - 13)$ వ అక్షరంగా కోడ్ చేయండి.

ఈ కోడింగ్ పద్ధతిని ఉపయోగించి 56 నుండి 60 ప్రశ్నలకు సమాధానాలిమ్ము.

Sub questions

Question Number : 56 Question Id : 2099631517 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

Code word for SECRET is

SECRET యొక్క కోడ్ పదం

(1) FVXFVG

(2) FVYEVG

(3) FVXEVG

(4) FVZEVG

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 57 Question Id : 2099631518 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

Which word is coded as CRIME?

CRIME గా కోడ్ చేయబడిన పదం ఏది?

(1) PIVZR

(2) PIVXR

(3) PIYZR

(4) PIVRZ

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 58 Question Id : 2099631519 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

Which word is coded as EXTINCT ?

ఏ పదం EXTINCT గా కోడ్ చేయబడింది?

- (1) RCFVMPG
- (2) RCGWNPG
- (3) RCGWMPG
- (4) RCGVMPG

Options :

1. ✓ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 59 Question Id : 2099631520 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

Code word for ELECTION is

ELECTION యొక్క కోడ్ పదం

- (1) VOVYGRBA
- (2) VOUXGRBA
- (3) VOVXGRBA
- (4) VOVXHRBA

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 60 Question Id : 2099631521 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

Which word is coded as DESIGN?

ఏ పదం DESIGN గా కోడ్ చేయబడింది ?

(1) QRHVMTM

(2) QRGVMTM

(3) QRHYTM

(4) QRHUTM

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Sub-Section Number:

9

Sub-Section Id:

209963170

Question Shuffling Allowed :

Yes

Question Number : 61 Question Id : 2099631522 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

BEAUTIFUL is coded as 986154210 and TUBEFUL is coded as 5198210, then the code word for FUTILE is

BEAUTIFUL ని 986154210 గాను మరియు TUBEFUL ని 5198210 గాను కోడ్ చేసినచో, FUTILE కి కోడ్ పదం

- (1) 214408
- (2) 216408
- (3) 215408
- (4) 215308

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 62 Question Id : 2099631523 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

If NATURE is coded as ANUTER, then the code of ABACUS is

NATURE అనే పదాన్ని ANUTER గా కోడ్ చేసినపుడు, ABACUS యొక్క కోడ్

- (1) BACASU
- (2) BAACSU
- (3) AABCUS
- (4) ASUBCA

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 63 Question Id : 2099631524 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

In a certain code language DREAM is coded as @! # * % and FROG is coded as < !? > then the code for FREEDOM is

ఒకానొక కోడ్ బాషలో DREAM ను @! # * % మరియు FROG ను < !? > గాను కోడ్ చేస్తే, FREEDOM యొక్క కోడ్

- (1) < !@@#? %
- (2) < !##@? %
- (3) > !##? @%
- (4) < !?? @#%

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 64 Question Id : 2099631525 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

C. Coding and Decoding Problems

కోడింగ్ మరియు డీకోడింగ్ సమస్యలు

If MOLES is coded as 64 and STATE is coded as 65, then the code for CENTRE is

MOLES ని 64గాను మరియు STATE ని 65 గాను కోడ్ చేసినచో, CENTRE యొక్క

కోడ్

- (1) 65
- (2) 66
- (3) 67
- (4) 68

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 65 Question Id : 2099631526 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

If COMPUTER is coded as OCMOVTRE, then the word coded as LAPGBBTE is

COMPUTER ను OCMOVTRE గా కోడ్ చేస్తే, LAPGBBTE గా కోడ్ చేయబడిన పదం

- (1) APLAHBET
- (2) ALHPABTE
- (3) ALAPHBET
- (4) ALPHABET

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 10
Sub-Section Id: 209963171
Question Shuffling Allowed : Yes

Question Number : 66 Question Id : 2099631527 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేది, సమయం మరియు అమరికల సమస్యలు

The year 2025 ends with the day

2025 వ సంవత్సరము ఏ రోజుతో ముగుస్తుంది?

- | | |
|---------------|----------|
| (1) Monday | సోమవారం |
| (2) Tuesday | మంగళవారం |
| (3) Wednesday | బుధవారం |
| (4) Thursday | గురువారం |

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 67 Question Id : 2099631528 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేది, సమయం మరియు అమరికల సమస్యలు

The ratio of the acute angles between the hands of a clock at 5.10 am and 5.20 pm is

ఒక గడియారంలో ఉదయం 5 గంటల 10 ని. లకు, సాయంత్రం 5 గంటల 20 ని. లకు ముల్లల మధ్య ఉండే కోణం ల నిష్పత్తి

- (1) 21 : 8
- (2) 19 : 7
- (3) 19 : 8
- (4) 17 : 5

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 68 Question Id : 2099631529 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేదీ, సమయం మరియు అమరికల సమస్యలు

What time between 4 O'clock and 5 O'clock will the hands of a clock be on the same straight line but not together?

ఒక గడియారంలో 4 మరియు 5 గంటల మధ్యలో ఏ సమయం వద్ద ఆ గడియారం ముల్లులు ఏకీభవించకుండా ఒకే రేఖ పై ఉంటాయి?

- (1) $54\frac{6}{11}$ min. past 4 4గం. $54\frac{6}{11}$ ని.
- (2) $53\frac{5}{11}$ min. past 4 4గం. $53\frac{5}{11}$ ని.
- (3) $49\frac{6}{11}$ min. past 4 4గం. $49\frac{6}{11}$ ని.
- (4) $51\frac{5}{11}$ min. past 4 4గం. $51\frac{5}{11}$ ని.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 69 Question Id : 2099631530 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేది, సమయం మరియు అమరికల సమస్యలు

A is my father's brother's wife's son. Then, A is related to me as

A అనే వ్యక్తి 'నా తండ్రియొక్క సోదరుని భార్య కుమారుడు' . అప్పుడు నాకు A ఏమౌతారు?

- | | |
|--------------------|-----------|
| (1) Nephew | మేనల్లుడు |
| (2) Brother-in-law | బావ |
| (3) Grandson | మనవడు |
| (4) Cousin Brother | సోదరుడు |

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 70 Question Id : 2099631531 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేది, సమయం మరియు అమరికల సమస్యలు

Three persons A, B and C reached a railway station in such a way that C reached the station 55 minutes before A while B reached 1 hour 15 minutes after A reached the station. Further A came to know that he reached the station 30 minutes before the scheduled departure of train at 11.10 am. By how much time C reached earlier than B?

A, B మరియు C అనే ముగ్గురు వ్యక్తులు రైల్వే స్టేషన్ ను ఈ క్రింది తెల్పిన విధంగా చేరుకొనిరి. A కన్నా 55 ని. లు ముందుగా C చేరుకొనగా, B, A కన్నా 1 గం.15ని. లు ఆలస్యంగా చేరుకొనెను. ఇంకను రైలు బయలుదేరడానికి నిర్దేశిత సమయం 11.10 ని.ల కన్న 30ని. లు ముందుగా A స్టేషన్ కు చేరుకున్నట్లయితే, B కన్నా ఎంత సమయం ముందుగా C ఆ స్టేషన్ ను చేరెను?

- | | |
|--------------------|--------------|
| (1) 2 hours 20 min | 2 గం. 20 ని. |
| (2) 2 hours | 2 గం. |
| (3) 2 hours 10 min | 2 గం.10 ని. |
| (4) 2 hours 40 min | 2 గం. 40 ని. |

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 71 Question Id : 2099631532 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేది, సమయం మరియు అమరికల సమస్యలు

Ashok wants to make a trip of 30 km by bicycle. He leaves 3 minutes late, but travels 1 kmph faster and arrives on time. Then the speed of cyclist Ashok (in kmph) is

అశోక్ తన సైకిల్ పై 30కి.మీ. ట్రిప్ కి వెళ్ళాలనుకుంటాడు. 3ని.లు ఆలస్యంగా బయలు దేరడం వల్ల గంటకు ఒక కి.మీ. వేగాన్ని పెంచి సరైన సమయానికి చేరుకుంటాడు. అప్పుడు సైకిలిస్ట్ అయిన అశోక్ యొక్క వేగం (గం./కి.మీ.లలో)

- (1) 24
- (2) 26
- (3) 27
- (4) 20

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 72 Question Id : 2099631533 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

Five persons P, Q, R, S and T sit around a circular table facing centre, as described below. T is second right to R and is also 2nd left to P. Q and S are neighbours to T. S is not sitting between R and T. Then who is to the immediate left of P?

