National Testing Agency

Question Paper Name: Paper II EHG 8th Jan 2019 Shift 2

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Paper II

Group Number:

Group Id: 416529143

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390

Mathematics

Section Id: 416529211

Section Number: 1
Section type: Online

Mandatory or Optional: Mandatory

Number of Questions:30Number of Questions to be attempted:30Section Marks:120Display Number Panel:YesGroup All Questions:No

Sub-Section Number: 1

Sub-Section Id: 416529326

Question Shuffling Allowed: Yes

Question Number: 1 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

In a survey it was found that 21 people liked product A, 26 liked product B and 29 liked product C. If 14 people liked products A and B, 12 people liked products C and A, 14 people liked products B and C and 8 liked all the three products. Then the number of people who liked product C only is:

- 1 4
- 2 6
- 3. 11
- 4. 15

Question Number: 1 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

एक सर्वेक्षण में यह पाया गया कि 21 लोगों ने वस्तु A को पसन्द किया, 26 ने वस्तु B को पसन्द किया तथा 29 ने वस्तु C को पसन्द किया। यदि 14 लोगों ने वस्तुओं A तथा B दोनों को पसन्द किया, 12 लोगों ने वस्तुओं C तथा A दोनों को पसन्द किया, 14 लोगों ने वस्तुओं B तथा C दोनों को पसन्द किया और 8 लोगों ने तीनों वस्तुओं को पसन्द किया, तो उन लोगों की संख्या, जिन्होंने केवल वस्तु C को पसन्द किया, है:

Options:

- 1. 4
- 2 6
- 3 11
- 4 15

Question Number: 1 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

કોઈ એક સર્વેક્ષણમાં એવું માલૂમ પડે છે કે 21 લોકો વસ્તુ A ને પસંદ કરે છે, 26 લોકો વસ્તુ B ને પસંદ કરે છે અને 29 લોકો વસ્તુ C ને પસંદ કરે છે. જો 14 લોકો વસ્તુઓ A અને B ને પસંદ કરતાં હોય, 12 લોકો વસ્તુઓ C અને A ને પસંદ કરતા હોય, 14 લોકો વસ્તુઓ B અને C ને પસંદ કરતા હોય અને 8 લોકો ત્રણેય વસ્તુઓને પસંદ કરતા હોય, તો ફક્ત વસ્તુ C ને પસંદ કરતા હોય તેવા લોકોની સંખ્યા છે.

Options:

1.4

- 2 6
- $_3$ 11
- 4. 15

Question Number : 2 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

सम्मिश्र समतल में बिन्दु $w = \text{Re}(z) + \frac{1}{z}$, जहाँ

|z|=3, का बिन्दुपथ है :

Options:

- 1 एक परवलय
- 2. एक वृत्त
- _२ एक दीर्घवृत्त
- एक अतिपरवलय

Question Number: 2 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

સંકર સંખ્યાઓના સમતલમાં |z|=3 ને સંતોષે તેવા બિંદુ

$$w = Re(z) + \frac{1}{z}$$
, નો બિંદુપથ એ એક _____

છે.

Options:

- 1. પરવલય
- 2. 90
- 3. ઉપવલય
- 4 અતિપરવલય

Question Number: 2 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

The locus of the point $w = \text{Re}(z) + \frac{1}{z}$,

where |z| = 3, in complex plane is :

Options:

- a parabola
- 2. a circle
- 3. an ellipse
- a hyperbola

Question Number: 3 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1

If each pair of three equations

$$x^{2}-p_{1}x+2=0, x^{2}-p_{2}x+3=0,$$

 $x^{2}-p_{3}x+6=0$

have a common root, then the positive values of p_1 , p_2 , p_3 are, respectively:

Options:

- 1. 3, 4, 5
- 2, 2, 3, 6
- 3 1, 3, 6
- 4, 3, 5, 6

Question Number: 3 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

यदि तीन समीकरणों

$$x^2 - p_1 x + 2 = 0$$
, $x^2 - p_2 x + 3 = 0$,
 $x^2 - p_3 x + 6 = 0$

के प्रत्येक युग्म का एक उभयनिष्ठ मूल है, तो

 $p_{1'} \, p_{2'} \, p_3$ के धनात्मक मान क्रमशः है :

- 1. 3, 4, 5
- 2, 2, 3, 6

3. 1, 3, 6

4 3, 5, 6

Question Number : 3 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

ત્રણ સમીકરણો

$$x^2 - p_1 x + 2 = 0, x^2 - p_2 x + 3 = 0,$$

 $x^2 - p_3 x + 6 = 0$

માંથી દરેક જોડને જો એક સામાન્ય બીજ હોય, તો

 p_1, p_2 અને p_3 ની ધન કિંમતો અનુક્રમે ______ છે.

Options:

1. 3, 4, 5

2, 3, 6

3, 1, 3, 6

4, 3, 5, 6

Question Number: 4 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

Let
$$A = \begin{bmatrix} 3a & b & c \\ b & 3c & a \\ c & a & 3b \end{bmatrix}$$
 be a 3×3 matrix

where a, b, $c \in R$. If abc = 1, $AA^T = 64 I_3$ and det(A) > 0, then $(a^3 + b^3 + c^3)$, is:

Options:

- 1. 21
- 2 11
- ₂ 9
- 4. 7

Question Number: 4 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

माना
$$A = \begin{bmatrix} 3a & b & c \\ b & 3c & a \\ c & a & 3b \end{bmatrix}$$
, 3×3 का एक आव्यूह

है जबिक a, b, c \in R. यदि abc = 1, AA^T = 64 I_3 तथा det (A) > 0, तो (a³ + b³ + c³) है :

Options:

- 1. 21
- 2. 11
- 3 9
- 4. 7

Question Number : 4 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

ધારો કે
$$A = \begin{bmatrix} 3a & b & c \\ b & 3c & a \\ c & a & 3b \end{bmatrix}$$
 એ 3×3 શ્રેણિક છે.

જયાં a, b, c \in R. જો abc = 1, AA^T = 64 I₃ અને det (A) > 0, તો (a³ + b³ + c³) બરાબર _____ છે.

Options:

- 1. 21
- 2 11
- 5 9
- 4. 7

Question Number : 5 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The value of 'a' for which system of linear equations

$$x + ay + z = 1$$

$$ax+y+z=1$$

$$x+y+az=1$$

has no solution is:

```
1. 1
2. -1
_{4.}-2
Question Number: 5 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 'a' का वह मान, जिसके लिए रैखिक समीकरण निकाय
 x + ay + z = 1
 ax+y+z=1
 x + y + az = 1
 का कोई हल नहीं है, है :
Options:
1. 1
2. -1
3. 2
4. -2
Question Number : 5 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 4 Wrong Marks: 1
  સુરેખ સમીકરણ સંહિત
  x + ay + z = 1
  ax+y+z=1
  x + y + az = 1
  ને એક પણ ઉકેલ ન હોય, તે માટેની 'a' ની કિંમત
       છે.
Options:
1 1
2. -1
3. 2
4. -2
```

Correct Marks: 4 Wrong Marks: 1
The maximum number of points of intersection of 4 distinct circles and 8 distinct straight lines, is:
Options:
1. 66
2. 64
3. 104
4. 40
Question Number: 6 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
चार भिन्न वृत्तों तथा आठ भिन्न सरल रेखाओं के प्रतिच्छेदन
बिन्दुओं की अधिकतम संख्या है :
Options:
1. 66
2. 64
3. 104
4. 40
Question Number: 6 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
4 ભિન્ન વર્તુળો અને 8 ભિન્ન રેખાઓ ના છેદબિંદુઓની
મહત્તમ સંખ્યા છે.
Options:
1. 66
2. 64
з. 104
4. 40

Question Number : 7 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1
The sum of all the coefficients in the binomial expansion of $(1+x)^n$ is 1024. Then the largest coefficient in the expansion is :
Options : 1. 512
252
3. 256
4. 352
Question Number: 7 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
$(1+x)^n$ के द्विपद प्रसार में सभी गुणांकों का योग
1024 है, तो इस प्रसार में अधिकतम गुणांक है :
Options : 1. 512
2. 252
3. 256
4. 352
Question Number: 7 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
$(1+x)^{\mathrm{n}}$ ના દ્વિપદી વિસ્તરણમાં સહગુણકોનો સરવાળો
1024 છે. તો આ વિસ્તરણમાં મહત્તમ સહગુણક
છે.
Options:
1, 512
2. 252
3. 256
4. 352

Question Number : 8 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

If three real numbers, a, b, c, all greater than one, are in a geometric progression such

that
$$\frac{\log_e a}{x} = \frac{\log_e b}{2y} = \frac{\log_e c}{3z}$$
, where x, y

and z are non-zero real numbers, then:

Options:

1.
$$2y = x + 3z$$

$$y = x + 3z$$

$$3. 2y = x + z$$

4.
$$y=x+z$$

Question Number: 8 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

यदि तीन वास्तविक संख्यायें a, b, c (प्रत्येक 1 से अधिक) गुणोत्तर श्रेढ़ी में इस प्रकार हैं कि

$$\frac{\log_e a}{x} = \frac{\log_e b}{2y} = \frac{\log_e c}{3z}$$
, जहाँ x , y तथा z

अशुन्य वास्तविक संख्यायें हैं, तो :

Options:

1.
$$2y = x + 3z$$

2.
$$4y = x + 3z$$

$$3. 2y = x + z$$

4.
$$y=x+z$$

Question Number: 8 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

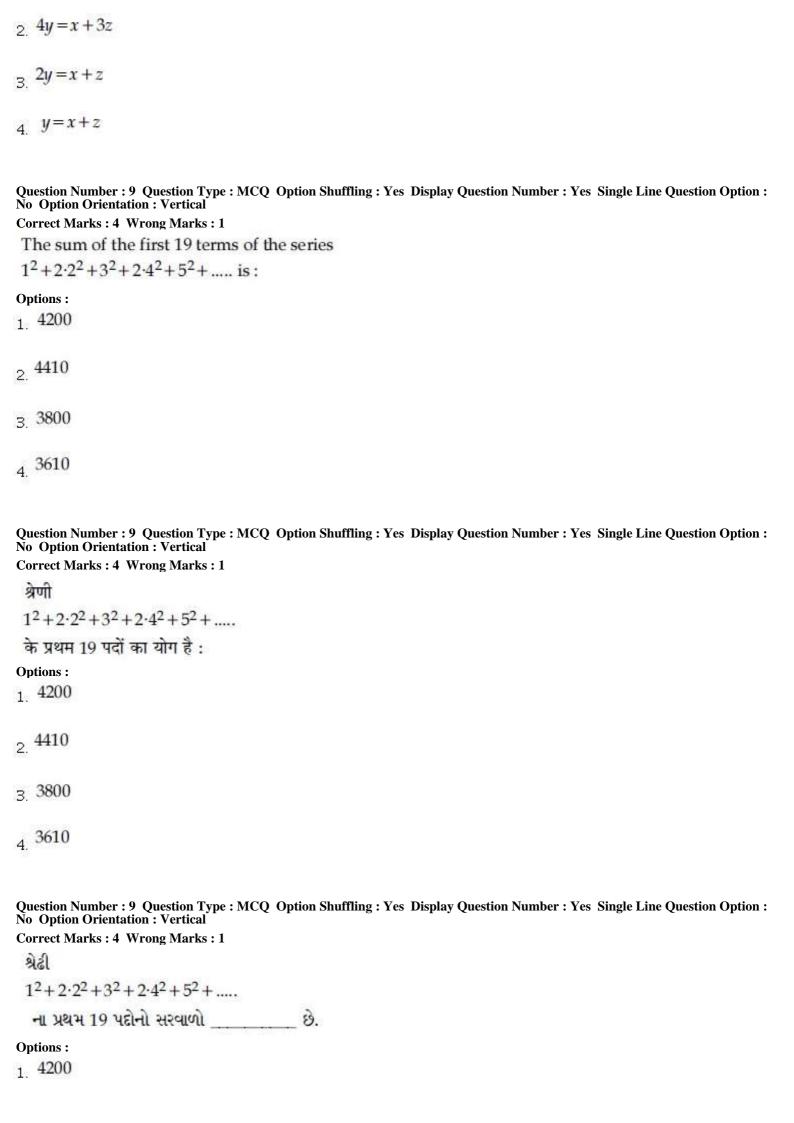
Correct Marks: 4 Wrong Marks: 1

જો a, b, c એ તમામ 1 કરતાં મોટી ત્રણ વાસ્તવિક સંખ્યાઓ સમગુણોત્તર શ્રેણી (G.P.) માં હોય કે જેથી

$$\frac{\log_e a}{x} = \frac{\log_e b}{2y} = \frac{\log_e c}{3z}$$
 થાય, જ્યાં x, y અને

z શૂન્યેતર વાસ્તવિક સંખ્યાઓ છે, તો

1.
$$2y = x + 3z$$



2. 4410

3 3800

4. 3610

Question Number: 10 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

If $f: \mathbb{R} \to \mathbb{R}$ be a differentiable function such that f(3) = 7 and f'(3) = 1, then the value of

$$\lim_{x\to 3} \int_{7}^{f(x)} \frac{3t^2}{(x-3)} dt$$
, is:

Options:

1. 21

2. 147

3.441

4. 105

Question Number: 10 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

यदि $f \colon \mathbf{R} \to \mathbf{R}$ एक अवलनीय फलन इस प्रकार है कि

$$f(3) = 7$$
 तथा $f'(3) = 1$, तो

$$\lim_{x\to 3} \int_{7}^{f(x)} \frac{3t^2}{(x-3)} dt$$
 का मान है:

Options:

1. 21

2. 147

3 441

4 105

Question Number: 10 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

જો વિધેય $f: \mathbb{R} \to \mathbb{R}$ વિકલનીય છે તથા f(3) = 7 અને f'(3) = 1 હોય, તો

$$\lim_{x \to 3} \int_{7}^{f(x)} \frac{3t^2}{(x-3)} dt - 1$$
 કિંમત _____ છે.