అయిదుగురు వ్యక్తులు P, Q, R, S, T లు వృత్తాకార బల్ల చుట్టూ కేంద్రాభిముఖంగా ఈ విధంగా కూర్చోన్నారు. T అనునతడు R కు కుడి వైపున రెండవ వాడు అవడమేకాక P కు ఎడమన రెండవ వాడు కూడా. T కు చెరో ప్రక్కన Q మరియు S లు ఉన్నారు. R మరియు T ల మధ్య S కూర్చోలేదు. అప్పుడు, P కు వెనువెంటనే ఎడమ ప్రక్కన ఉన్నది ఎవరు?

- (1) T
- (2) Q
- (3) R
- (4) S

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 73 Question Id : 2099631534 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేది, సమయం మరియు అమరికల సమస్యలు

Let m and n be any integers.

If $m \alpha n = 3m + 2n$, $m\beta n = 2m + 3n$

and $m\gamma n = m^2 + n^3$, then $(1 \alpha 2)\beta(3\gamma 4) =$

m, n లను పూర్ణ సంఖ్యలుగా గైకొనుము.

$m \alpha n = 3m + 2n$, $m\beta n = 2m + 3n$ మరియు

$m\gamma n = m^2 + n^3$ అయినపుడు, $(1 \alpha 2)\beta(3\gamma 4) =$

- (1) 209
- (2) 219
- (3) 233
- (4) 239

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

SECTION - A : ANALYTICAL ABILITY

2. Problem Solving

సమస్య సాధన

D. Date and Time & Arrangement Problems

తేది, సమయం మరియు అమరికల సమస్యలు

If $a \oplus b = a^b + b$ and $a * b = \frac{a+b}{b-a}$, then $(1 \oplus 2) * (3 \oplus 4) =$

$a \oplus b = a^b + b$ మరియు $a * b = \frac{a+b}{b-a}$ అయినప్పుడు, $(1 \oplus 2) * (3 \oplus 4) =$

(1) $\frac{41}{44}$

(2) $\frac{41}{47}$

(3) $\frac{44}{41}$

(4) $\frac{47}{41}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 75 Question Id : 2099631536 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

For real x, y

Let $x \vee y = (x + y)^2 + (x - y)^2$ and $x \wedge y = (x + y)^2 - (x - y)^2$.

If $5 \wedge (6 \vee (-7)) = x \vee (1 \wedge 3)$, then $x^2 =$

x, y వాస్తవ సంఖ్యలకు

$x \vee y = (x + y)^2 + (x - y)^2$ మరియు $x \wedge y = (x + y)^2 - (x - y)^2$

అనుకొనుము.

$5 \wedge (6 \vee (-7)) = x \vee (1 \wedge 3)$ అయితే, $x^2 =$

- (1) 1556
- (2) 1656
- (3) 1456
- (4) 1558

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Mathematical Ability

Section Id :	20996323
Section Number :	2
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions to be attempted:	75

Section Marks:

75

Maximum Instruction Time :

0

Sub-Section Number:

1

Sub-Section Id:

209963172

Question Shuffling Allowed :

Yes

Question Number : 76 Question Id : 2099631537 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

$$\left[\left(\sqrt[3]{\frac{-4}{2 \cdot \frac{1}{3}}} \right)^{\frac{-3}{4}} \right]^{-3} =$$

(1) 2

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

(3) 4

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

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 77 Question Id : 2099631538 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

$$\frac{\left(\frac{31}{51}\right)^2 - \left(\frac{51}{31}\right)^2}{\frac{31}{51} - \frac{51}{31}} - \frac{\left(\frac{31}{51}\right)^3 - \left(\frac{51}{31}\right)^3}{\left(\frac{31}{51}\right)^2 - \left(\frac{51}{31}\right)^2} = \frac{k}{31^2 + 51^2} \Rightarrow k =$$

(1) 1580

(2) 1581

(3) 1582

(4) 1583

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 78 Question Id : 2099631539 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

If $A : B = \frac{1}{4} : \frac{1}{5}$ and $B : C = \frac{1}{8} : \frac{1}{7}$, then $\frac{4A+2B+2C}{3B+C} =$

$A : B = \frac{1}{4} : \frac{1}{5}$ మరియు $B : C = \frac{1}{8} : \frac{1}{7}$ అయినప్పుడు, $\frac{4A+2B+2C}{3B+C} =$

(1) $\frac{27}{65}$

(2) $\frac{29}{65}$

(3) $\frac{65}{29}$

(4) $\frac{65}{27}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 79 Question Id : 2099631540 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Ratio of two numbers is 3 : 5. If x is added to each number, then their ratio becomes 7 : 5. The sum of squares of those numbers in terms of x is

రెండు సంఖ్యల నిష్పత్తి 3 : 5. ఆ సంఖ్యలకు x ను కలిపినపుడు వాటి నిష్పత్తి 7:5 అయినపుడు, ఆ సంఖ్యల వర్గాల మొత్తం x పదాలలో

(1) $\frac{9}{25} x^2$

(2) $\frac{7}{20} x^2$

(3) $\frac{17}{25} x^2$

(4) $\frac{17}{50} x^2$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 80 Question Id : 2099631541 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

$$\frac{2+\sqrt{3}}{\sqrt{2}+\sqrt{2+\sqrt{3}}} + \frac{2-\sqrt{3}}{\sqrt{2}-\sqrt{2-\sqrt{3}}} =$$

(1) $2\sqrt{2}$

(2) $3\sqrt{2}$

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

(4) $\sqrt{2}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 81 Question Id : 2099631542 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

$$a = \sqrt{4 + \sqrt{15}}, b = \sqrt{4 - \sqrt{15}} \Rightarrow a + b =$$

(1) $2\sqrt{2}$

(2) $\sqrt{10}$

(3) 3

(4) 4

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 82 Question Id : 2099631543 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Let a be a two-digit number and b be the number obtained by reversing its digits. If $ab = 7663$, then the difference of these two numbers is

a ఒక రెండంకెల సంఖ్య అని మరియు b అనేది ఆ సంఖ్యలోని అంకెలను తారుమారు చేయగా వచ్చు సంఖ్య అనుకొనుము. $ab = 7663$ అయితే, ఈ రెండు సంఖ్యల భేదం

- (1) 27
- (2) 12
- (3) 18
- (4) 36

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 83 Question Id : 2099631544 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

The units digit in the number $61 \times 62 \times 63 \times 64 \times 66 \times 67 \times 68$ is

$61 \times 62 \times 63 \times 64 \times 66 \times 67 \times 68$ అనే సంఖ్యలోని ఒకట్ల స్థానంలోని అంకె

(1) 4

(2) 6

(3) 8

(4) 2

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 84 Question Id : 2099631545 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

If LCM of 31, 32, 35, 36, 37, 38, 39, 40 and 43 is N, then the LCM of 31, 32, 35, 36, 37, 38, 39, 40, 43, 44, 45, 48 and 50, in terms of N, is

31, 32, 35, 36, 37, 38, 39, 40 మరియు 43 ల క.సా.గు. N అనుకుంటే,

31, 32, 35, 36, 37, 38, 39, 40, 43, 44, 45, 48 మరియు 50 ల క.సా.గు. N పదాలలో

- (1) 50N
- (2) 44N
- (3) 11N
- (4) 5N

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 85 Question Id : 2099631546 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Which of the following is not a divisor of $7^{42} - 1$?

ఈ క్రింది వానిలో $7^{42} - 1$ కు భాజకం కానిది ?

(1) $7^3 - 1$

(2) $7^6 - 1$

(3) $7^8 - 1$

(4) $7^7 - 1$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 86 Question Id : 2099631547 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

If $0.3\overline{75} = \frac{p}{q}$, where p and q are relatively primes, then $3p - q =$

$0.3\overline{75} = \frac{p}{q}$, p, q లు సాపేక్ష ప్రధానాంకాలు, అయితే, $3p - q =$

(1) 23

(2) 19

(3) 52

(4) 21

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 87 Question Id : 2099631548 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

$$1000 \left\{ (0.07776)^{\frac{2}{5}} + (0.125)^{\frac{2}{3}} \right\} =$$

- (1) 6.1
- (2) 0.61
- (3) 61
- (4) 610

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 88 Question Id : 2099631549 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

Ascending order of the numbers

$\frac{65}{63}, \frac{41}{40}, \frac{13}{14}, \frac{25}{24}, \frac{37}{35}$ is

$\frac{65}{63}, \frac{41}{40}, \frac{13}{14}, \frac{25}{24}, \frac{37}{35}$ ల ఆరోహణ క్రమం

(1) $\frac{13}{14}, \frac{41}{40}, \frac{65}{63}, \frac{25}{24}, \frac{37}{35}$

(2) $\frac{13}{14}, \frac{65}{63}, \frac{41}{40}, \frac{25}{24}, \frac{37}{35}$

(3) $\frac{13}{14}, \frac{25}{24}, \frac{41}{40}, \frac{65}{63}, \frac{37}{35}$

(4) $\frac{37}{35}, \frac{13}{14}, \frac{41}{40}, \frac{65}{63}, \frac{25}{24}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 89 Question Id : 2099631550 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

Decreasing order of the numbers

$7 - 4\sqrt{3}, 8 - 3\sqrt{7}, 4 - \sqrt{15}, 6 - \sqrt{35}, 5 - 2\sqrt{6}$ is

$7 - 4\sqrt{3}, 8 - 3\sqrt{7}, 4 - \sqrt{15}, 6 - \sqrt{35}, 5 - 2\sqrt{6}$ ల అవరోహణ క్రమం

(1) $4 - \sqrt{15}, 8 - 3\sqrt{7}, 7 - 4\sqrt{3}, 6 - \sqrt{35}, 5 - 2\sqrt{6}$

(2) $7 - 4\sqrt{3}, 6 - \sqrt{35}, 5 - 2\sqrt{6}, 4 - \sqrt{15}, 8 - 3\sqrt{7}$

(3) $4 - \sqrt{15}, 5 - 2\sqrt{6}, 6 - \sqrt{35}, 7 - 4\sqrt{3}, 8 - 3\sqrt{7}$

(4) $8 - 3\sqrt{7}, 6 - \sqrt{35}, 7 - 4\sqrt{3}, 5 - 2\sqrt{6}, 4 - \sqrt{15}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 90 Question Id : 2099631551 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

If $(x + 2y)$ percent of $x + 2y + 3z$ is same as $(2y + 3z)$ percent of $x + 2y + 3z$ then the relation between x and $z =$

$x + 2y + 3z$ లో $(x + 2y)$ శాతం, $x + 2y + 3z$ లో $(2y + 3z)$ శాతానికి సమానం అయితే, x, z ల మధ్య సంబంధము

(1) $x = 4z$

(2) $x = 6z$

(3) $x = 3z$

(4) $x = 5z$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 91 Question Id : 2099631552 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

If the sum of two numbers is $\frac{27}{20}$ of the first number, then the second number is what percent of the first number?

రెండు సంఖ్యల మొత్తం మొదటి సంఖ్యకు $\frac{27}{20}$ రెట్లు ఐతే, ఆ రెండవ సంఖ్య మొదటి సంఖ్యలో ఎంత శాతం ?

- (1) 25
- (2) 35
- (3) 30
- (4) 33

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 92 Question Id : 2099631553 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

The cost price of an article is C and its marked price is M. By allowing a discount of 10%, on marked price, one gains 10% profit. Then the relation between M and C is

ఒక వస్తువును కొన్నవెల C, దాని ప్రకటిత వెల M. ప్రకటిత వెలపై 10% తగ్గిస్తే, 10% లాభం వస్తుంది. అప్పుడు, M మరియు C ల మధ్య సంబంధం

- (1) $11M = 9C$
- (2) $7M = 11C$
- (3) $9M = 13C$
- (4) $9M = 11C$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 93 Question Id : 2099631554 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

An article costs Rs.12500. Marked price is fixed 30% extra over its cost price and is allowed 8% discount while selling. If the article is sold out, then profit earned (in rupees) is

ఒక వస్తువు యొక్క కొన్న వల రూ. 12500. కొన్నవల కంటే 30% అధికంగా ప్రకటిత వలను నిర్ధారించి, 8% తగ్గింపుతో ఆ వస్తువును అమ్మినపుడు వచ్చిన లాభం (రూ.లలో)

- (1) 2540
- (2) 2405
- (3) 2650
- (4) 2450

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 94 Question Id : 2099631555 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Three persons A, B and C enter into a partnership business with the investments in the ratio 5 : 4 : 3. A withdraws his investment at the end of 6 months, B also leaves the business by withdrawing his investment at the end of 9 months. C continues till the end. If the year-end profit is Rs.1530000, then the share of A (in rupees) is

A, B, Cలు ఒక భాగస్వామ్య వ్యాపారాన్ని 5 : 4 : 3 నిష్పత్తిలో పెట్టుబడులతో ప్రారంభించిరి. 6 నెలల తరువాత A ఆ వ్యాపారం నుండి నిష్క్రమించెను. 9 నెలల చివర B కూడా ఆ వ్యాపారం నుండి నిష్క్రమించెను. C చివరిదాకా వ్యాపారాన్ని కొనసాగించెను. సంవత్సరాంత లాభం రూ.1530000 అయిన, లాభంలో A యొక్క వాటా (రూ.లలో)

- (1) 630000
- (2) 450000
- (3) 540000
- (4) 360000

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 95 Question Id : 2099631556 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Two persons A and B begin a joint venture with the investments in the ratio 4 : 5. Another person C joins the business in the beginning of 3rd quarter with an investment equal to that of A. In the year-end profit if the C's share is Rs.244000, then A's share (in rupees) is

A, B అనే వ్యక్తులు 4 : 5 నిష్పత్తిలో పెట్టుబడితో ఒక ఉమ్మడి వ్యాపారాన్ని ప్రారంభించిరి. మూడో త్రైమాసికం ప్రారంభంలో A పెట్టుబడికి సమానమయిన పెట్టుబడితో C అనే వ్యక్తి వ్యాపారం లో చేరెను. సంవత్సరాంత లాభంలో C యొక్క వాటా రూ. 244000 అయినపుడు, లాభంలో A యొక్క వాటా (రూ.లలో)

- (1) 244000
- (2) 488000
- (3) 322000
- (4) 122000

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 96 Question Id : 2099631557 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Two pipes A and B can fill a tank in 6 hours and 8 hours respectively, while pipe C can empty the tank in 12 hours. If all the three pipes are opened at the same time, then the time taken to completely fill the tank is (in hours)

రెండు పంపులు A, Bలు ఒక ట్యాంక్ ను వరుసగా 6, 8 గంటలలో నింప గల్గితే, C అనే మూడో పంపు దానిని 12 గంటలలో ఖాళీ చేయగలదు. ఆ మూడు పంపులను ఒకేసారి తెరిచి ఉంచితే, ఆ ట్యాంక్ పూర్తిగా నిండటానికి పట్టే సమయం (గం.లలో)

- (1) 5
- (2) 6
- (3) 6.2
- (4) 4.8

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 97 Question Id : 2099631558 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

There are three taps A, B, C which are used to fill an empty water tank T. A can fill the empty tank in x hours, B and C individually empty the full tank in y and z hours respectively. When the tank is empty all the three taps are opened. Then the time taken to fill the empty tank is (In hours)

T అనే ఒక ఖాళీ నీళ్ళ తొట్టి ని నింపడానికి A, B, C అనే మూడు నల్లాలను ఉపయోగిస్తారు. నల్లా A ఆ ఖాళీ తొట్టి ని x గంటలలో, నిండు తొట్టి ని B, Cలు విడివిడిగా వరుసగా y, z గంటలలో ఖాళీ చేయగలవు. ఆ తొట్టి ఖాళీగా ఉన్నప్పుడు ఆ మూడు నల్లాలను తెరిస్తే, ఆ తొట్టి నిండటానికి పట్టే సమయం (గం.లలో)

(1) $\frac{xyz}{xy-yz-zx}$

(2) $\frac{xyz}{yz-xz-xy}$

(3) $\frac{xyz}{xy+yz-zx}$

(4) $\frac{xyz}{xy+yz+zx}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 98 Question Id : 2099631559 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Mohan goes to his office by walk. If he walks with the speed of 5kmph, he will be late by 4 minutes and if he increases his speed by 1 km, he reaches 4 minutes early. Then the distance between his home and office is

మోహన్ అతని కార్యాలయానికి నడుచుకుంటూ వెళ్తాడు. అతడు గంటకు 5 కి.మీ. వేగంతో నడిస్తే 4 నిమిషాలు ఆలస్యంగా, ఒకవేళ అతడి వేగాన్ని గంటకు 1 కి.మీ. పెంచితే 4 నిమిషాలు త్వరగా చేరుకుంటాడు. ఐతే, అతడి ఇంటికి, కార్యాలయానికి మధ్య దూరం

- (1) 4 km కి.మీ.
- (2) 3 km కి.మీ.
- (3) 3.5 km కి.మీ.
- (4) 4.5 km కి.మీ.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 99 Question Id : 2099631560 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

A car leaves the station A with a speed of 60 kmph and arrives at station B in 40 minutes. From B, the car moves towards the station C and reaches in 40 minutes. If the average speed of the car in travelling from A to C is 80 kmph, then the distance between A and C (in km) is