Options:

- 1. 21
- 2 147
- 3 441
- 4. 105

Question Number: 11 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

यदि
$$f(x) = \begin{cases} ax^2 + bx + 4, x \ge -1 \\ bx^2 + a, x < -1 \end{cases}$$
 द्वारा

परिभाषित फलन \mathbf{R} पर अवकलनीय है, तो $\mathbf{f}(2)$ बराबर

है :

Options:

- 1. 16
- 2. -4
- 3. **2**0
- 4 12

Question Number : 11 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

$$f(x) = \begin{cases} ax^2 + bx + 4, & x \ge -1 \\ bx^2 + a, & x < -1 \end{cases}$$

દ્વારા વ્યાખ્યાયિત વિધેય f(x) જો $\mathbf R$ પર વિકલનીય હોય,

- 1. 16
- 2. -4

 $_{3}$ 20

4. 12

Question Number: 11 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

If the function f(x) defined by

$$f(x) = \begin{cases} ax^2 + bx + 4, & x \ge -1 \\ bx^2 + a, & x < -1 \end{cases}$$

is differentiable on R, then f(2) equals:

Options:

1 16

 2 -4

3, **2**0

4 12

Question Number: 12 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Let m(b) be the minimum value of the function f(x) defined by

 $f(x) = (1 + b^2)x^2 + 4bx + 4, x \in \mathbb{R}.$

If the range of m(b) is the interval [2, 4], then the range of values of b is the interval:

Options:

1. [0, 1]

2. [-1,0]

 $\left[-\frac{1}{2},\,\frac{1}{2}\right]$

[-1,1]

Question Number: 12 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1 माना $f(x) = (1 + b^2)x^2 + 4bx + 4$, $x \in \mathbb{R}$ द्वारा परिभाषित फलन का न्यूनतम मान m(b) है। यदि m(b) का परिसर, अंतराल [2, 4] है, तो b के मानों का परिसर निम्न में से कौन–सा अंतराल है?

Options:

[0,1]

2. [-1,0]

 $\left[-\frac{1}{2},\,\frac{1}{2}\right]$

[-1,1]

Question Number: 12 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

ધારો કે $f(x) = (1 + b^2)x^2 + 4bx + 4$, $x \in \mathbb{R}$ દ્વારા વ્યાખ્યાયિત વિધેય f(x) ની ન્યૂનતમ કિંમત m(b) છે. જો m(b) નો વિસ્તાર, અંતરાલ [2,4] હોય, તો b નો વિસ્તાર ______ છે.

Options:

1. [0, 1]

2. [-1,0]

 $\left[-\frac{1}{2},\,\frac{1}{2}\right]$

[-1,1]

Question Number: 13 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No. Option Orientation: Vertical

No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

The equation $x^3 + e^x + 5 = 0$ ($x \in \mathbb{R}$), has:

Options:

1. no solution

exactly one solution

3. exactly two solutions

infinitely many solutions

Question Number: 13 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

समीकरण $x^3 + e^x + 5 = 0 \ (x \in \mathbb{R})$:

Options:

1 का कोई हल नहीं है।

्र का मात्र एक हल है।

3. के मात्र दो हल हैं।

के अनन्त हल हैं।

Question Number: 13 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

સમીકરણ $x^3 + e^x + 5 = 0 \ (x \in \mathbb{R})$, ને

Options:

1 એક પણ ઉકેલ નથી.

🤈 બરાબર એક જ ઉકેલ છે.

₃ બરાબર બે જ ઉકેલો છે.

₄ અનંત ઉકેલો છે.

Question Number: 14 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Let

$$\int (\sin x) \left(\sqrt{x} - \frac{1}{4x\sqrt{x}} \right) dx = \sin x f(x) - \sqrt{x} g(x) + C,$$

where C is a constant of integration.

Then f(x) and g(x) are, respectively,

Options:

 $\frac{1}{2\sqrt{x}}$ and $\cos x$

$$\sqrt{x}$$
 and $-\sin x$

$$\frac{2}{\sqrt{x}}$$
 and $-\cos x$

$$2\sqrt{x}$$
 and $\sin x$

Question Number: 14 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

माना

$$\int (\sin x) \left(\sqrt{x} - \frac{1}{4x\sqrt{x}} \right) dx = \sin x f(x) - \sqrt{x} g(x) + C,$$

जहाँ C एक समाकलन अचर है, तो f(x) तथा g(x)

क्रमशः है :

Options:

$$\frac{1}{2\sqrt{x}} \ \text{तथा} \cos x$$

$$\sqrt{x}$$
 तथा $-\sin x$

$$\frac{2}{\sqrt{x}}$$
 तथा $-\cos x$

$$4. 2\sqrt{x}$$
 तथा $\sin x$

Question Number: 14 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

ધારો કે

$$\int (\sin x) \left(\sqrt{x} - \frac{1}{4x\sqrt{x}} \right) dx = \sin x f(x) - \sqrt{x} g(x) + C,$$

જયાં C એ સંકલનનો અચળાંક છે, તો f(x) અને g(x)

અનુક્રમે _____ છે.

$$\frac{1}{2\sqrt{x}}$$
 અને $\cos x$

$$\sqrt{x}$$
 અને $-\sin x$

$$\frac{2}{\sqrt{x}}$$
 અને $-\cos x$

$$\sqrt{2\sqrt{x}}$$
 અને $\sin x$

Question Number: 15 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

If $f(x) = [x^2] + g(x)$, where [x] represents the greatest integer $\leq x$, and

$$g(x) = \begin{cases} -2x-3, & \frac{-3}{2} \le x < -1 \\ x & -1 \le x < 1 \\ 3-2x, & 1 \le x \le \frac{3}{2} \end{cases}$$

then the value of $\int_{-\frac{3}{2}}^{\frac{3}{2}} f(x) dx$, is:

Options:

$$4 + 2\sqrt{2}$$

$$_{2}$$
 $4-2\sqrt{2}$

$$\frac{15}{2} - 2\sqrt{2}$$

Question Number: 15 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No. Option Orientation: Vertical

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

यदि
$$f(x) = [x^2] + g(x)$$
, जहाँ $[x]$, x के समान या इससे

कम महत्तम पूर्णांक है, तथा

$$g(x) = \begin{cases} -2x-3, & \frac{-3}{2} \le x < -1 \\ x & -1 \le x < 1 \\ 3-2x, & 1 \le x \le \frac{3}{2} \end{cases}$$

तो
$$\int_{-\frac{3}{2}}^{\frac{3}{2}} f(x) \mathrm{d}x$$
 का मान है :

$$4 + 2\sqrt{2}$$

$$\frac{1}{2}4 - 2\sqrt{2}$$

$$\frac{15}{2} - 2\sqrt{2}$$

Question Number: 15 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

જો $f(x) = [x^2] + g(x)$, જ્યાં [x] એ x થી નાના અથવા x ને સમાન તમામ પૂર્ણાંકોમાં સૌથી મોટો પૂર્ણાંક દર્શાવે

છે અને
$$g(x) = \begin{cases} -2x-3, & \frac{-3}{2} \le x < -1 \\ x & -1 \le x < 1 \\ 3-2x, & 1 \le x \le \frac{3}{2} \end{cases}$$

તો
$$\int_{-\frac{3}{2}}^{\frac{3}{2}} f(x) \mathrm{d}x \, dx \, dx \, dx \, dx \, dx \, dx$$
 છે.

Options:

$$1.4 + 2\sqrt{2}$$

$$2.4-2\sqrt{2}$$

3. 1

$$\frac{15}{2} - 2\sqrt{2}$$

Question Number: 16 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

The area (in sq. units) of the finite region

bounded by the curves $y^2 = x$ and $y = \frac{x}{3}$

is:

Options:

 $\frac{9}{1}$

- 27
- 3 27
- $\frac{9}{4}$

Question Number : 16 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1

वक्रों $y^2 = x$ तथा $y = \frac{x}{3}$ द्वारा घिरे सीमित क्षेत्र का

क्षेत्रफल (वर्ग इकाइयों में) है :

Options:

- $\frac{9}{2}$
- 2. 4
- 27
- $\frac{9}{4}$

Question Number : 16 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

વક્રો $y^2 = x$ અને $y = \frac{x}{3}$ દ્વારા આવૃત્ત સાન્ત પ્રદેશનું

ક્ષેત્રફળ (ચો. એકમમાં) ______ છે.

- 1 2
- $\frac{27}{4}$
- 27

Question Number: 17 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The solution curve of the differential

equation
$$(1+x^2)\frac{dy}{dx} + 2xy = \frac{1}{(1+x^2)}$$
,

passing through the point (1, 0) is:

Options:

$$y = \frac{2}{1+x^2} \left(\tan^{-1} x - \frac{\pi}{4} \right)$$

$$y = \frac{1}{1+x^2} \left(\tan^{-1} x - \frac{\pi}{4} \right)$$

$$y = \frac{\tan^{-1} x}{1 + x^2} - \frac{\pi}{8}$$

$$y = \frac{2\tan^{-1}x}{1+x^2} - \frac{\pi}{4}$$

Question Number: 17 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

अवकल समीकरण

$$(1+x^2)\frac{dy}{dx} + 2xy = \frac{1}{(1+x^2)}$$
 का हल वक्र,

जो कि बिन्दु (1,0) से होकर जाता है, है:

$$y = \frac{2}{1+x^2} \left(\tan^{-1} x - \frac{\pi}{4} \right)$$

$$y = \frac{1}{1+x^2} \left(\tan^{-1} x - \frac{\pi}{4} \right)$$

$$y = \frac{\tan^{-1} x}{1 + x^2} - \frac{\pi}{8}$$

$$y = \frac{2\tan^{-1}x}{1+x^2} - \frac{\pi}{4}$$

Question Number: 17 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

વિકલ સમીકરણ

$$(1+x^2)\frac{dy}{dx} + 2xy = \frac{1}{(1+x^2)} + i (4\xi (1,0))$$

માંથી પસાર થતો ઉકેલ વક્ર _____ છે.

Options:

$$y = \frac{2}{1+x^2} \left(\tan^{-1} x - \frac{\pi}{4} \right)$$

$$y = \frac{1}{1+x^2} \left(\tan^{-1} x - \frac{\pi}{4} \right)$$

$$y = \frac{\tan^{-1} x}{1 + x^2} - \frac{\pi}{8}$$

$$y = \frac{2\tan^{-1}x}{1+x^2} - \frac{\pi}{4}$$

Question Number: 18 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The straight line which passes through the point of intersection of the straight lines x+y=5 and x-y=2 and is perpendicular to the straight line 2x+5y=4 also passes through the point:

$$\left(\frac{5}{2}, -\frac{7}{2}\right)$$

$$\left(\frac{3}{2}, -\frac{7}{2}\right)$$

$$\left(-\frac{3}{2},\,\frac{7}{2}\right)$$

Question Number: 18 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

वह सरल रेखा, जो सरल रेखाओं x+y=5 तथा x-y=2 के प्रतिच्छेदन बिन्दु से होकर जाती है और सरल रेखा 2x+5y=4 के लम्बवत है, निम्न में से किस बिन्दु से भी होकर जाती है:

Options:

$$\left(\frac{5}{2}, -\frac{7}{2}\right)$$

$$\left(\frac{3}{2}, -\frac{7}{2}\right)$$

$$\left(-\frac{3}{2},\frac{7}{2}\right)$$

Question Number: 18 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

રેખાઓ x+y=5 અને x-y=2 ના છેદબિંદુમાંથી પસાર થતી અને રેખા 2x+5y=4 ને લંબ હોય, તે રેખા _____ બિંદુમાંથી પણ પસાર થાય છે.

Options:

$$\left(\frac{5}{2}, -\frac{7}{2}\right)$$

$$\left(\frac{3}{2}, -\frac{7}{2}\right)$$

$$_{4.}\left(-\frac{3}{2},\,\frac{7}{2}\right)$$

Question Number: 19 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

An ellipse has its centre at the origin and its minor axis is along the x-axis. If the distance between its foci is equal to the length of the minor axis and length of its latus rectum is 4, then which of the following points lies on this ellipse?

Options:

$$(2,2\sqrt{2})$$

$$_{2.}(2,\sqrt{2})$$

$$_{3.}$$
 $(\sqrt{2},2\sqrt{2})$

Question Number : 19 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

एक दीर्घवृत्त का केन्द्र मूल बिन्दु पर है तथा इसका लघु अक्ष, x-अक्ष के अनुदिश है। यदि इसकी नाभियों के बीच की दूरी लघु अक्ष की लम्बाई के बराबर है तथा इसकी नाभिलम्ब जीवा की लम्बाई 4 है, तो निम्न में से कौन-सा बिन्दु इस दीर्घवृत्त पर स्थित है?

Options:

$$(2,2\sqrt{2})$$

$$_{2.}$$
 $(2,\sqrt{2})$

$$_{3}$$
 $(\sqrt{2},2\sqrt{2})$

Question Number: 19 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1

કોઈ એક ઉપવલયનું કેન્દ્ર ઊગમબિંદ્ર આગળ છે અને તેનો ગૌણ અક્ષ x-અક્ષ પર છે. જો તેની નાભિઓ વચ્ચેનું અંતર તેના ગૌણ અક્ષની લંબાઈ જેટલું હોય અને નાભિલંબની લંબાઈ 4 હોય, તો નીચેના પૈકી કયું બિંદુ આ ઉપવલય પર આવેલ છે?