గంటకు 60 కి.మీ. వేగంతో ఒక కారు A అనే స్టేషన్ నుండి బయలుదేరి స్టేషన్ B కు 40 ని.లలో చేరుకున్నది. B నుండి C స్టేషన్ కు బయలుదేరి 40 ని. లలో చేరుకుంటుంది. A నుండి C కు ప్రయాణంలో కారు యొక్క సగటు వేగం గంటకు 80 కి.మీ. అయితే, A, C ల మధ్య దూరం (కి.మీ.లలో)

- (1) 120
- (2) 125
- (3) 140
- (4) 100

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 100 Question Id : 2099631561 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

Three persons A, B and C together can finish a job in 18 days. B and C together can finish the same job in 45 days. A and C together can finish the job in 24 days. If A, B, C individually finish the job in d_1, d_2, d_3 days respectively, then $d_1 : d_2 : d_3 =$

ముగ్గురు వ్యక్తులు A, B, C లు కలిసి ఒక పనిని 18 రోజులలో పూర్తిచేయగలరు. B, C లు ఇద్దరూ కలిసి ఆ పనిని 45 రోజులలో పూర్తి చేయగలరు. A, Cలు ఇద్దరూ కలిసి అదే పనిని 24 రోజులలో పూర్తిచేయగలరు. అదే పనిని A, B, C లు విడివిడిగా పూర్తి చేయుటకు పట్టు రోజులు వరుసగా d_1, d_2, d_3 అయినపుడు, $d_1 : d_2 : d_3 =$

- (1) 3 : 8 : 10
- (2) 5 : 12 : 20
- (3) 4 : 13 : 20
- (4) 5 : 14 : 20

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 101 Question Id : 2099631562 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

One day work in performing a job by three individuals P, Q, R are in the ratio 6 : 3 : 2. If Q and R together can finish the job in 9 days, then P and Q together can finish the same job in how many days ?

ఒక పనిని పూర్తి చేయుటలో ముగ్గురు వ్యక్తులు P, Q, R ల ఒక రోజు పని నిష్పత్తి 6 : 3 : 2. Q, Rలు ఇద్దరు కలిసి ఆ పనిని 9 రోజులలో చేయగలిగితే, P, Qలు ఇద్దరూ కలిసి ఎన్ని రోజులలో పూర్తి చేయగలరు?

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

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 102 Question Id : 2099631563 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Consider the rectangle ABCD with E, F being points of trisection on BC. Then the ratio of areas of quadrilaterals DABE and DABF is

BC పై త్రిధాకరణ బిందువులు E, F లు గల ABCD ఒక దీర్ఘ చతురస్రం. అప్పుడు, చతుర్భుజాలు DABE మరియు DABF ల వైశాల్యాల నిష్పత్తి

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

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 103 Question Id : 2099631564 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

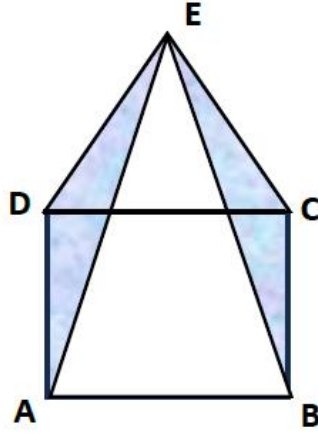
SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

Consider the figure given below, where in ABCD is a square and EDC is an equilateral triangle. Let a be the side of the square. Find the area of the shaded region (in sq. units).

క్రింద ఇవ్వబడిన పటంలో ABCD ఒక చతురస్రం, EDC ఒక సమబాహు త్రిభుజం లు కలవు. ఆ చతురస్రం భుజం a అనుకోండి. అయితే, ఆ పేజ్ చేయబడిన ప్రాంత వైశాల్యం కనుక్కోండి. (చ.యూ.లలో)



- (1) a^2
(2) $\frac{a^2}{3}$
(3) $\frac{2a^2}{3}$
(4) $\frac{a^2}{2}$

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 104 Question Id : 2099631565 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

If the ratio of the heights of two cones C_1, C_2 is $2 : 5$ and their diameters in the same order are in the ratio $6 : 7$, then the ratio of their volumes is

రెండు శంఖువులు C_1, C_2 ఎత్తుల నిష్పత్తి $2 : 5$ మరియు అదే క్రమంలో వాటి వ్యాసాల నిష్పత్తి $6 : 7$ అయితే, వాటి ఘన పరిమాణాల నిష్పత్తి

- (1) $36 : 49$
- (2) $4 : 25$
- (3) $72 : 245$
- (4) $53 : 225$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 105 Question Id : 2099631566 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

If the vertical angle of a right circular cone is 90° and its slant height is 20 cm, then its volume is (in cm^3)

ఒక క్రమ వృత్తాకార శంఖువు శీర్ష కోణం 90° మరియు దాని ఏటవాలు ఎత్తు 20 సెం.మీ. అయితే, దాని ఘనపరిమాణం (సెం.మీ.³లలో)

(1) $\frac{2000\sqrt{2}\pi}{3}$

(2) $\frac{1000\pi}{3}$

(3) 2000π

(4) $1000\sqrt{2}\pi$

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 106 Question Id : 2099631567 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

A rectangular room has floor dimensions $9ft \times 12ft$, with the height of the room being 9 ft. Four walls are to be painted. If the painting cost per sq.ft. is Rs.40, then the total cost for painting four walls (in rupees) is

ఒక దీర్ఘ చతురస్రాకార గది నేల కొలతలు 9 అడుగులు \times 12 అడుగులు మరియు ఆ గది ఎత్తు 9 అడుగులు. ఆ గది యొక్క నాలుగు గోడలకు రంగు వేయవలసి ఉన్నది. ప్రతి చ. అడుగు ఒక్కంటికి రూ.40 చొప్పున ఆ గది నాలుగు గోడలకు రంగు వేయడానికి అయ్యే ఖర్చు (రూ.లలో)

- (1) 16000
- (2) 15240
- (3) 15120
- (4) 15000

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 107 Question Id : 2099631568 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యం

There is a rectangular field of dimension $250 \times 200 m^2$. It is decided to go for fencing along the boundary, with a provision for a gate of width 4 m along the smaller side. The gate costs Rs.15000. The total expenditure including gate cost, incurred in fencing this field is Rs.131480, then the cost of fencing (only) per meter is

ఒక దీర్ఘ చతురస్రాకారపు క్షేత్రం కొలతలు $250 \times 200 మీ^2$. చిన్న భుజం పై 4 మీ. నిడివిని గేటు కొరకు వదిలి మిగతా చుట్టుతూ కంచె వేయుటకు నిర్ణయించిరి. గేటు ఖరీదు రూ.15000, గేటు ఖరీదుతో పాటు మొత్తం కంచె కూడా వేయుటకైన ఖర్చు రూ. 131480 అయితే, ప్రతి మీటరుకు కంచె వేయుటకైన ఖర్చు

- (1) 125
- (2) 130
- (3) 140
- (4) 145

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 108 Question Id : 2099631569 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

The radius and slant height of a cone are in the ratio 5 : 14. If its curved surface area is 3520 cm^2 , then the radius is (in cms) (take $\pi = \frac{22}{7}$)

ఒక శంఖువు యొక్క వ్యాసార్థం మరియు ఏటవాలు ఎత్తులు 5 : 14 నిష్పత్తిలో ఉన్నాయి. దాని వక్రతల వైశాల్యం 3520 చ. సెం.మీ. అయినపుడు దాని వ్యాసార్థం (సెం.మీ. లలో) (ఇక్కడ $\pi = \frac{22}{7}$ గా తీసుకోండి.)

- (1) 14
- (2) 28
- (3) 15
- (4) 20

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 109 Question Id : 2099631570 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

The remainder when 37^{65} is divided by 8 is

37^{65} ను 8 చే భాగించినపుడు లభించే శేషం

(1) 5

(2) 3

(3) 7

(4) 1

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 110 Question Id : 2099631571 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

1. Arithmetical Ability

అంకగణిత సామర్థ్యత

The smallest positive integer with four digits that satisfies $13x \equiv 1 \pmod{15}$ is

$13x \equiv 1 \pmod{15}$ ను తృప్తి పరిచే నాలుగంకెల సంఖ్యలలో కనిష్ఠ ధన సంఖ్య

(1) 1012

(2) 1039

(3) 1056

(4) 1073

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Sub-Section Number: 2
Sub-Section Id: 209963173
Question Shuffling Allowed : Yes

Question Number : 111 Question Id : 2099631572 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

Let $S = \{k \mid k \text{ is a natural number, } 1 \leq k \leq 150\}$,

$A = \{k \in S \mid k \text{ is a multiple of } 6\}$ and

$B = \{k \in S \mid k \text{ is a multiple of } 10\}$.

Then the total number of elements in the set $(A \cup B) - (A \cap B)$ is

$S = \{k \mid k \text{ ఒక సహజ సంఖ్య, } 1 \leq k \leq 150\}$,

$A = \{k \in S \mid 6 \text{ యొక్క గుణిజం } k \}$ మరియు

$B = \{k \in S \mid 10 \text{ యొక్క గుణిజం } k \}$ అయినపుడు,

$(A \cup B) - (A \cap B)$ అనే సమితిలోని మొత్తం మూలకాల సంఖ్య

(1) 45

(2) 40

(3) 35

(4) 30

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 112 Question Id : 2099631573 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

$$A = \{x \in R : |x - 3| < 3\}, B = \{x \in R : |x - 2| < 4\} \Rightarrow A \cap B =$$

- (1) $A \cup B$
- (2) B
- (3) A
- (4) ϕ

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 113 Question Id : 2099631574 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If $p(x) = x^3 - x^2 - 8x + 12$ and $q(x) = x^3 + 4x^2 - 3x - 18$, then GCD of $p(x)$ and $q(x)$ is

$p(x) = x^3 - x^2 - 8x + 12$, $q(x) = x^3 + 4x^2 - 3x - 18$ అయితే, $p(x)$, $q(x)$ ల గ.సా.భా.

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

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 114 Question Id : 2099631575 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If the sum of zeros of the cubic polynomial $p(x) = 3x^3 - k(k - 2)x^2 + 6x + 24$ is 5, then the possible values of k are

$p(x) = 3x^3 - k(k - 2)x^2 + 6x + 24$ అనే ఘన బహుపది యొక్క శూన్యాల మొత్తం 5 అయినపుడు, k కు వీలయ్యే విలువలు

(1) $-5, 3$

(2) $-5, -3$

(3) $5, 3$

(4) $5, -3$

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 115 Question Id : 2099631576 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If $p(x) = x^3 + 2x^2 + ax + b$, leaves remainders 0 and 1 when divided by $x - 1$, and $x - 2$ respectively then $a^2 + b^2 =$

$p(x) = x^3 + 2x^2 + ax + b$ ను $x - 1$ మరియు $x - 2$ లచే భాగించగా వచ్చు శేషాలు వరుసగా 0, 1 అయితే, $a^2 + b^2 =$

- (1) 121
- (2) 196
- (3) 100
- (4) 225

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 116 Question Id : 2099631577 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

The remainder when $x^3 + 3x^2 + 7x - 6$ divided by $(x - 2)$ is

$x^3 + 3x^2 + 7x - 6$ ను $(x - 2)$ చే భాగించినపుడు లభించే శేషం

(1) 24

(2) 26

(3) 28

(4) 12

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 117 Question Id : 2099631578 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

The common solution of equations $12x - 7xy + 12y = 0$ and

$12x + 5xy - 24y = 0$ is (x_0, y_0) . Then $x_0^2 + y_0^2 =$

$12x - 7xy + 12y = 0$ మరియు $12x + 5xy - 24y = 0$ అనే సమీకరణముల ఉమ్మడి

సాధన (x_0, y_0) అయితే, $x_0^2 + y_0^2 =$

(1) 13

(2) 27

(3) 25

(4) 18

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 118 Question Id : 2099631579 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

$$x = \sqrt{5 + \sqrt{21}}, y = \sqrt{5 - \sqrt{21}} \Rightarrow x + y + xy =$$

(1) $2 + \sqrt{14}$

(2) $4 + \sqrt{14}$

(3) $4 - \sqrt{14}$

(4) $\sqrt{14} - 2$

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 119 Question Id : 2099631580 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If $x^2 + y^2 + z^2 = xy + yz + zx, x \neq 0$, then $\frac{15x+4y+5z}{8x} =$

$x^2 + y^2 + z^2 = xy + yz + zx, x \neq 0$ అయితే $\frac{15x + 4y + 5z}{8x} =$

(1) 3

(2) 4

(3) 2

(4) 5

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 120 Question Id : 2099631581 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If the 10th and 20th terms of an arithmetic progression are 66 and 106 respectively, then the 15th term in that progression is

ఒక అంకశ్రేణిలో 10వ మరియు 20వ పదాలు వరుసగా 66 మరియు 106 అయినపుడు, ఆ శ్రేణిలోని 15వ పదం

- (1) 82
- (2) 78
- (3) 86
- (4) 94

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 121 Question Id : 2099631582 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If p^{th} and q^{th} terms of an arithmetic progression are q and p , then 2024^{th} term in that progression is

ఒక అంకశ్రేణి లోని p వ మరియు q వ పదాలు వరుసగా q మరియు p లయితే, ఆ శ్రేణిలో 2024 వ పదం

(1) $p + q - 2023$

(2) $p + q + 2023$

(3) $p + q - 2024$

(4) $p + q + 2024$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 122 Question Id : 2099631583 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

$$\cot \theta = \frac{5}{12} \Rightarrow \frac{1+\cos \theta}{1-\sin \theta} =$$

(1) 20

(2) 18

(3) 30

(4) 28

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 123 Question Id : 2099631584 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

$$\sin^2 30^\circ + \cos^2 45^\circ + \sin^2 60^\circ + \cos^2 120^\circ + \sin^2 150^\circ =$$

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

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

(3) 1

(4) 2

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 124 Question Id : 2099631585 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If $a \cos \theta + b \sin \theta = c$, and $a \sin \theta - b \cos \theta = d$, then

$a \cos \theta + b \sin \theta = c$, మరియు $a \sin \theta - b \cos \theta = d$ అయినప్పుడు,

(1) $a^2 + b^2 = c^2 + d^2$

(2) $a^2 - b^2 = c^2 - d^2$

(3) $a^2 + 2b^2 = c^2 + d^2$

(4) $2a^2 + 3b^2 = c^2 + d^2$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 125 Question Id : 2099631586 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

$$\frac{5}{1+\cot^2 \theta} + \frac{4}{1+\tan^2 \theta} + \cos^2 \theta =$$

(1) 1

(2) 9

(3) 5

(4) 0

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 126 Question Id : 2099631587 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

CD is a tower of height $25\sqrt{3}$ m. with the top of the tower being D. A, B are two points collinear with C lying on same side. If a person standing on top of the tower observes that angles of depression of A and B are respectively 30° and 60° , then the distance between A and B (in meters) is

$25\sqrt{3}$ మీ. ఎత్తు గల ఒక స్తంభం CD యొక్క శిఖరం D. C తో సరేఖీయంగా ఒకే వైపున గల రెండు బిందువులు A, B లు స్థంభాగ్రం నుండి ఒక వ్యక్తి A, B ల నిమ్న కోణాలు వరుసగా 30° మరియు 60° గా గమనించినట్లయితే, A, B ల మధ్య దూరం (మీ.లలో)

- (1) 60
- (2) 75
- (3) 50
- (4) 45

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 127 Question Id : 2099631588 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

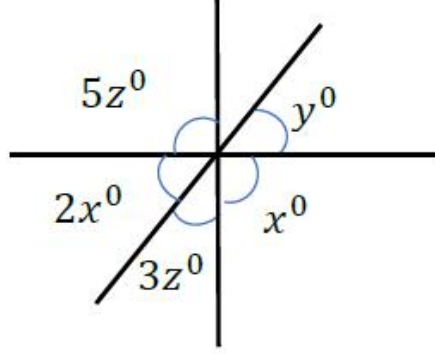
SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

In the following figure what is the value of x ?

క్రింది పటంలో x విలువ ఎంత ?