Options:

1. $(2,2\sqrt{2})$

 $_{2.}$ $(2, \sqrt{2})$

3. $(\sqrt{2}, 2\sqrt{2})$ 4. $(2\sqrt{2}, 2)$

Question Number: 20 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The positive value of λ for which the straight line $4x-3y+\lambda=0$ touches the circle $x^2 + y^2 - 4x + 6y - 3 = 0$ is:

Options:

1. 4

2. 3

Question Number: 20 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1

λ का वह धनात्मक मान, जिसके लिए सरल रेखा

 $4x-3y+\lambda=0$, वृत्त $x^2+y^2-4x+6y-3=0$ को

स्पर्श करती है, है:

Options:

1. 4

Question Number: 20 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

```
રેખા 4x-3y+\lambda=0 એ વર્તુળ x^2+y^2-4x+6y-3=0 ને સ્પર્શે તે માટેની \lambda ની ધન કિંમત _____ છે.
```

Options:

- 1. 4
- 2. 3
- 2 5
- 4 8

Question Number : 21 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

If a normal to the parabola, $y^2 = 4x$ is perpendicular to the line, 3y + x + 1 = 0, then the ordinate of the point of intersection of this normal with the directrix of the parabola, is:

Options:

- $_{1}$ -33
- 2. -36
- з. 33
- 4 36

Question Number : 21 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

यदि परवलय $y^2=4x$ का एक अभिलम्ब, रेखा 3y+x+1=0 पर लम्बवत है, तो इस अभिलम्ब का परवलय की नियता (directrix) के साथ प्रतिच्छेदन बिन्दु की कोटि (ordinate) है :

- 1. -33
- 2. -36
- 3, 33
- 4. 36

Question Number : 21 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

No Option Orientation: vertical

Correct Marks: 4 Wrong Marks: 1

જો પરવલય $y^2 = 4x$ નો અભિલંબ રેખા 3y + x + 1 = 0

ને લંબ હોય, તો આ અભિલંબના આ પરવલયની નિયામિકા

સાથેના છેદબિંદુનો *y*-યામ _____ છે.

Options:

$$_{1}$$
 -33

$$_{2} - 36$$

Question Number : 22 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Let S and S' be the foci of the ellipse

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$
 and let A be the point (0, b).

If SA and S'A are perpendicular to each other, then the eccentricity of the ellipse is:

Options:

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

$$\sqrt{2} - 1$$

$$\frac{1}{\sqrt{3}}$$

$$\frac{1}{\sqrt{2}}$$

Question Number: 22 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No. Option Orientation: Vertical

No Option Orientation : Vertical

माना दीर्घवृत्त
$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$
 की नाभियाँ S तथा S'

हैं तथा माना A बिन्दु (0, b) है। यदिSA तथाS'A एक दूसरे पर लम्बवत हैं, तो दीर्घवृत्त की उत्केन्द्रता है :

Options:

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

$$\sqrt{2} - 1$$

$$\frac{1}{\sqrt{3}}$$

$$\frac{1}{\sqrt{2}}$$

Question Number : 22 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

ધારો કે S અને S' એ ઉપવલય
$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$$
 ની

નાભિઓ છે અને ધારો કે A એ બિંદુ (0,b) છે. જો SA અને S'A એકબીજાને લંબ હોય, તો આ ઉપવલયની ઉત્કેન્દ્રતા ______ છે.

Options:

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

$$\sqrt{2} - 1$$

$$\frac{1}{\sqrt{3}}$$

$$\frac{1}{\sqrt{2}}$$

Question Number: 23 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

The length of the perpendicular from the point (1, 2, 6) on the line

$$\frac{x-3}{-2} = \frac{y+1}{1} = \frac{z-5}{2}$$
 is:

Options:

- 1. $\sqrt{2}$
- 2. $\sqrt{3}$
- 3. ²
- 4. √5

Question Number: 23 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

बिन्दु
$$(1,2,6)$$
 से रेखा $\frac{x-3}{-2} = \frac{y+1}{1} = \frac{z-5}{2}$

पर खींचे गये लम्ब की लम्बाई है :

Options:

- 1. $\sqrt{2}$
- 2. $\sqrt{3}$
- 3. 2
- 4. √5

Question Number : 23 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

બિંદુ (1, 2, 6) થી રેખા
$$\frac{x-3}{-2} = \frac{y+1}{1} = \frac{z-5}{2}$$

પરના લંબની લંબાઈ _____ છે.

- 1. $\sqrt{2}$
- $\sqrt{3}$
- ₂ 2

Question Number: 24 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

A plane has intercepts p-1, 1 and p+1 on

the co-ordinate axes x, y and z respectively.

If the distance of the plane from the origin

is $\frac{1}{\sqrt{3}}$, then the largest value of p is:

Options:

- 1. 0

- √3

Question Number : 24 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

एक समतल के निर्देशांक अक्षों x, y तथा z पर अंतखण्ड

क्रमशः p-1,1 तथा p+1 हैं। यदि समतल की मूल

बिन्दु से दूरी $\frac{1}{\sqrt{3}}$ है, तो p का अधिकतम मान है :

Options:

- 1. 0

- √3

Question Number: 24 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical

કોઈ એક સમતલના યામાક્ષો x,y અને z પરના અંતઃ ખંડો અનુક્રમે p-1, 1 અને p+1 છે. જો આ સમતલનું ઊગમબિંદુથી અંતર $\frac{1}{\sqrt{3}}$ હોય, તો p ની મહત્તમ કિંમત

_____ છે.

Options:

- 1. 0
- 2 2
- $\sqrt{2}$
- $4. \sqrt{3}$

Question Number : 25 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

Let an angle between the vectors a and

 \overrightarrow{b} be $\frac{2\pi}{3}$. If $|\overrightarrow{b}| = 2|\overrightarrow{a}|$ and the vectors

 $\overrightarrow{a} + x \overrightarrow{b}$ and $\overrightarrow{a} - \overrightarrow{b}$ are at right angles, then the value of x is equal to :

Options:

- 1 3
- 5
- $\frac{1}{3}$
- $\frac{1}{4}$

Question Number: 25 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

माना सिंदशों $\stackrel{\rightarrow}{a}$ तथा $\stackrel{\rightarrow}{b}$ के बीच एक कोण $\frac{2\pi}{3}$ है।

यदि $\begin{vmatrix} \overrightarrow{b} \\ \overrightarrow{b} \end{vmatrix} = 2 \begin{vmatrix} \overrightarrow{a} \\ \overrightarrow{a} \end{vmatrix}$ तथा सदिशों $\begin{vmatrix} \overrightarrow{a} \\ \overrightarrow{a} + x \begin{vmatrix} \overrightarrow{b} \\ \overrightarrow{b} \end{vmatrix}$ और

 \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{a} \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{b} \overrightarrow{a} \overrightarrow{b} \overrightarrow{b} \overrightarrow{a} \overrightarrow{b} \overrightarrow{b}

Options:

- $\frac{2}{3}$
- $\frac{2}{5}$
- $\frac{1}{3}$
- $\frac{1}{4}$

Question Number : 25 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

ધારો કે સિંદિશો $\stackrel{\rightarrow}{a}$ અને $\stackrel{\rightarrow}{b}$ વચ્ચેનો ખૂણો $\frac{2\pi}{3}$ છે.

જો $\begin{vmatrix} \overrightarrow{b} \\ \overrightarrow{b} \end{vmatrix} = 2 \begin{vmatrix} \overrightarrow{a} \\ \overrightarrow{a} \end{vmatrix}$ તથા સિંદશો $\begin{vmatrix} \overrightarrow{a} \\ \overrightarrow{a} + x \begin{vmatrix} \overrightarrow{b} \end{vmatrix}$ અને

 $\stackrel{
ightarrow}{\mathsf{a}}\stackrel{
ightarrow}{\mathsf{b}}$ કાટખૂણે હોય, તો x ની કિંમત ______

Options:

- 1 3
- 2
- $\frac{1}{3}$
- 4 5

Question Number : 26 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

One player A plays 4 games with another player B. In any game, the probabilities of A getting points 0, 1 and 2 are 0.45, 0.05 and 0.5 respectively. Assuming that the outcomes are independent, the probability of A getting a total of 7 points is:

Options:

$$\frac{1}{20}$$

$$\frac{1}{2}$$

$$\frac{3}{40}$$

$$\frac{1}{4}$$
 $\frac{1}{10}$

Question Number : 26 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

एक खिलाड़ी A, दूसरे खिलाड़ी B के साथ 4 गेम (games) खेलता है। किसी गेम में A के 0, 1 तथा 2 अंक (points) प्राप्त करने की प्रायिकतायें क्रमश: 0.45, 0.05 तथा 0.5 हैं। यह मानते हुए कि सभी परिणाम (outcomes) स्वतंत्र हैं, A के कुल 7 अंक प्राप्त करने की प्रायिकता है:

Options:

$$\frac{1}{1}$$
 20

$$\frac{1}{40}$$

$$\frac{3}{40}$$

$$\frac{1}{10}$$

Question Number: 26 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

કોઈ એક ખેલાડી A, ખેલાડી B સાથે 4 રમતો રમે છે. કોઈપણ રમતમાં, A ની 0, 1 અને 2 અંકો મેળવવાની સંભાવના અનુક્રમે 0.45,0.05 અને 0.5 છે. પરિણામોને નિરપેક્ષ ધારતાં, A બરાબર 7 અંકો જ મેળવે તેની સંભાવના ______ છે.

Options:

- $\frac{1}{1}$
- $\frac{1}{2}$
- $\frac{3}{3}$
- $\frac{1}{4}$ $\frac{1}{10}$

Question Number : 27 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The mean deviation about the median of the data set

4, 10, 6, 4, 13, 11, 19, m, 8, 7

where m ≥ 11 is an integer, is 4.

Then m is equal to:

Options:

- 1. 14
- 2. 15
- з. 16
- 4 17

Question Number: 27 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1

यदि आँकडों के समृह

4, 10, 6, 4, 13, 11, 19, m, 8, 7

जहाँ m ≥ 11 एक पूर्णांक है, की माध्यिका के सापेक्ष

माध्य विचलन 4 है, तो m बराबर है:

- 1. 14
- 2. 15
- ₂ 16
- 4 17

Question Number: 27 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

માહિતી ગણ

4, 10, 6, 4, 13, 11, 19, m, 8, 7

જ્યાં m ≥ 11 પૂર્ણાંક છે, નું મધ્યસ્થથી સરેરાશ વિચલન

4 છે. તો m બરાબર _____ છે.

Options:

- 1. 14
- 2 15
- ₂ 16
- 4 17

Question Number : 28 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The value of $\sum_{\alpha \in s} \cot \alpha$ where

$$S = \left\{ \alpha : \frac{\pi}{4} < \alpha \le \frac{7\pi}{4} \text{ and } \right\}$$

$$4^{\cos^2\alpha} + 4^{\sin^2\alpha} = 4$$
 is:

- 1. -1
- 2 0
- _ 1
- $_{4}$ -3

Correct Marks: 4 Wrong Marks: 1

$$\sum_{\alpha \in S} \cot \alpha$$
 , जहाँ

$$S = \left\{ \alpha : \frac{\pi}{4} < \alpha \le \frac{7\pi}{4} \right\}$$
 तथा

$$4^{\cos^2\alpha} + 4^{\sin^2\alpha} = 4$$
 का मान है :

Options:

- 1. -1
- ~ 0
- 2 1
- 4. -3

Question Number: 28 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

જો
$$S = \left\{ \alpha : \frac{\pi}{4} < \alpha \le \frac{7\pi}{4} \right\}$$
 અને

$$4^{\cos^2 \alpha} + 4^{\sin^2 \alpha} = 4$$
 હોય, તો $\sum_{\alpha \in S} \cot \alpha$ ની

કિંમત _____ છે.

Options:

- 1. -1
- -
- 4. -3

Question Number: 29 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1

The expression

$$\sqrt{(\cos(\tan^{-1}x) + x\sin(\tan^{-1}x))^2 - 1}$$
,

when 0 < x < 1, is equal to:

Options:

1. X

$$\sqrt{1+x^2}$$

$$\frac{1}{\sqrt{x^2+1}}$$

$$\frac{x}{\sqrt{1+x^2}}$$

Question Number: 29 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

व्यंजक

$$\sqrt{(\cos(\tan^{-1}x) + x\sin(\tan^{-1}x))^2 - 1}$$
,

जब कि 0 < x < 1, बराबर है:

Options:

$$\sqrt{1+x^2}$$

$$\frac{1}{\sqrt{x^2+1}}$$

$$\frac{x}{\sqrt{1+x^2}}$$

Question Number: 29 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No. Option Orientation: Vertical

No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

$$\sqrt{(\cos(\tan^{-1}x) + x\sin(\tan^{-1}x))^2 - 1}$$
, જયાં

$$\sqrt{1+x^2}$$

$$\frac{1}{\sqrt{x^2+1}}$$

$$\frac{x}{\sqrt{1+x^2}}$$

Question Number: 30 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

The equivalent expression of $(p \wedge q) \vee (\sim p \wedge q)$ is:

Options:

$$(q \lor \sim p) \lor p$$

Question Number : 30 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

$$(p \wedge q) \vee (\sim p \wedge q)$$
 के तुल्य व्यंजक है:

Options:

$$p \wedge q$$

$$(q \vee \sim p) \vee p$$

Question Number : 30 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

No Option Orientation: vertical Correct Marks: 4 Wrong Marks: 1

સમકક્ષ છે.

$$_1$$
 $p \wedge q$

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

Aptitude Test

Section Id: 416529212

Section Number: 2
Section type: Online
Mandatory or Optional: Mandatory

Number of Questions:9Number of Questions to be attempted:9Section Marks:200Display Number Panel:YesGroup All Questions:No

Sub-Section Number: 1

Sub-Section Id: 416529327

Question Shuffling Allowed: Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (31 to 35)

Question Label : Comprehension

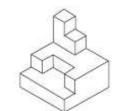
Directions: The 3 - D figure shows the view of an object. Identify the correct top view from amongst

the answer figures.