- (1) 37
- (2) 38.5
- (3) 50
- (4) 36

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 128 Question Id : 2099631589 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If the bisectors of angle $\angle ABC$ and $\angle ACB$ of a triangle ABC meet at a point O and if $\angle A = 60^\circ$, then $\angle BOC =$

త్రిభుజం ABC లోని $\angle ABC$, $\angle ACB$ ల కోణ సమద్విఖండన రేఖలు బిందువు O వద్ద కలుస్తూ $\angle A = 60^\circ$ అయితే, $\angle BOC =$

- (1) 135°
- (2) 120°
- (3) 105°
- (4) 75°

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 129 Question Id : 2099631590 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

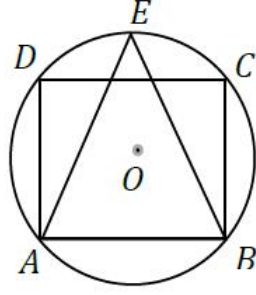
SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

In the following figure, if ABCD is a square and the circle with centre O is of radius 6 cm, then the area of ΔEAB (in sq. cm) is

ఈ క్రింది చిత్రంలో ABCD ఒక చతురస్రం, మరియు O ను కేంద్రంగా కల్గిన వృత్తపు వ్యాసార్థం 6 సెం.మీ. అయినపుడు, ΔEAB వైశాల్యం (చ.సెం.మీ. లలో)



- (1) $18(\sqrt{2} + 1)$
- (2) $16(\sqrt{2} + 1)$
- (3) $14(\sqrt{2} + 1)$
- (4) $20(\sqrt{2} + 1)$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 130 Question Id : 2099631591 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

Suppose ABCD is a quadrilateral. If the sum of the lengths of perpendiculars drawn from A and C onto the diagonal BD of length 10 cm is 18 cm., then the area of the quadrilateral ABCD (in sq.cm) is

ABCD ని ఒక చతుర్భుజం గా తీసికొనుము. A, C అనే బిందువుల నుండి 10 సెం.మీ. పొడవు గల BD అనే వికర్ణం మీదికి గీయబడిన లంబాల పొడవుల మొత్తం 18 సెం.మీ. అయినపుడు, ABCD చతుర్భుజ వైశాల్యం (చ.సెం.మీ.లలో)

- (1) 180
- (2) 100
- (3) 80
- (4) 90

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 131 Question Id : 2099631592 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

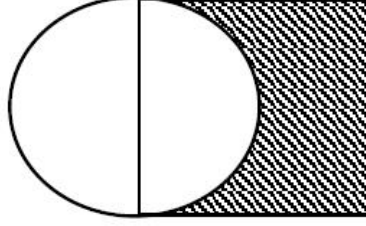
బీజీయ, జ్యామితీయ సామర్థ్యత

In the following figure unit square is given. What is the area of shaded region?

(take $\pi = \frac{22}{7}$) (in sq. units)

ఈ క్రింది చిత్రంలోని చతురస్ర వైశాల్యం 1 చ.యూ. పేడ్ చేయబడిన ప్రాంత వైశాల్యం

($\pi = \frac{22}{7}$ గా తీసికొనుము) (చ.యూ.లలో)



- (1) $\frac{17}{28}$
- (2) $\frac{19}{28}$
- (3) $\frac{23}{28}$
- (4) $\frac{25}{28}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 132 Question Id : 2099631593 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

In the triangle ABC, if $\angle A = x^0 + y^0$, $\angle B = 60^0 + y^0$ and $\angle C = 50^0 - x^0$, then $y =$

త్రిభుజం ABC లో $\angle A = x^0 + y^0$, $\angle B = 60^0 + y^0$ మరియు $\angle C = 50^0 - x^0$ అయినప్పుడు, $y =$

- (1) 45
- (2) 40
- (3) 30
- (4) 35

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Question Number : 133 Question Id : 2099631594 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

The largest possible value of k such that the distance between the points $(k, 3)$ and $(4, k)$ is 5 is

బిందువులు $(k, 3)$ మరియు $(4, k)$ ల మధ్యదూరం 5 అయేటట్లు k కు సాధ్యమయ్యే గరిష్ఠ విలువ

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

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 134 Question Id : 2099631595 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

$A(-1, 3), B(2, -5)$ and $(4, 6)$ are three points. Then the equation of the straight line passing through A and parallel to BC is

$A(-1, 3), B(2, -5), C(4, 6)$ లు మూడు బిందువులు. BC కు సమాంతరంగా ఉంటూ A గుండా పోయే సరళరేఖా సమీకరణం

(1) $-22x + 4y + 17 = 0$

(2) $11x - 2y + 17 = 0$

(3) $-11x + 2y + 17 = 0$

(4) $22x - 4y + 35 = 0$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 135 Question Id : 2099631596 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

The ratio in which the point $P(5,6)$ divides the line joining the points $A(2,3), B(9,10)$ internally is

$A(2,3), B(9,10)$ బిందువులను కలిపే రేఖ ను $P(5,6)$ అనే బిందువు అంతరంగా విభజించే నిష్పత్తి

(1) 4 : 5

(2) 5 : 3

(3) 3 : 5

(4) 3 : 4

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 136 Question Id : 2099631597 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

The equation of straight line passing through origin making angle 60° with positive direction of X-axis is

X-అక్షం దనాత్మక దిశతో 60° కోణం చేస్తూ మూల బిందువు గుండా పోయే సరళరేఖ

సమీకరణం

(1) $x - \sqrt{3}y = 0$

(2) $\sqrt{3}x - y = 0$

(3) $y = 3x$

(4) $x = 3y$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 137 Question Id : 2099631598 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

The equation of the straight line passing through the points O(0, 0) and A(2, 5) is

O(0, 0) , A(2, 5) అనే బిందువుల గుండా పోవు సరళరేఖ సమీకరణం

(1) $2x = 5y$

(2) $2y = 5x$

(3) $3x = 5y$

(4) $3y = 5x$

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 138 Question Id : 2099631599 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If the Y-intercept made by the line $5x + 3y - k = 0$ is -6 then $k =$

$5x + 3y - k = 0$ అనే సరళరేఖ Y-అక్షం పై చేయు అంతరఖండం -6 అయిన $k =$

(1) -18

(2) -15

(3) -12

(4) -21

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 139 Question Id : 2099631600 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

If a and b are X and Y-intercepts of the line $3x + 4y - 12 = 0$ respectively, then

$$a^2 + b^2 =$$

$3x + 4y - 12 = 0$ సరళరేఖ యొక్క X, Y- అంతర ఖండాలు వరుసగా a, b లు అయితే

$$a^2 + b^2 =$$

(1) 13

(2) 26

(3) 25

(4) 18

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 140 Question Id : 2099631601 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

2. Algebraic and Geometrical Ability

బీజీయ, జ్యామితీయ సామర్థ్యత

Equation of the line passing through $P(5, -12)$ and making equal intercepts on axes is

$P(5, -12)$ అనే బిందువు గుండా పోతూ అక్షాల మీద సమాన అంతర ఖండాలు చేయు

సరళరేఖ సమీకరణం

(1) $x - y - 17 = 0$

(2) $x + y + 17 = 0$

(3) $x + y + 7 = 0$

(4) $x + y - 17 = 0$

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 3
Sub-Section Id: 209963174
Question Shuffling Allowed : Yes

Question Number : 141 Question Id : 2099631602 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

The mean of the first 2000 odd positive integers is

మొదటి 2000 ల టేసి ధన పూర్ణ సంఖ్యల మధ్యమం

(1) 2000

(2) 4500

(3) 3000

(4) 2500

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 142 Question Id : 2099631603 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

The arithmetic mean of first 30 terms of an arithmetic progression whose first term is 2 and the common difference 4 is

మొదటి పదం 2, పదాంతరం 4 గా కలిగిన అంకశ్రేణి లో మొదటి 30 పదాల అంకమధ్యమం

- (1) 64
- (2) 70
- (3) 58
- (4) 60

Options :

- 1. ✓ 1
- 2. ✖ 2
- 3. ✖ 3
- 4. ✖ 4

Question Number : 143 Question Id : 2099631604 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

If the numbers 5, 7, 6, 14 have frequencies $x, x + 4, x - 3, x + 8$ respectively and if their arithmetic mean is 10, then $x =$

5, 7, 6, 14 ల పౌనః పున్యాలు వరుసగా $x, x + 4, x - 3, x + 8$. వాటి అంకమధ్యమం 10 అయితే, $x =$

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

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 144 Question Id : 2099631605 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

Median of the following grouped data is

క్రింది వర్గీకృత దత్తాంశ యొక్క మధ్యగతం

Class interval తరగతి అంతరం	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
Frequency పౌనః పున్యం	5	10	15	8	2

- (1) 33
- (2) 34
- (3) 34.3
- (4) 33.3

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 145 Question Id : 2099631606 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

In a data it is observed that the numbers 3, 5, 7, 11, 13, 17 appeared respectively 13, 21, 29, 49, 53, 69 times. Then the median of the data is

ఒక దత్తాంశంలో సంఖ్యలు 3, 5, 7, 11, 13, 17 లనేవి వరుసగా 13, 21, 29, 49, 53, 69 సార్లు అగుపించాయని గమనిస్తే ఆ దత్తాంశం యొక్క మధ్యగతం

- (1) 11
- (2) 13
- (3) 17
- (4) 7

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 146 Question Id : 2099631607 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

If the mode and median of a data are 10, 8 respectively, then the mean is

ఒకానొక దత్తంశపు బాహుళకం మరియు మధ్యగతాలు వరుసగా 10, 8 లు అయినపుడు, ఆ దత్తంశపు అంకమధ్యమం

(1) 14

(2) 22

(3) 34

(4) 7

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 147 Question Id : 2099631608 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

Mode of the observations is

క్రింది పరిశీలనల బాహుళకం

2, 3, 6, 4, 5, 6, 2, 3, 6, 3, 2, 6, 2, 5, 6, 2, 4, 5, 6

(1) 2

(2) 6

(3) 5

(4) 4

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 148 Question Id : 2099631609 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

If two dice are rolled at a time, then the probability of getting a sum of 6 is

రెండు పాచికలను ఒకే సారి దొర్లించి నపుడు, వాటిపై వచ్చే అంకెల మొత్తం 6 అయ్యే ఘటనకు సంభావ్యత

(1) $\frac{7}{36}$

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

(3) $\frac{5}{36}$

(4) $\frac{1}{12}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 149 Question Id : 2099631610 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

The following string of numbers show the number of children that 15 selected families have 1, 2, 3, 1, 4, 3, 2, 1, 2, 3, 4, 5, 2, 1, 1

Then the probability that a family selected randomly will have atmost 2 children is

ఎంపిక చేయబడిన 15 కుటుంబాలలో పిల్లల సంఖ్యను ఈ క్రింది సంఖ్యల సరణి సూచిస్తుంది.

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

యాదృచ్ఛికంగా ఎంపిక చేసిన కుటుంబంలో గరిష్టంగా ఇద్దరు పిల్లలుండే ఘటనకు సంభావ్యత

(1) $\frac{7}{15}$

(2) $\frac{3}{5}$

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

(4) $\frac{11}{15}$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 150 Question Id : 2099631611 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION – B : MATHEMATICAL ABILITY

3. Statistical Ability

సంఖ్యాకశాస్త్ర సామర్థ్యత

Let $A = \{1, 3, 5, \dots, 99\}$. An element x is chosen from A randomly. Then the probability that x is a perfect square is

$A = \{1, 3, 5, \dots, 99\}$ అనుకోండి. A నుండి ఒక మూలకం x యాదృచ్ఛికంగా ఎంచుకోవాలి. x పరిపూర్ణ వర్గం అయ్యేందుకు సంభావ్యత

- (1) 0.1
- (2) 0.12
- (3) 0.3
- (4) 0.2

Options :

- 1. ✓ 1
- 2. ✗ 2
- 3. ✗ 3
- 4. ✗ 4

Communication Ability

Section Id :	20996324
Section Number :	3
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions to be attempted:	38
Section Marks:	50
Maximum Instruction Time :	0

Sub-Section Number:	1
Sub-Section Id:	209963175
Question Shuffling Allowed :	Yes

Question Number : 151 Question Id : 2099631612 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

Someone who criticizes cherished ideas or beliefs is a/an _____ .

- (1) numismatic
- (2) iconoclast
- (3) doctor
- (4) scientist

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 152 Question Id : 2099631613 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Meanings

The government policy is to make India self-reliant. It encourages _____ industry.

- (1) foreign
- (2) indigenous
- (3) non-local
- (4) unavailable

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 153 Question Id : 2099631614 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Meanings

When Rajesh was asked to introspect himself by his teacher, he meant to _____
carefully

- (1) examine his own thoughts
- (2) look up to
- (3) look forward
- (4) look out

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 154 Question Id : 2099631615 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Meanings

My friend wavered between two opinions.

- (1) decided
- (2) hesitated
- (3) thought
- (4) arrived at

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 155 Question Id : 2099631616 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Meanings

He was kind. He was _____ even towards his opponents.

- (1) magnificent
- (2) magnanimous
- (3) foolish
- (4) unkind

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number:	2
Sub-Section Id:	209963176
Question Shuffling Allowed :	Yes

Question Number : 156 Question Id : 2099631617 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

What is the antonym of ‘noble’?

- (1) innoble
- (2) unnoble
- (3) ignoble
- (4) disnoble

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 157 Question Id : 2099631618 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Synonyms and Antonyms

The antonym of amateur

- (1) layman
- (2) professional
- (3) non-professional
- (4) incompetent

Options :

1. ✓ 1

2. ✗ 2

3. ✖ 3

4. ✖ 4

Question Number : 158 Question Id : 2099631619 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Synonyms and Antonyms

The synonym of ‘compassion’

- (1) compress
- (2) kindred
- (3) kindness
- (4) compromise

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 159 Question Id : 2099631620 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

Synonym of 'prompt'

- (1) mistake
- (2) wrong
- (3) interest
- (4) quick

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 160 Question Id : 2099631621 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

The synonym of eschew

- (1) encounter
- (2) meet
- (3) avoid
- (4) accept

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 3
Sub-Section Id: 209963177
Question Shuffling Allowed : Yes

Question Number : 161 Question Id : 2099631622 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Verb (Tense & Voice)

It is I who _____ taking care of his children.

(1) is

(2) am

(3) are

(4) were

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 162 Question Id : 2099631623 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Verb (Tense & Voice)

I _____ reading the book just now.

- (1) have finished
- (2) finished
- (3) had finished
- (4) am finished

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 163 Question Id : 2099631624 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Verb (Tense & Voice)

By the time they reached the theatre, the movie _____ already started.

- (1) has
- (2) is being
- (3) has been
- (4) had

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Verb (Tense & Voice)

He _____ daily at 5 a.m.

- (1) is getting up
- (2) has got up
- (3) gets up
- (4) has been getting

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Verb (Tense & Voice)

Who wrote Julius Ceasar? (Change the Voice)

- (1) Julius Ceasar written by whom?
- (2) By whom was Julius Ceasar written?
- (3) By whom Julius Ceasar was written?
- (4) By whom is Julius Ceasar written?

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 4
Sub-Section Id: 209963178
Question Shuffling Allowed : Yes

Question Number : 166 Question Id : 2099631627 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Phrasal Verbs and Idioms

My friend was at loggerheads with his classmates.
(Find out the meaning of the underlined idiom)

- (1) head on collision
- (2) strongly disagree
- (3) deeply in love
- (4) in close association

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 167 Question Id : 2099631628 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

Both the teams are playing very well. To choose between the two is a real toss-up.

The underlined idiom means

- (1) It is easy to choose the winning team.
- (2) It is difficult to toss up the coin.
- (3) It is difficult to choose the winning team.
- (4) It is not necessary to toss up the coin to choose the winning team.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 168 Question Id : 2099631629 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

The protesting employees were asked to _____ their strike.

- (1) call over
- (2) call on
- (3) call of
- (4) call off

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 169 Question Id : 2099631630 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Phrasal Verbs and Idioms

He got _____ the train.

- (1) of
- (2) off
- (3) down
- (4) in

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 170 Question Id : 2099631631 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Phrasal Verbs and Idioms

Doctor advised him to give up junk food.

The underlined phrase means

- (1) continue
- (2) start
- (3) retain
- (4) abandon

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 5
Sub-Section Id: 209963179
Question Shuffling Allowed : Yes

Question Number : 171 Question Id : 2099631632 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Articles and Propositions

Rama considered Raju _____ genius.

(1) a

(2) the

(3) an

(4) one

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 172 Question Id : 2099631633 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Articles and Propositions

He gave the beggar _____ one-rupee note.

- (1) an
- (2) a
- (3) the
- (4) this

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 173 Question Id : 2099631634 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Articles and Propositions

The boat moved gently _____ the river.

- (1) above
- (2) under
- (3) upon
- (4) in

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✖ 4

Question Number : 174 Question Id : 2099631635 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Articles and Propositions

My friend has been exempted _____ remitting the fee for the examination.

- (1) on
- (2) from
- (3) for
- (4) of

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 175 Question Id : 2099631636 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Articles and Propositions

Though he finished his studies long back, he has been still looking
_____ a job.

- (1) at
- (2) for
- (3) upon
- (4) up

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 6
Sub-Section Id: 209963180
Question Shuffling Allowed : Yes

Question Number : 176 Question Id : 2099631637 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Computer Terminology

Applet is

- (1) a small apple
- (2) a small java application that is downloaded from java-based web
- (3) browser
- (4) apple berry

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 177 Question Id : 2099631638 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

A term used to describe computer's aptitude to mimic human abilities.