Sub questions

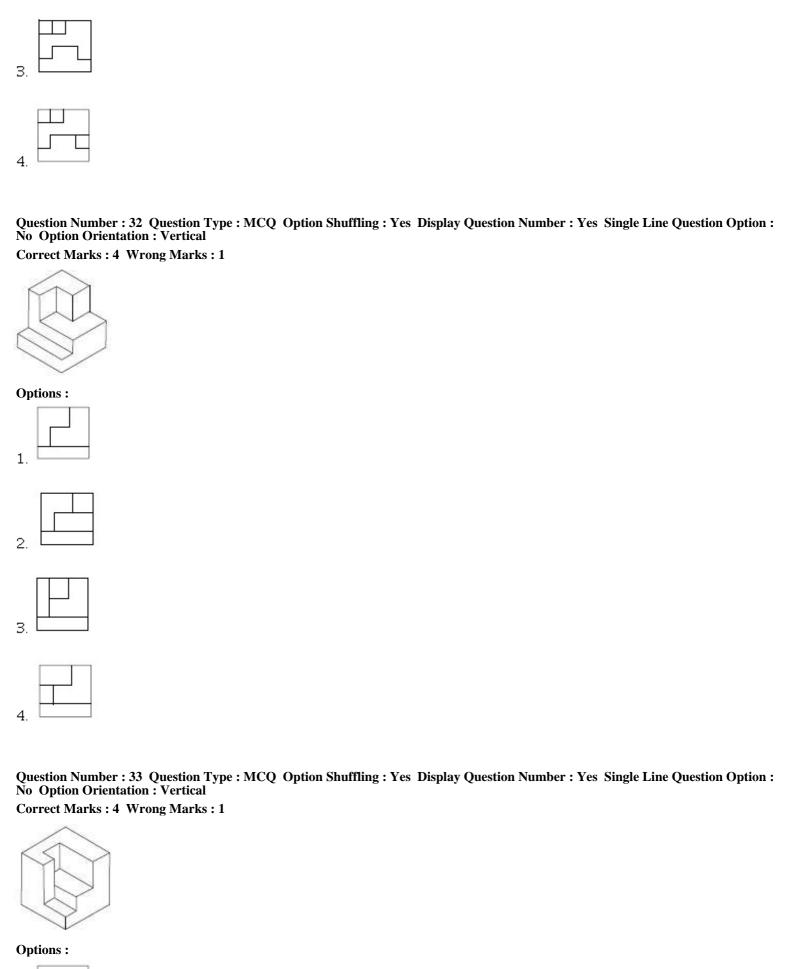
Question Number: 31 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

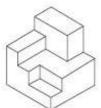
No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1





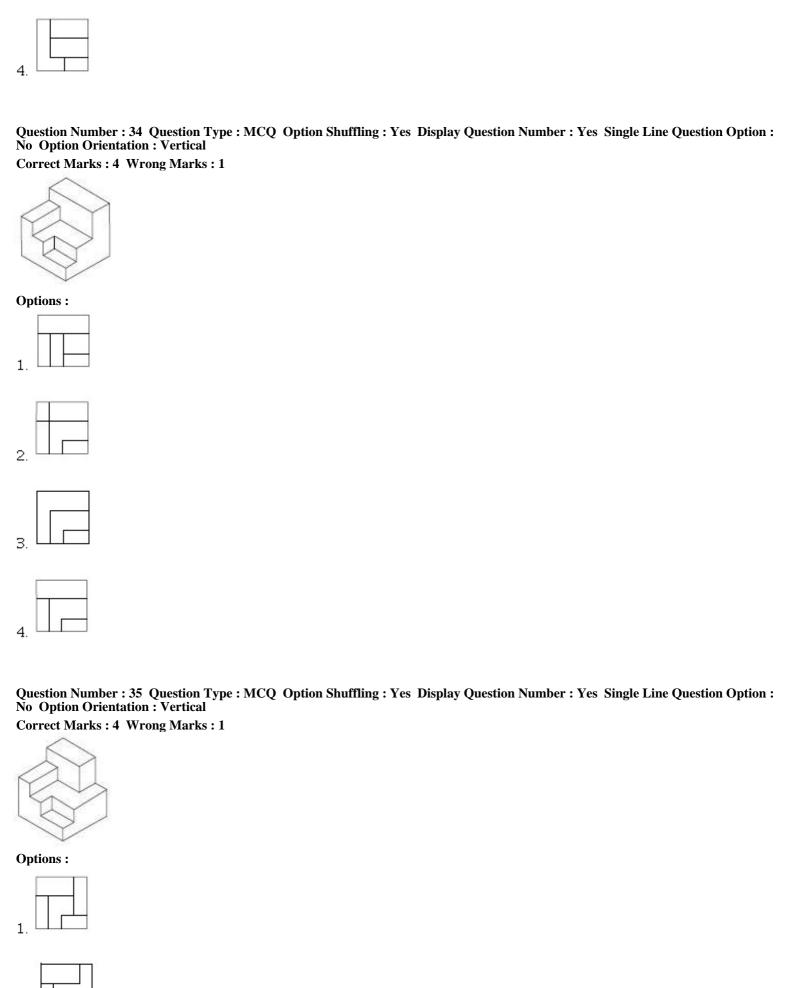


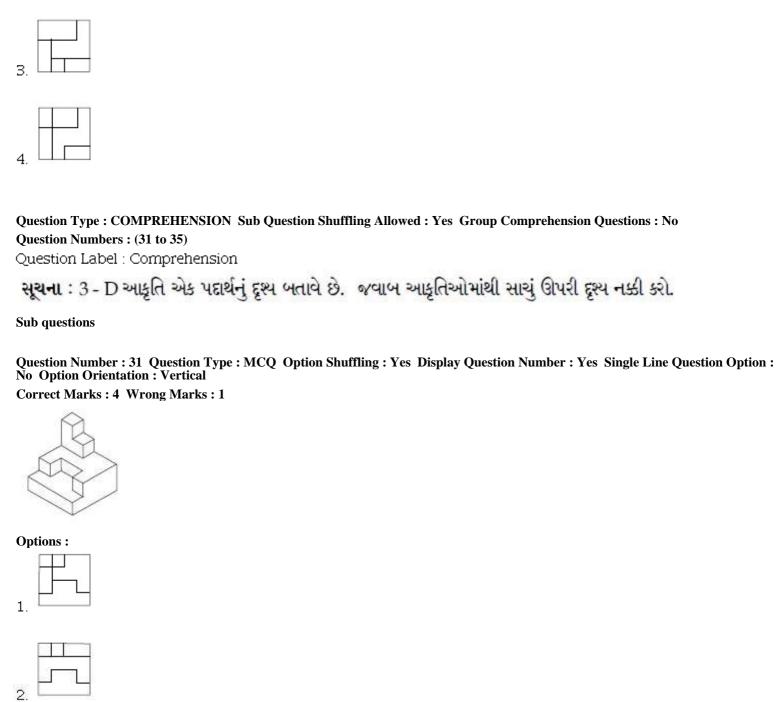




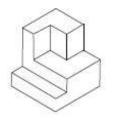
1.
2.
3.
4.
Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (31 to 35) Question Label : Comprehension निर्देश : 3 - D प्रश्न आकृति में एक वस्तु के एक दृश्य को दिखाया गया है। इसका सही ऊपरी दृश्य, उत्तर आकृतियों में से पहचानिये।
Sub questions
Question Number : 31 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1
Options: 1.
2.
3.
4.

Question Number : 32 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 4 Wrong Marks: 1
Options:
1.
2.
3.
4.
Question Number: 33 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
Options:
1.
2.
3.



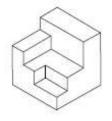


Question Number : 32 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical



Options:
з.
4.
Question Number: 33 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
Options:
2.
3.
4.

 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes \ Display \ Question \ Number: Yes \ Single \ Line \ Question \ Option \ Optio$



Options:



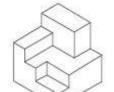






 $Question\ Number: 35\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1











Sub-Section Number: 2

Sub-Section Id: 416529328

Question Shuffling Allowed: Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (36 to 39)

Question Label: Comprehension

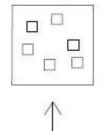
Directions: The problem figure shows the top view of objects. Looking in the direction of the arrow, identify the correct elevation, from amongst the answer figures.

Sub questions

Question Number: 36 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

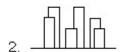
No Option Orientation : Vertical

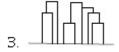
Correct Marks: 4 Wrong Marks: 1









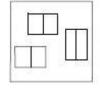




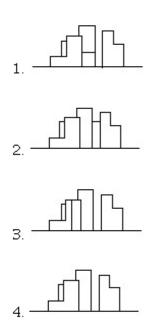
Question Number: 37 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

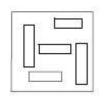






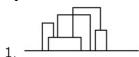
 $Question\ Number: 38\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

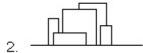
Correct Marks: 4 Wrong Marks: 1

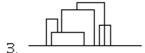


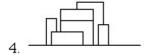


Options:

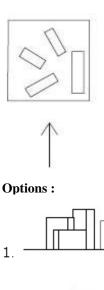


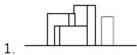


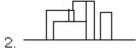


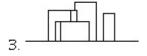


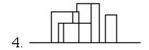
 $Question\ Number: 39\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$











Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (36 to 39)

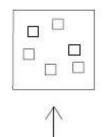
Question Label: Comprehension

निर्देश : प्रश्न आकृति में वस्तुओं का ऊपरी दृश्य दिखाया गया है। तीर की सिह में देखते हुए उत्तर आकृतियों में से सही सम्मुख दृश्य पहचानिये।

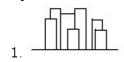
Sub questions

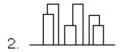
Question Number: 36 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

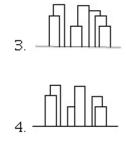
No Option Orientation: Vertical











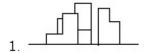
 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$

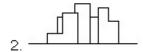
Correct Marks: 4 Wrong Marks: 1

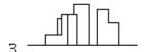




Options:



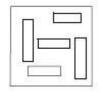




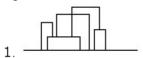


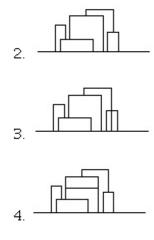
 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: \\ No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1



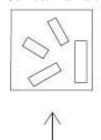






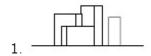
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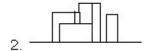
Correct Marks: 4 Wrong Marks: 1

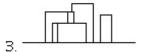


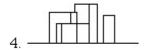


Options:









Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (36 to 39)

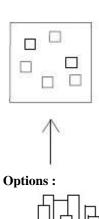
Question Label: Comprehension

સૂચના : પ્રશ્ના આકૃતિ પદાર્થનું ઊપરી દૃશ્ય બતાવે છે. તીરની દિશામાં જોતાં, જવાબ આકૃતિઓમાંથી સાચું ઊન્નત દૃશ્ય ઓળખો.

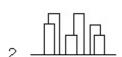
Sub questions

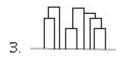
Question Number: 36 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

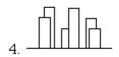
No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1



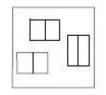








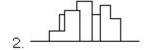
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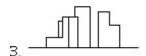


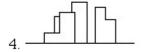


Options:



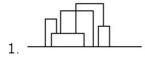


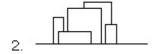


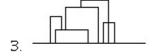


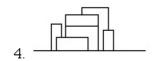


Options:



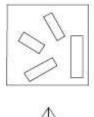




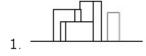


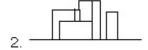
 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$

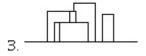
Correct Marks: 4 Wrong Marks: 1

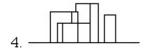












Sub-Section Number:

Sub-Section Id: 416529329

Question Shuffling Allowed: Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (40 to 44)

Question Label : Comprehension

Directions: Which one of the answer figure will complete the sequence of the three problem figures

Sub questions

Question Number: 40 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1









Options:









 $Question\ Number: 41\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks : 4 Wrong Marks : 1



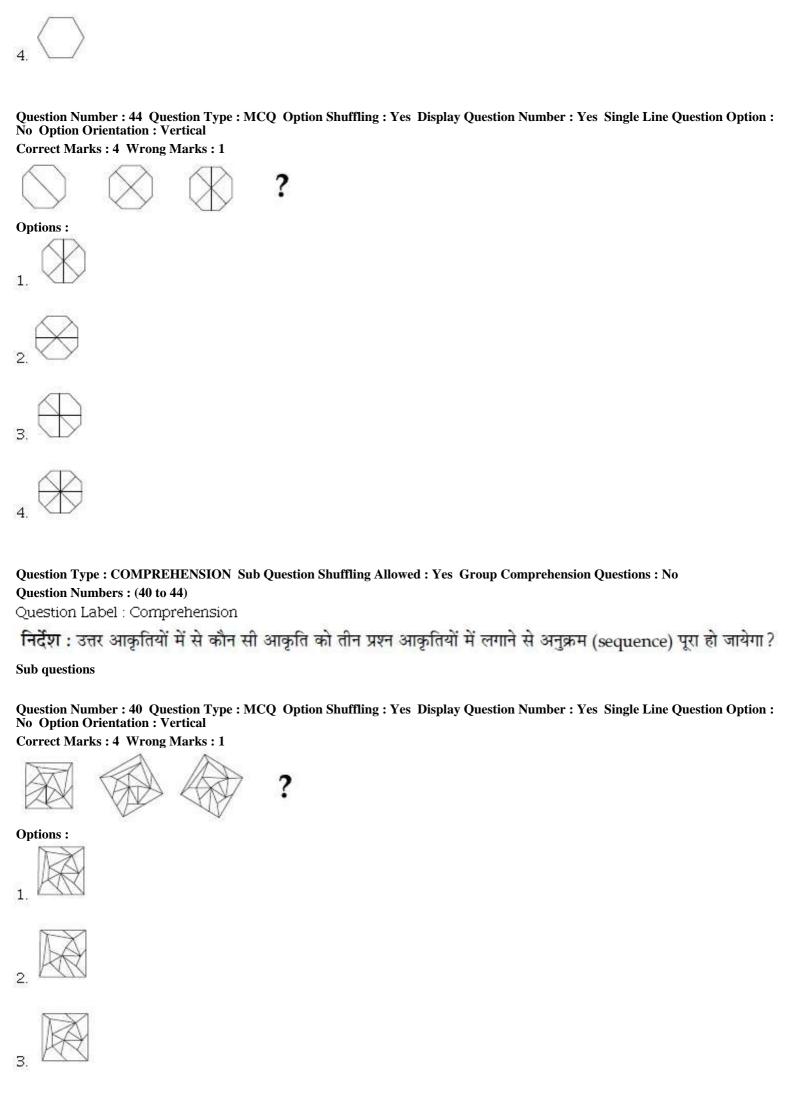








2.
з.
4.
Question Number: 42 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
\bigcirc \bigcirc ?
Options:
2.
з. С
4.
Question Number: 43 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
\triangle \square ?
Options: 1.
2.
з. 🛆





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

Correct Marks: 4 Wrong Marks: 1









Options:









Question Number: 42 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1









Options:



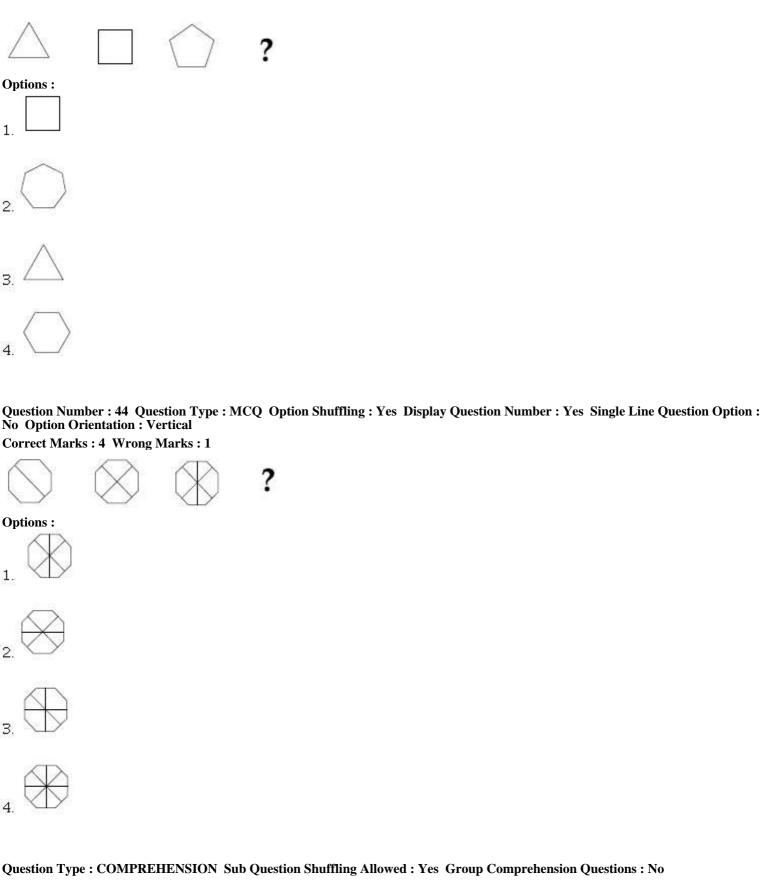






Question Number: 43 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical



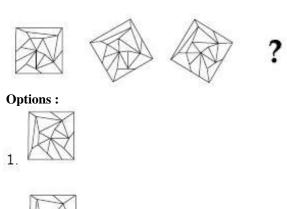
Question Numbers: (40 to 44)

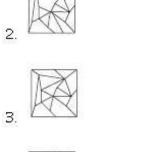
Question Label: Comprehension

સૂચના : જવાબ આકૃતિઓમાંની કઈ આકૃતિ પ્રશ્ન આકૃતિઓમાંની ત્રણ આકૃતિઓની શ્રેણીને પૂર્ણ કરશે?

Sub questions

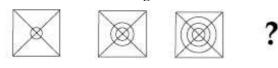
 $Question\ Number: 40\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$





 $Question\ Number: 41\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1







Question Number: 42 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: **No Option Orientation : Vertical**







1.						
2.						
3.						
4.						
Question Number : No Option Orienta Correct Marks : 4	43 Question Type : M tion : Vertical Wrong Marks : 1	ICQ Option Shufflin	ng : Yes Display Que	estion Number : Yes Si	ngle Line Question	Option :
\triangle		?				
Options:						
2.						
з. 🛆						
4.						
Question Number : No Option Orienta Correct Marks : 4	44 Question Type : M tion : Vertical Wrong Marks : 1	ICQ Option Shufflin	ng : Yes Display Que	estion Number : Yes Si	ngle Line Question	Option :
	\otimes	?				
Options:						
1.						
2.						





Sub-Section Number: 4

Sub-Section Id: 416529330

Question Shuffling Allowed: Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (45 to 47)

Question Label: Comprehension

Directions: Which one of the answer figures shows the correct view of the 3 - D problem figure after

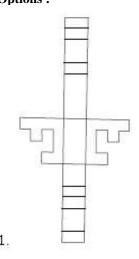
the problem figure is opened up?

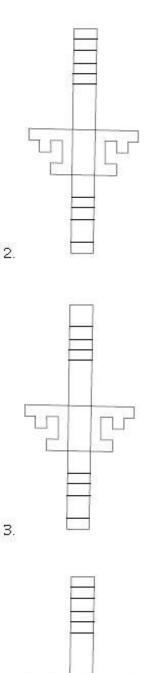
Sub questions

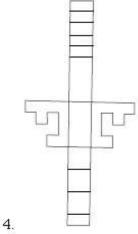
Question Number: 45 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1





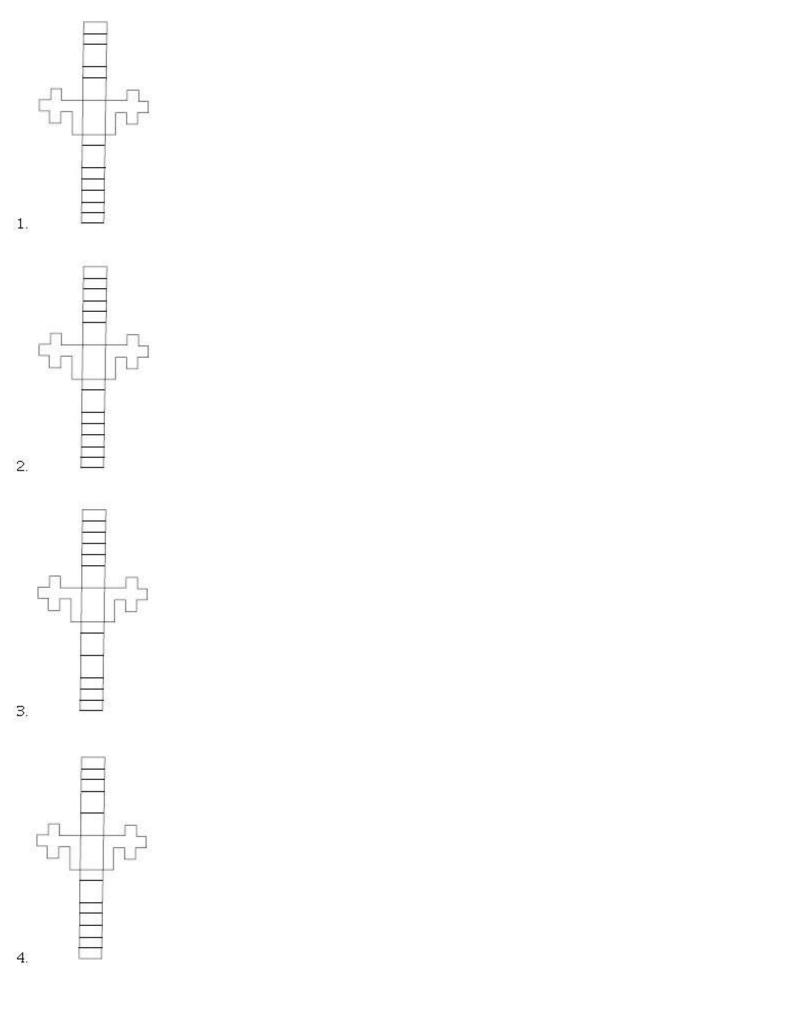




 $Question\ Number: 46\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks : 4 Wrong Marks : 1

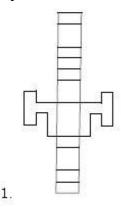


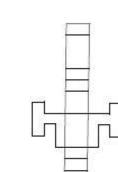


 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$

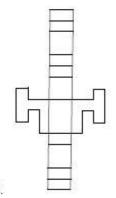


Options:

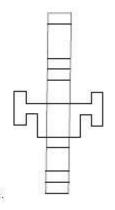




2



3.



Question Type: COMPREHENSION~Sub~Question~Shuffling~Allowed: Yes~Group~Comprehension~Questions: No

Question Numbers : (45 to 47)

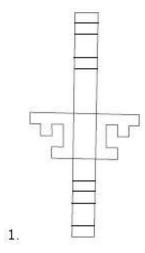
Question Label: Comprehension

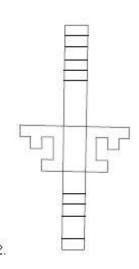
निर्देश: 3 - D प्रश्न आकृति को खोलने पर, उत्तर आकृतियों में से सही दृश्य कौन सा है?

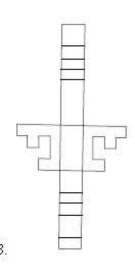
 $Question\ Number: 45\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

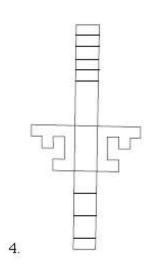
Correct Marks: 4 Wrong Marks: 1









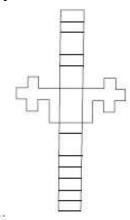


 $Question\ Number: 46\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

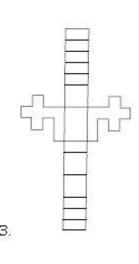
No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1

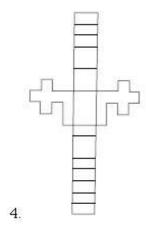


Options:



7

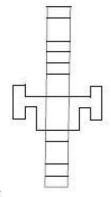


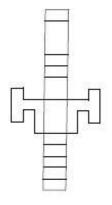


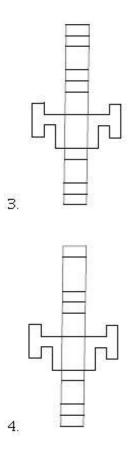
 $Question\ Number: 47\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1









Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (45 to 47)

Question Label: Comprehension

સૂચના : 3 - D પ્રશ્ન આકૃતિને ખોલી નાખતાં જવાબ આકૃતિઓમાંની કઈ આકૃતિ સાચું દૃશ્ય દર્શાવે છે?

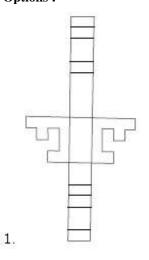
Sub questions

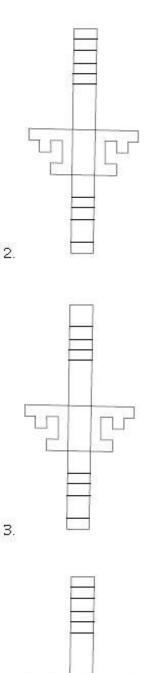
 $Question\ Number: 45\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: An extra Control of the Control of the$

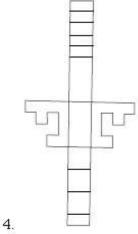
No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1





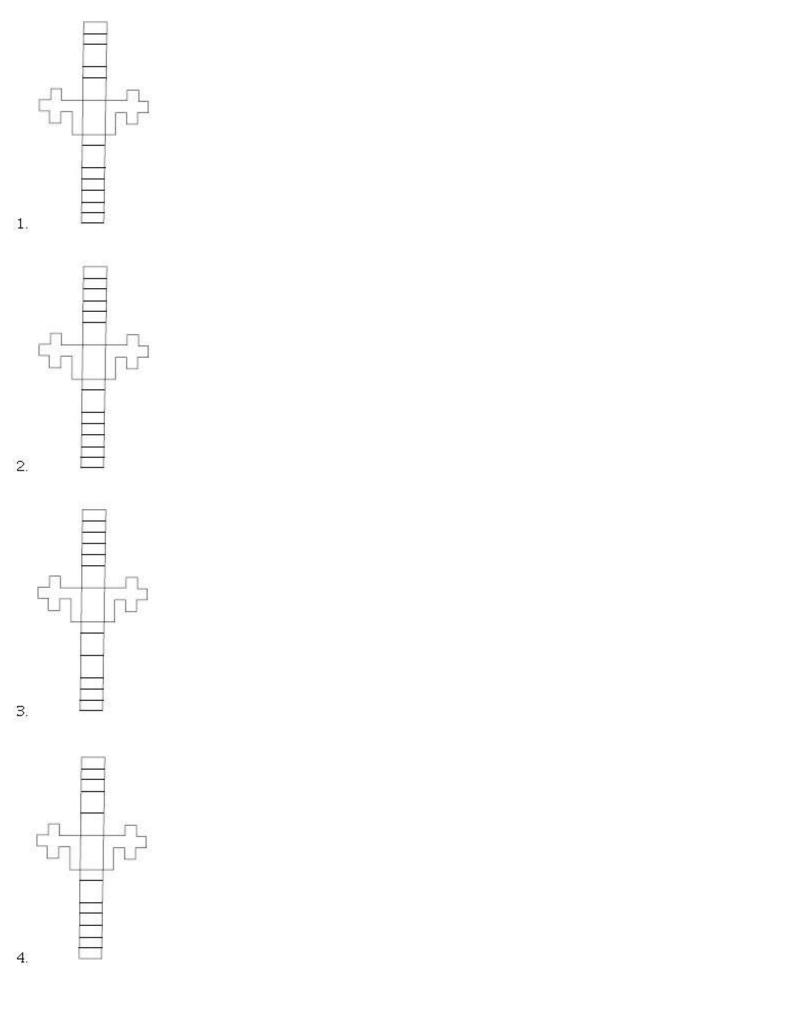




 $Question\ Number: 46\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks : 4 Wrong Marks : 1

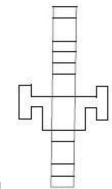




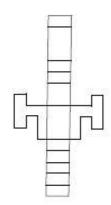
 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$



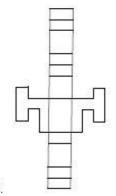
Options:



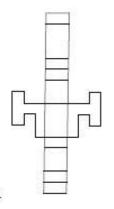
1.



2.



3.