- (1) Augmented Reality
- (2) Artificial Intelligence
- (3) Automation
- (4) Big data

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 178 Question Id : 2099631639 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Computer Terminology

One of the following is NOT a malware

- (1) Trojan
- (2) Rootkits
- (3) Keyloggers
- (4) Parallel port

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✖ 4

Question Number : 179 Question Id : 2099631640 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Computer Terminology

DPI stands for

- (1) Development Parameter Index
- (2) Dots Per Inch
- (3) Dues Payment Installment
- (4) Dense Pavement Ivory

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 180 Question Id : 2099631641 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

WAN stands for

- (1) World-wide Area Network
- (2) Web Area Network
- (3) Wide Area Network
- (4) Web Analysis Network

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Sub-Section Number:	7
Sub-Section Id:	209963181
Question Shuffling Allowed :	Yes

Question Number : 181 Question Id : 2099631642 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

What is Stock ?

- (1) A pile of sticks.
- (2) Actual goods or materials a business currently has on hand.
- (3) A phrase used to represent a group of abstract things
- (4) Another name for tick-tocking

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 182 Question Id : 2099631643 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Business Terminology

A skill that enables a person to anticipate what might happen and prepare for any eventuality.

- (1) Backward Planning
- (2) Forward Planning
- (3) Ad-hoc Planning
- (4) Action Point

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✖ 4

Question Number : 183 Question Id : 2099631644 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Business Terminology

The reduction in value of assets over a period of time is called _____.

- (1) recession
- (2) depreciation
- (3) appreciation
- (4) inflation

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 184 Question Id : 2099631645 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Business Terminology

An unauthorized representation of a registered trade mark on goods similar for which the trademark is registered

- (1) Countertrade
- (2) Conterfeit
- (3) Counter
- (4) Cost-plus pricing

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 185 Question Id : 2099631646 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Business Terminology

Costs you must pay whether your business is doing well or not.

- (1) Variable Costs
- (2) Fixed Costs
- (3) Accounts Payable
- (4) Margin

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number:	8
Sub-Section Id:	209963182
Question Shuffling Allowed :	No

Question Id : 2099631647 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension
Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in
seconds) : 0 Calculator : None

Question Numbers : (186 to 190)

Children have always been taken for granted although reams of documents have been churned out by international and national agencies trying to better the child's tomorrow. Despite all the words written, promises made and conventions signed, too little has changed. A good proportion of children throughout the world, especially in India, form a part of the toiling masses – destitute, deprived and disadvantaged. Millions of them work in fields and factories, on street corners and in garbage dumps, in private houses and in 'public' houses. Most do some work from their earliest years, helping around the home or running errands? With a low level of education and rundown sense of social responsibility, such children can do much harm to society if they are not treated as equal to others and given equal protection and opportunities to develop to the best of their potential.

The existence of child labour in India is a complex reality, a social crime, a crime against humanity. It is a symptom, however, not the disease. It is but natural that one may be tempted to ask why the problem still exists.

Poverty is the principal and parent cause for the prevalence and persistence of child labour. Large number of dependent children, parental illiteracy, unstable and poor income, and few income-generating assets are the more likely reasons for children ending up working rather than studying. Some studies reveal higher incidence of child labour in poor single-parent families. However, many children work not entirely because of poverty but because of pressure from parents who themselves sit idle or demand extra income to satisfy their various addictions.

Sub questions

Question Number : 186 Question Id : 2099631648 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

Child labour is

- (1) a disease
- (2) a symptom
- (3) a boon
- (4) social responsibility

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 187 Question Id : 2099631649 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-1

What is the meaning of ‘destitute’?

- (1) approved
- (2) delivered
- (3) deprived
- (4) designed

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 188 Question Id : 2099631650 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-1

The theme of the passage

- (1) Manual Labour
- (2) Child Labour
- (3) Social Crime
- (4) Social Responsibility

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 189 Question Id : 2099631651 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

Incidence of child labour is high in

- (1) joint families.
- (2) nuclear families.
- (3) single-parent families.
- (4) poor single-parent families.

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 190 Question Id : 2099631652 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-1

According to the passage, Child labour is found in

- (1) garbage dumps
- (2) schools
- (3) warehouses
- (4) old age homes

Options :

1. ✓ 1

2. ✗ 2

3. ✖ 3

4. ✖ 4

Sub-Section Number: 9
Sub-Section Id: 209963183
Question Shuffling Allowed : No

Question Id : 2099631653 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Question Numbers : (191 to 195)

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-2

Civilizations have flourished in the past and gone on to establish themselves based on the foundations of singular inventions like use of iron or copper or bronze. While the past can boast of the iron and the Bronze Ages, our presents days' singular invention, which has become as omnipresent as the iron and bronze tools in the past ages, is the computer. An invention of miraculous dimensions, computers have revolutionized our lifestyles for the better and continue to do so. In less than fifty years they have influenced practically every field of activity. The Computer Age is our new reality.

No one could have imagined that the initial computing machines would so soon be developed into the highly sophisticated present day computers. And this stupendous revolution has been carried out by the computer without a shot being fired or a drop of blood being shed. Computers have taken up key roles in all fields of activity including agriculture, weather forecast, scientific research, designing, banks and financial institutions, space research and technology, communication and media, medicine, aviation, railways, traffic control, language learning, literature and entertainment.

A computer is an electronic device that can carry out calculations and process information. Vast amounts of data can be handled effectively and efficiently at a very fast rate. A computer can virtually carry out any activity but it cannot think, at least for now! It thus requires a human operator and a set of detailed instructions, called a program.

Sub questions

Question Number : 191 Question Id : 2099631654 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

What is the singular invention of the present day?

- (1) Iron and bronze
- (2) Computer
- (3) Agriculture
- (4) Civilization

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 192 Question Id : 2099631655 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None
Correct Marks : 1 Wrong Marks : 0

Meaning of ‘miraculous’

- (1) ordinary
- (2) terrifying
- (3) amazing
- (4) disgusting

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 193 Question Id : 2099631656 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-2

In which field of activity, computer does not play a key role?

- (1) Space research & technology
- (2) weather forecast
- (3) research and development
- (4) geography

Options :

1. ✓ 1

2. ✗ 2

3. ✖ 3

4. ✖ 4

Question Number : 194 Question Id : 2099631657 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-2

A program in computer is

- (1) data
- (2) a set of detailed instructions
- (3) virtual activity
- (4) human operator

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 195 Question Id : 2099631658 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

The title of the passage can be

- (1) Iron and Bronze Ages
- (2) Research and Development
- (3) Computer : A Silent Revolution
- (4) Computer Operation

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Sub-Section Number:	10
Sub-Section Id:	209963184
Question Shuffling Allowed :	No

Question Id : 2099631659 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Question Numbers : (196 to 200)

Now comes the Information Revolution and in its wake comes the 'network society'. It has opened new horizons, and tests to the limit the ability of political and economic leaders to manage the repercussions of the changes. And, what changes. Suddenly those great walls and formidable borders and barriers seem ridiculously meaningless. The Internet leaps borders with impunity--a click of your mouse and the material held on a computer in Indonesia gives way to material compiled in Sweden. If Indonesia has different rules of decency or probity from Sweden, nothing much can be done. Furthermore, in the network society the line demarcating public and private communication simply fades away. All this appears reprehensible to most of us, for change, and that too rapid change, is not easily accepted by all. Easy, quick and wide access to information in combination with the ease of communication between individuals interested in the same fields, the rapid advance in and simplification of many technologies have all led to the empowerment of the individual. While this is seen as a positive step by some, there are others who anxiously point out the negative aspects. Crime has become easier; sitting in their rooms persons operating their computers have been able to spirit away billions of dollars from bank accounts.

Sub questions

Question Number : 196 Question Id : 2099631660 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-3

'Network society' emerged due to

- (1) Industrial Revolution
- (2) Agricultural Revolution
- (3) Information Revolution
- (4) Silent Revolution

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 197 Question Id : 2099631661 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-3

The word 'impunity' in the passage means

- (1) liability for punishment
- (2) freedom from punishment
- (3) impurity
- (4) authority

Options :

1. ✓ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 198 Question Id : 2099631662 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

"The internet leaps borders with impunity" refers to

- (1) jumping of borders of the country
- (2) inaccessibility of data
- (3) jumping of data on the Internet
- (4) easy access to the data on the Internet

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 199 Question Id : 2099631663 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-3

In the network society, the distinction between public and private communication

- (1) figures
- (2) blurs
- (3) improves
- (4) exists

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 200 Question Id : 2099631664 Question Type : MCQ Option Shuffling : No Display Question Number : Yes
Maximum Instruction Time(in seconds) : 0 Minimum Instruction Time(in seconds) : 0 Calculator : None

Correct Marks : 1 Wrong Marks : 0

SECTION - C : COMMUNICATION ABILITY – Comprehension Passage-3

'Crime has become easier': The word 'crime' in the passage refers to

- (1) Violence
- (2) simplification of technologies
- (3) Cyber-crime
- (4) Information technology

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4