Sub-Section Number:

Sub-Section Id: 416529331

Question Shuffling Allowed:

Yes

5

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (48 to 52)

Question Label : Comprehension

Directions: One of the following answer figures is hidden in the problem figure in the same size and

direction. Select the correct one.

Sub questions

 $\label{eq:Question Number: Yes Single Line Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1



Options:







 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1



Options:







Question Number: 50 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical



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Question Number : 51 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1



Options:









Question Number : 52 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1



Options:

1.

2

3

4. 🗢
Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (48 to 52) Question Label : Comprehension निर्देश : नीचे दी गयी उत्तर आकृतियों में से एक आकृति माप और दिशा में समान रूप से प्रश्न आकृति में छुपी है। कौन सी सह
है, चुनिए।
Sub questions
Question Number : 48 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1
Options: 1.
2. 4
3.
4. \(\sum_{\text{\tinx{\text{\tinx{\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tint{\text{\text{\tint{\tint{\tin{\tint{\tinit}\x{\text{\tin{\text{\text{\text{\text{\text{\tin{\text{\text{\text{\text{\text{\text{\text{\text{\tin{\text{\tin{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin{\text{\tin{\text{\tin{\tin{\text{\text{\text{\text{\text{\text{\tin{\tex{\tin{\text{\text{\text{\text{\text{\tin{\tin{\text{\text{\tin{\tin{\tin{\text{\tin{\text{\tin{\tin{\tin{\tin{\text{\tin{\text{\tin{\text{\tin{\tin{\tin{\tert{\texi}\tin{\text{\tin{\tin{\tin{\tin{\tin{\tin{\tin{\ti
Question Number : 49 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1
Options:
1.
2. 🗸
з. 🗸
4.

Correct Marks : 4 Wrong Marks : 1
Options: 1.
2.
3. 🔽
4.
Question Number: 51 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
Options :
1.
2.
3. \$\sqrt{\sq}}\sqrt{\sq}\sqrt{\sq}}}}}}\sqit{\sqrt{\sint}}}}}\signt{\sintitita}\sqrt{\sintiin}}}}}}}}}}}}}}}}}}}}}}}}}}
4. 3
Question Number: 52 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
Options:
1.
2. 🗸
3.

4.
Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (48 to 52) Question Label : Comprehension સૂચના : માપ અને દિશા સમાન હોય તે રીતે જવાબ આકૃતિઓમાંની એક આકૃતિ પ્રશ્ન આકૃતિમાં છુપાએલ છે. સાચો જવાબ શોધો.
Sub questions
Question Number: 48 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
Options: 1.
2. 4
з. <
4. 2
Question Number: 49 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
Correct Marks . 4 Wrong Marks . 1
Options:
1.
2. 🗸
2. 🗸

 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes \ Display \ Question \ Number: Yes \ Single \ Line \ Question \ Option \ Optio$



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	L	_
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Question Number : 51 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1



Options:









Question Number : 52 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1



Options:

1.

2

3

Sub-Section Number:

Sub-Section Id: 416529332 **Question Shuffling Allowed:** Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers : (53 to 57)

Question Label : Comprehension

Directions: Which one of the answer figures is the correct mirror image of the problem figure with

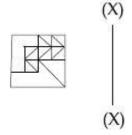
respect to X - X?

Sub questions

Question Number: 53 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical

Correct Marks: 4 Wrong Marks: 1



Options:



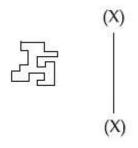






Question Number: 54 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1





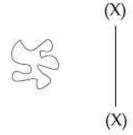






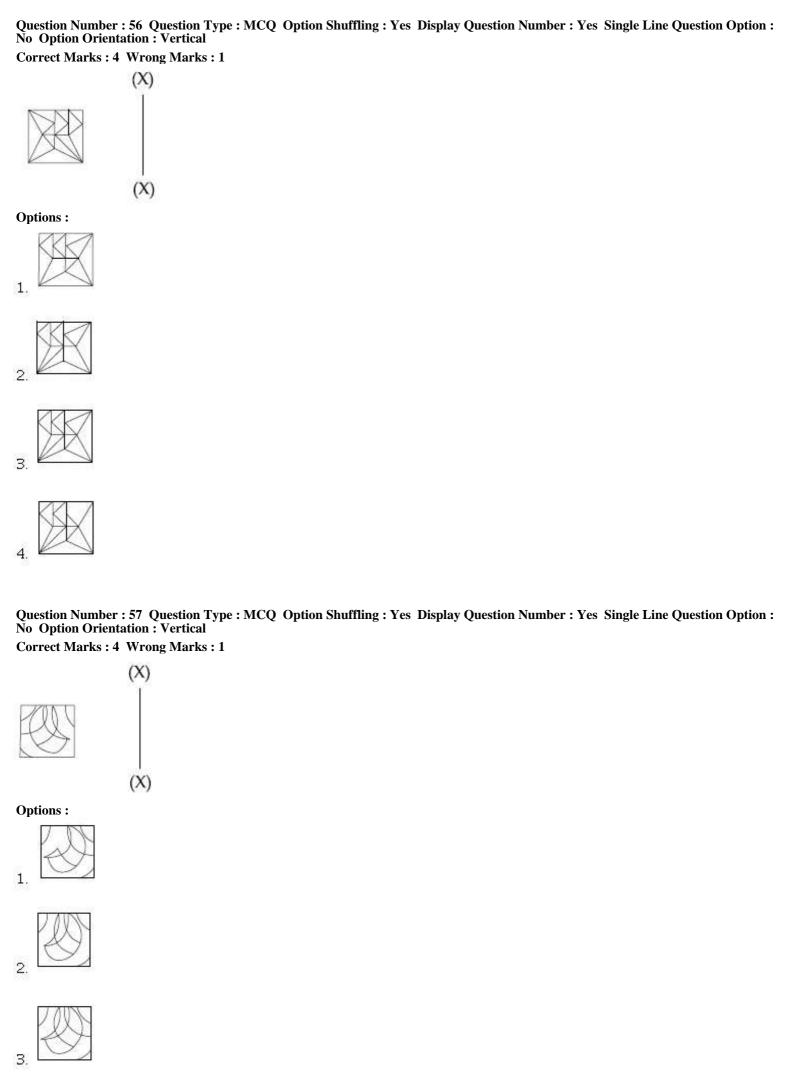
 $\label{lem:question} \begin{tabular}{ll} Question Number: S5 & Question Type: MCQ & Option Shuffling: Yes & Display Question Number: Yes & Single Line Question Option: No & Option Orientation: Vertical & Property of the Control o$

Correct Marks: 4 Wrong Marks: 1











Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (53 to 57)

Question Label: Comprehension

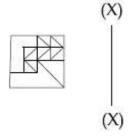
निर्देश: उत्तर आकृतियों में से कौनसी आकृति दी गयी प्रश्न आकृति का X - X से सम्बंधित सही दर्पण प्रतिबिम्ब है?

Sub questions

Question Number: 53 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1



Options:





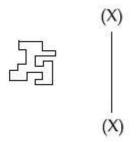


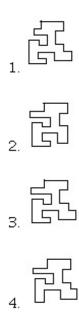


Question Number: 54 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

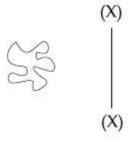
Correct Marks: 4 Wrong Marks: 1





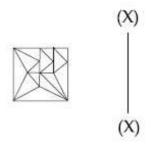
Question Number: 55 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: **No Option Orientation : Vertical**

Correct Marks: 4 Wrong Marks: 1



Options:

Question Number: 56 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical











 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1











Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (53 to 57)

Question Label: Comprehension

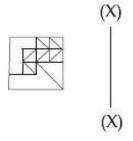
સૂચના : જવાબ આકૃતિઓમાંની કઈ આકૃતિ, પ્રશ્ન આકૃતિનું X - X ને સાપેક્ષ સાચું આરસી પ્રતિબિંબ છે?

Sub questions

Question Number: 53 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1



Options:



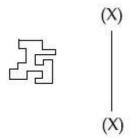


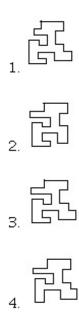




Question Number : 54 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

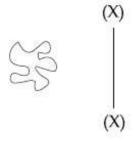
Correct Marks: 4 Wrong Marks: 1





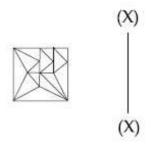
Question Number: 55 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: **No Option Orientation : Vertical**

Correct Marks: 4 Wrong Marks: 1



Options:

Question Number: 56 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical











 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1













Sub-Section Number:

Sub-Section Id: 416529333

Question Shuffling Allowed: Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (58 to 62)

Question Label : Comprehension

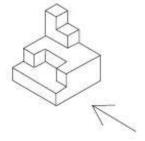
Directions: The 3 - D figure shows the view of an object. Identify the correct front view in the

direction of the arrow, from amongst the answer figures.

Sub questions

Question Number: 58 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1



Options:

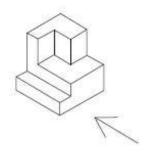








 $\label{lem:question} \begin{tabular}{ll} Question Number: S9 & Question Type: MCQ & Option Shuffling: Yes & Display Question Number: Yes & Single Line Question Option: No & Option Orientation: Vertical & Property of the Control o$





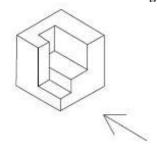






 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: \\ No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1





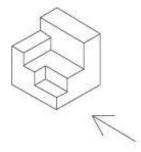






 $Question\ Number: 61\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1



Options:

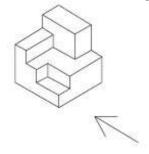




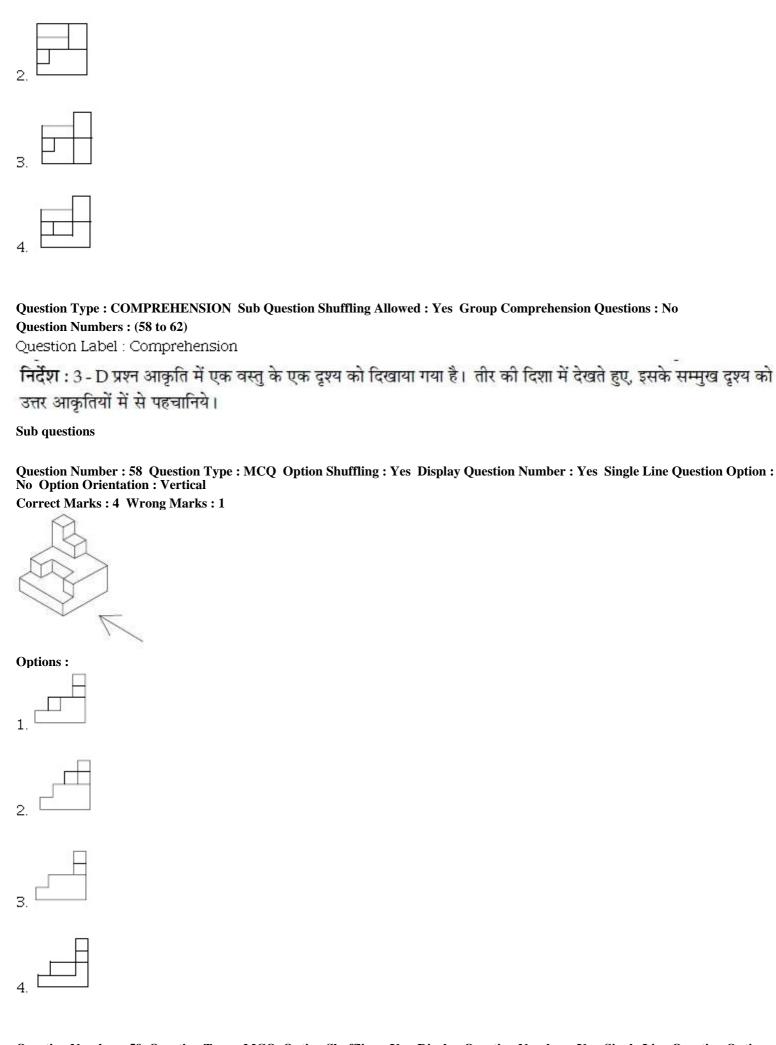


 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes \ Display \ Question \ Number: Yes \ Single \ Line \ Question \ Option \ Optio$

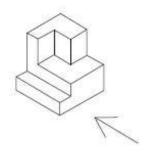
Correct Marks: 4 Wrong Marks: 1







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





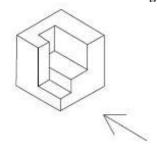






 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: \\ No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1





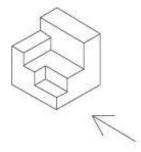






 $Question\ Number: 61\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1



Options:

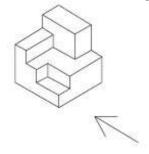




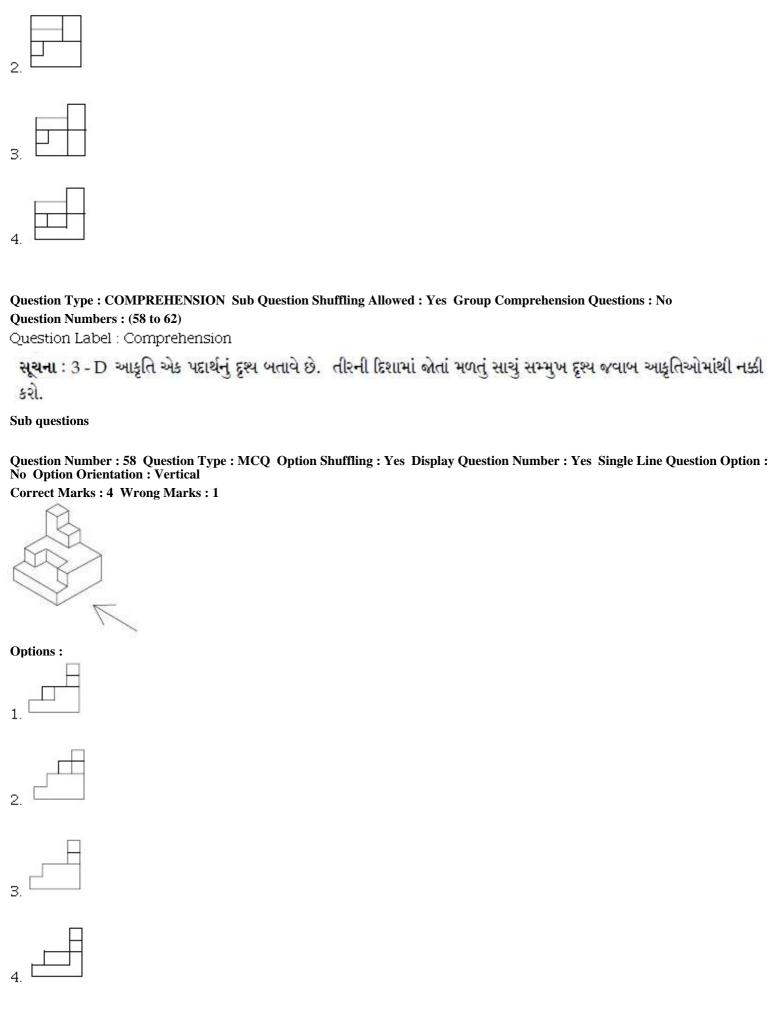


 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes \ Display \ Question \ Number: Yes \ Single \ Line \ Question \ Option \ Optio$

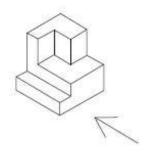
Correct Marks: 4 Wrong Marks: 1







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





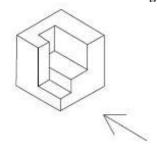






 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: \\ No Option Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1





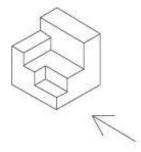






 $Question\ Number: 61\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

Correct Marks: 4 Wrong Marks: 1



Options:

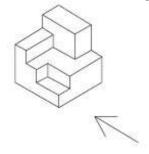




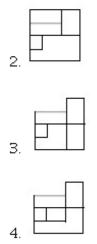


 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes \ Display \ Question \ Number: Yes \ Single \ Line \ Question \ Option \ Optio$

Correct Marks: 4 Wrong Marks: 1







Sub-Section Number: 8

Sub-Section Id: 416529334

Question Shuffling Allowed: Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (63 to 65)

Question Label: Comprehension

Directions: The 3 - D figure shows the view of an object. Identify the correct front view in the

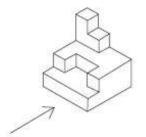
direction of the arrow, from amongst the answer figures.

Sub questions

Question Number: 63 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1





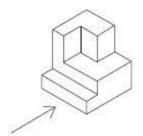






 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes \ Display \ Question \ Number: Yes \ Single \ Line \ Question \ Option \ Crientation: Vertical$

Correct Marks: 4 Wrong Marks: 1



Options:



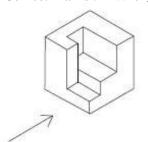




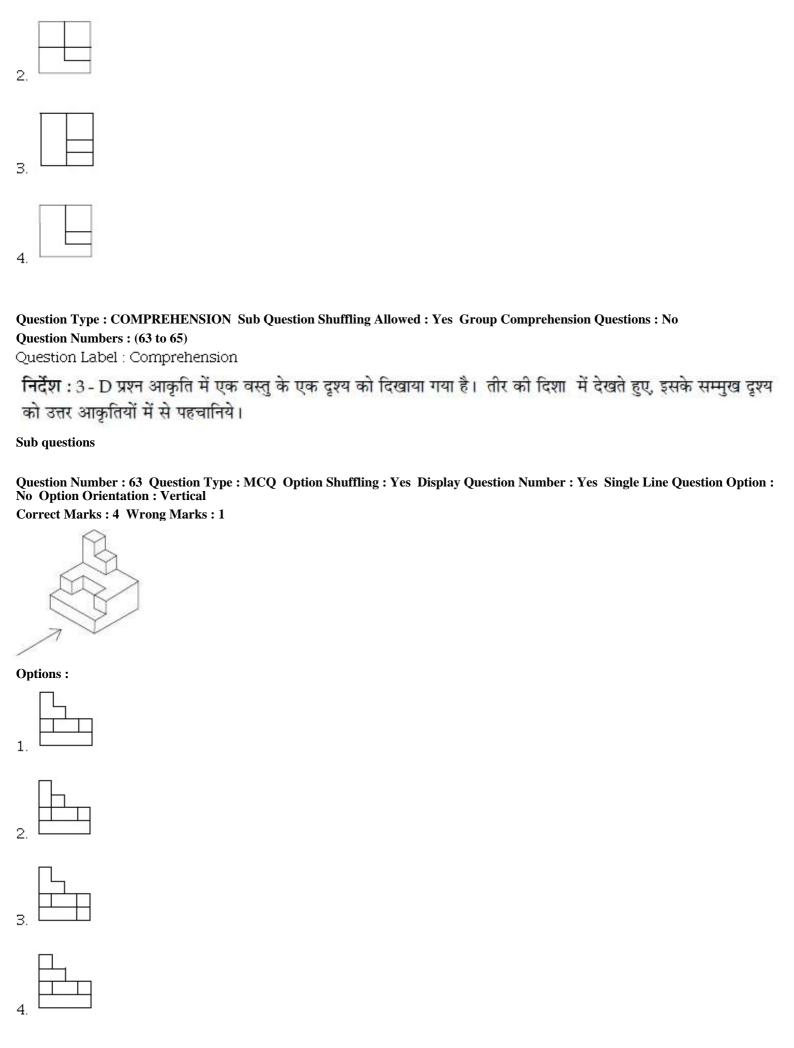


 $Question\ Number: 65\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$

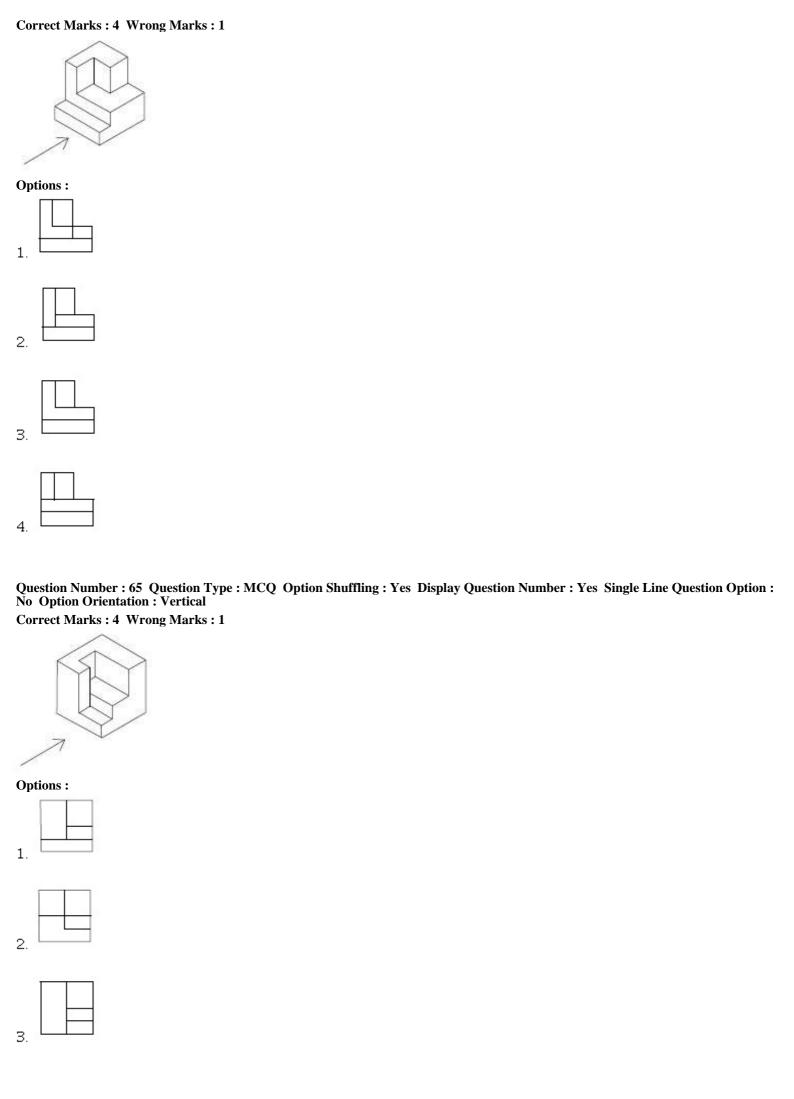
No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1







 $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$





Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No

Question Numbers: (63 to 65)

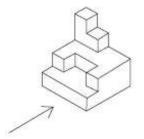
Question Label: Comprehension

સૂચના : 3 - D આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું સમ્મુખ દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી

Sub questions

 $Question\ Number: 63\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Property of the Control of the Control$

No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1



Options:



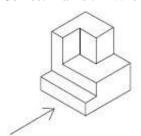






Question Number: 64 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:

No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1



1.
2.
3.
4.
Question Number: 65 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1
Options:
2.
3.
4.

Sub-Section Number: 9

Sub-Section Id: 416529335

Question Shuffling Allowed: Yes

Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No **Question Numbers: (66 to 80)** Question Label : Comprehension **Sub questions** Question Number: 66 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 4 Wrong Marks: 1 In which Indian city would you find the mosque with "Shaking Minarets"? **Options:** 1. Hyderabad Lucknow Ahmedabad 4. Allahabad $\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical$ Correct Marks: 4 Wrong Marks: 1 Ellora in Aurangabad(Maharashtra) is famous for ancient caves representing Buddhism, Hinduism and Jainism. Of these, the largest number pertains to ...? **Options:** Buddhism Hinduism Jainism Zorastrianism Question Number: 68 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation : Vertical Correct Marks: 4 Wrong Marks: 1 Which one of the following is a renewable source of energy? **Options:** 1. Coal Natural gas

```
Oil
Question Number: 69 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 Everyone knows 'The Taj Mahal'. It was
 built by the Emperor Shah Jahan, but for
 whom?
Options:
1. Jahani Mahal
   Farida Mahal
   Mumtaz Mahal
   Toba Begum
Question Number: 70 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 Where is the world's largest panoramic
 sculptural relief located?
Options:
1. Kanchipuram
<sub>2</sub> Madurai
   Pondicherry
4. Mahabalipuram
Question Number: 71 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 In which place in India can we find cave
 temples of three faiths?
Options:
1. Madurai
2 Delhi
```

Ocean waves

```
3. Ellora
4. Agra
\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 Which of these is not a planned city of
 India?
Options:
   Kanpur
   Bhubaneshwar
   Chandigarh
   Gandhi nagar
Question Number: 73 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
Who is the Architect of "LIC Building, New
Delhi"?
Options:

    Charles Correa

2. Laurie Baker
   Le Corbusier
   B V Doshi
Question Number: 74 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation : Vertical
Correct Marks: 4 Wrong Marks: 1
 Which is the highest Award for
 Architects?
Options:
    Pritzker's Award
Aga Khan Award
3. Rechter Prize
```

4. Stirling Prize Question Number: 75 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 The house called 'Falling Waters' was designed by which one of the following architects? **Options:** 1. James Sterling 2 Frank Lloyd Wright Walter Gropius Frank Ghery Question Number: 76 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 4 Wrong Marks: 1 The maximum heat gain in a building is from which part of the building: **Options:** Floors 2. Doors 3. Roofs 4. Windows Question Number: 77 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 Shady trees can help protect a building from the summer sun when these are located on which side: **Options:** 1. North 2. South

3. East

4. West Question Number: 78 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 4 Wrong Marks: 1 What is the role of lintels in a building? **Options:** Give light to buildings Support the portion above wall openings Separate the rooms Support the windows Question Number: 79 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 In side hung windows the hinges are fixed on which side of the shutter? **Options:** 1. Top 2. Bottom 3. Side 4. Middle Question Number: 80 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 'Mona Lisa' is which of the following? **Options:** A painting 2. A Queen 3. An Actress 4 A Dancer

```
Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No
Question Numbers: (66 to 80)
Question Label : Comprehension
Sub questions
Question Number: 66 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 किस भारतीय शहर में आपको "हिलने वाले मीनार"
 के साथ मस्जिद मिलेगी?
Options:
1 हैदराबाद
   लखनऊ
    इलाहाबाद
Question Number: 67 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 औरंगाबाद (महाराष्ट्र) में एलोरा बौद्ध धर्म, हिंदु धर्म
 और जैन धर्म का प्रतिनिधित्व करने वाली प्राचीन गुफाओं
 के लिए प्रसिद्ध है। इनमें से, सबसे बड़ी संख्या से
 संबंधित है :
Options:
1. बौद्ध धर्म
Question Number: 68 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 निम्नलिखित में से कौन सी ऊर्जा का अक्षय स्रोत है?
Options:
1 कोयला
2. प्राकृतिक गैस
```

```
Question Number: 69 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
हर कोई 'ताजमहल' जानता है। यह सम्राट शाहजहां
द्वारा बनाया गया था, लेकिन किसके लिए?
Options:
1. जहांनी महल
   फरीदा महल
   मुमताज महल
Question Number: 70 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
दुनिया की सबसे बड़ी पैनोरैमिक मूर्तिकला राहत कहाँ
स्थित है?
Options:
<sub>1.</sub> कांचीपुरम
   महाबलीपरम
Question Number: 71 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 भारत में किस स्थान पर हम तीन धर्मों के गफा मंदिरों
 को पा सकते हैं?
Options:
    मदुरै
```

महासागर लहरें

```
आगरा
Question Number: 72 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
इनमें से कौन सा भारत का नियोजित शहर नहीं है?
Options:
   कानपुर
    भुवनेश्वर
Question Number: 73 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
''एलआईसी बिल्डिंग, नई दिल्ली'' का आर्किटेक्ट
 कौन है?
Options:
   चार्ल्स कोरिया
2. लॉरी बेकर
3. ले Corbusier
  बी.वी. दोशी
Question Number: 74 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 आर्किटेक्ट्स के लिए सबसे ज्यादा पुरस्कार कौन सा
 है?
Options:
   प्रिट्जर का पुरस्कार
```

आगा खान पुरस्कार पुरस्कार रेक्टर स्टर्लिंग पुरस्कार Question Number: 75 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 4 Wrong Marks: 1 'फॉलिंग वाटर्स' नामक घर को निम्नलिखित आर्किटेक्ट्स में से किसके द्वारा डिज़ाइन किया गया था? **Options:** 1. जेम्स स्टर्लिंग फ्रेंक लॉयड राइट वाल्टर ग्रोपियस 4 फ्रैंक गेरी Question Number: 76 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 भवनों में गर्मी सबसे अधिक किस हिस्से से आती है? **Options:** Question Number: 77 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical Correct Marks: 4 Wrong Marks: 1 छायादार पेड़ सूर्य की गर्मी से एक इमारत की रक्षा में मदद कर सकते हैं जब वे किस तरफ स्थित है: **Options:**

```
Question Number: 78 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation : Vertical
Correct Marks: 4 Wrong Marks: 1
एक इमारत में लिंटेल की भूमिका क्या है?
Options:
   इमारतों को प्रकाश दें
    दीवारों के खुले हिस्से के ऊपरी भाग को सहारा
   कमरे अलग करें
   खिडकियों को सहारा देना
Question Number: 79 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
एक तरफ से खुलने वाली खिड़की के काज किस तरफ
 होते हैं?
Options:

    35पर

Question Number: 80 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
'मोना लिसा' निम्नलिखित में से क्या है?
Options:
```

एक पेंटिंग एक रानी एक नर्तकी Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (66 to 80) Question Label : Comprehension **Sub questions** Question Number: 66 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option: **No Option Orientation: Vertical** Correct Marks: 4 Wrong Marks: 1 ભારતનાં કયા શહેરમાં "ઝૂલતા મિનાર" આવેલ છે? **Options:** હૈદરાબાદ લખનો અમદાવાદ અલ્હાબાદ $Question\ Number: 67\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: No\ Option\ Orientation: Vertical$ Correct Marks: 4 Wrong Marks: 1 ઔરંગાબાદ (મહારાષ્ટ્ર) નું ઈલોરા એ બૌધ્ધ,હિન્દ્ર અને જૈન ધર્મનું પ્રતિનિધિત્વ કરતી પ્રાચીન ગુફાઓ માટે જાણીતું છે. આમાંની સૌથી વધુ સંખ્યાની ગુફાઓનો સંબંધ શાની સાથે છે? **Options:** 🔒 બૌઘ્ધ ધર્મ સાથે _{2.} હિન્દુ ધર્મ સાથે 3. જૈન ધર્મ સાથે _{4.} ઝોરેસ્ટ્રિયનવાદ સાથે

```
Question Number: 68 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
નીચેનામાંથી ક્યો ઊર્જા સ્રોત પુનઃપ્રાપ્ય છે?
Options:
<sub>1.</sub> કોલસો
2. પ્રાકૃતિક ગેસ
<sub>3.</sub> દરિયાઈ મોજા
<sub>4.</sub> ઓઈલ (તેલ)
Question Number : 69 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks: 4 Wrong Marks: 1
 દરેક લોકો ''તાજમહેલ'' થી પરિચિત છે. તે સમ્રાટ
 શાહજહાં એ બંધાવ્યો હતો. તેમણે તે કોની યાદમાં
 બંધાવ્યો હતો?
Options:
   જહાની મહલ
<sub>2.</sub> ફરીદા મહલ
   મુમતાઝ મહલ
   ટોબા બેગમ (Toba Begum)
Question Number: 70 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
દુનિયાનું મોટામાં મોટું પૈનોરૈમિક-સ્કલ્પચરલ-રીલિફ કયાં
 આવેલું છે?
Options:
    કાંચીપુરમ્
<sub>3.</sub> પોન્ડીચેરી
```

```
Question Number: 71 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
ભારતમાં કઈ જગ્યાયે ત્રણ આસ્થાવાળા ગુફા મંદિરો જોવા
મળે છે?
Options:
   મદ્દરાઇ
2. દિલ્હી
   ઈલોરા
<sub>4.</sub> આગ્રા
Question Number: 72 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 નીચેનામાંથી કયું શહેર આયોજનબધ્ધ નથી?
Options:
<sub>1.</sub> કાનપુર
2. ભુવનેશ્વર
<sub>3.</sub> ચંડીગઢ
<sub>4.</sub> ગાંધીનગર
Question Number: 73 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
''LIC બિલ્ડીંગ, ન્યુ દિલ્હી'' ના વાસ્તુકાર કોણ છે?
Options:
<sub>1.</sub> <mark>ચાર્લ્સ કોર્રિયા</mark>
<sub>2.</sub> લોરી બેકર
3 લે કોર્બુસીયર (Le Corbusier)
```

મહાબલીપુરમ

```
Question Number: 74 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 વાસ્તુકારો માટેનો સૌથી મોટો પુરસ્કાર કયો છે?
Options:
1. પ્રિટ્ઝકર પુરસ્કાર
    આગાખાન પુરસ્કાર
    રેક્ટર પુરસ્કાર (Rechter Prize)
   સ્ટર્લિંગ પુરસ્કાર
\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 ''ફોલિંગ વૉટર્સ'' નામના ઘરનાં વાસ્તુકાર નીચેનામાંથી
 કોણ હતાં?
Options:
    જેમ્સ સ્ટર્લિંગ
2. ફ્રેન્ક લોયડ રાઈટ
<sub>3.</sub> વોલ્ટર ગ્રોપિયસ
4 ફ્રૈન્ક ગેરી
\label{eq:Question Number: Yes Single Line Question Shuffling: Yes Display Question Number: Yes Single Line Question Option: No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
મકાનનાં કયા ભાગમાંથી સૌથી વધુ ગરમી આવે છે?
Options:
   લાદીમાંથી
<sub>2.</sub> દરવાજામાંથી
```

4. બી.વી. દોશી

```
<sub>૩.</sub> છત ઉપરથી
4 બારીઓમાંથી
Question Number: 77 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation : Vertical
Correct Marks: 4 Wrong Marks: 1
 મકાનને ઉનાળાની ગરમીથી રક્ષણ મળે તે હેતુથી ઘટાદાર
 (છાયાદાર) વૃક્ષો કઈ બાજુએ હોવા જોઈએ?
Options:

    ઊત્તર

<sub>2.</sub> દક્ષિણ
4 પશ્ચિમ
Question Number: 78 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
મકાનમાં લિન્ટેલની ભૂમિકા શું છે?
1. મકાનોને પ્રકાશ આપવો
   ખુલ્લા ભાગોને ટેકો આપવો
૩ ઓરડાઓને અલગ કરવા
<sub>4.</sub> બારીઓને ટેકો આપવો
Question Number: 79 Question Type: MCQ Option Shuffling: Yes Display Question Number: Yes Single Line Question Option:
No Option Orientation: Vertical
Correct Marks: 4 Wrong Marks: 1
 એક બાજુએ ખુલતી બારીઓમાં મજાગરા શટરની કઈ
 બાજુએ રાખવામાં આવે છે?
Options:
    ઊપર
```

ુ નીચે

ુ બાજુ પર

4 વ્રરે

 $Question\ Number: 80\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Line\ Question\ Option: Type: MCQ\ Option\ Shuffling: Yes\ Display\ Question\ Number: Yes\ Single\ Number: Yes\ Single\ Number: Yes\ Single\ Number: Yes\ Single\ Number: Yes\ Number: Yes\ Single\ Number: Yes\ Number: Ye$

No Option Orientation : Vertical

Correct Marks: 4 Wrong Marks: 1

''મોના લિસા'' નીચેનામાંથી શું છે?

Options:

1. એક ચિત્ર

2. એક રાણી

3. એક અભિનેત્રી

ુ એક નૃત્યાંગના 4.

Drawing

Section Id: 416529213

Section Number: 3

Section type: Offline

Mandatory or Optional: Mandatory

Number of Questions:3Number of Questions to be attempted:3Section Marks:70

Display Number Panel:

Group All Questions:

No

Sub-Section Number: 1

Sub-Section Id: 416529336

Question Shuffling Allowed: No

Question Number: 81 Question Type: SUBJECTIVE Display Question Number: Yes

Correct Marks: 20

(a) In the space provided in the answer sheet for this question, draw margin lines to form a frame. In this frame create an aesthetic composition using only equilateral triangles. These triangles can be of any size, and may be placed separate, overlapping or within each other. Design and draw to produce an aesthetic and visually exciting composition of these triangles in the frame without making it look like any form like house face The spaces created by the composition should be filled with some colors of your choice so that the visual quality of the composition is enhanced. Use of drawing instruments is allowed. 20 Marks

Question Number: 81 Question Type: SUBJECTIVE Display Question Number: Yes Correct Marks: 20

इस प्रश्न के लिए उत्तर पत्र में प्रदान की गई (a) जगह में, फ्रेम बनाने के लिए मार्जिन लाइन बनाएं। इस फ्रेम में केवल समतल्य त्रिकोण का उपयोग करके एक सौंदर्य रचना बनाओ। ये त्रिभज किसी भी आकार का हो सकते हैं, और अलग-अलग, ओवरलैपिंग या एक दूसरे के भीतर रखा जा सकता है। फ्रेम में इन त्रिकोणों की एक सौंदर्य और दुष्टि से रोमांचक संरचना का निर्माण करने के लिए डिज़ाइन और डॉ करें, इसे घर के चेहरे आदि जैसे किसी भी रूप की तरह दिखने के बिना। संरचना द्वारा बनाई गई रिक्त स्थान आपकी पसंद के कुछ रंगों से भरी जानी चाहिए ताकि दुश्य गुणवत्ता संरचना बढाया गया है। डाइंग उपकरणों का उपयोग करने की 20 Marks अनुमति है।

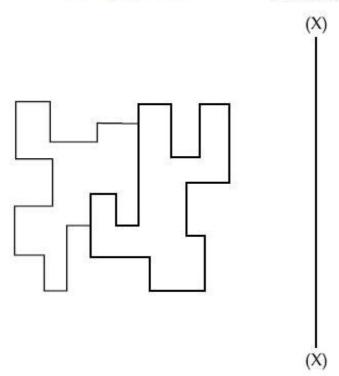
 ${\bf Question\ Number: 81\ Question\ Type: SUBJECTIVE\ Display\ Question\ Number: Yes}$

Correct Marks: 20

આ પ્રશ્નના જવાબ માટે આપવામાં આવેલ (a) જગ્યામાં એક ફ્રેમ બનાવવા માટે હાંસિયા-રેખાઓ દ્વેરો. આ ફ્રેમમાં ફક્ત સમબાજુ ત્રિકોણોનો ઉપયોગ કરી એક સુંદર સંયોજન બનાવો. આ ત્રિકોણો ગમે તે માપનાં અને એક-બીજાથી જુદા, એક-બીજા ઊપર કે અંદર મૂકી શકો છો. આવા ત્રિકોણોથી આ ફ્રેમમાં ઘર કે ચેહરાનું ચિત્ર ન ઉપજે તે રીતે જોવામાં આકર્ષક લાગે તેવાં સંયોજનનું આયોજન કરી ચિત્ર દોરો. આ સંયોજનથી રચાતા અવકાશને મનપસંદ રંગોથી રંગો કે જેથી સંયોજનનાં દ્દશ્યની ગણવત્તામાં વધારો થાય. રેખાંકન-ઉપકરણોનો (drawing instruments) ઉપયોગ કરી શકો છો. 20 Marks

Question Number: 82 Question Type: SUBJECTIVE Display Question Number: Yes Correct Marks: 20

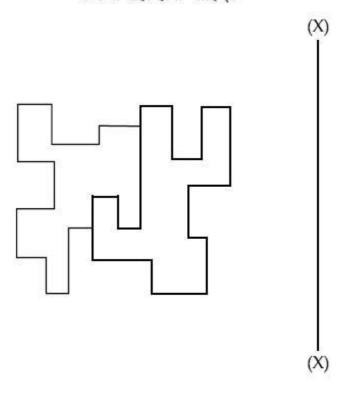
Draw the mirror image of the graphic (b) shown below about the line X - X. Your drawing should be technically correct in the drawing of lines and their positions. 20 Marks



Question Number: 82 Question Type: SUBJECTIVE Display Question Number: Yes

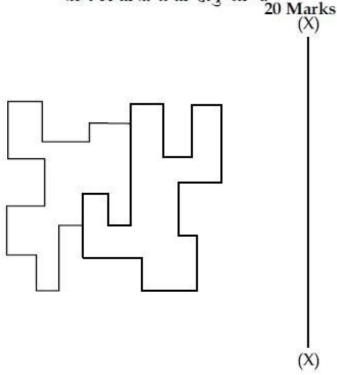
Correct Marks: 20

(b) लाइन X - X के संबंध में नीचे दिखाए गए ग्राफिक की दर्पण छिव बनाएं। आपकी ड्राइंग लाइनों और उनकी स्थिति के चित्रण में तकनीकी रूप से सही होनी चाहिए।
20 Marks



Question Number : 82 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 20

(b) આપેલ ગ્રાફિકનું X - X ને સાપેક્ષ આરસી પ્રતિબિંબ દોરો. આપનું ચિત્ર રેખાઓ અને તેનાં સ્થાનને લઇને ટેક્નીકલી સચોટ હોવું જોઇએ. 20 Marks



Question Number: 83 Question Type: SUBJECTIVE Display Question Number: Yes Correct Marks: 30

(c) Make a beautiful colorful design for male shirting material. 30 Marks

OR

Draw a picture of your favourite film star as realistic as possible.

OR

Draw from memory a picture of your school showing the surroundings.

Question Number: 83 Question Type: SUBJECTIVE Display Question Number: Yes Correct Marks: 30

(c) नर कमीज़ों के कपड़े के लिए एक सुंदर रंगीन डिज़ाइन बनायें। 30 Marks

या

यथासंभव यथार्थवादी के रूप में अपने पसंदीदा फिल्म स्टार की एक तस्वीर बनाएं।

या

यादृच्छिक दिखाते हुए अपने स्कूल की एक तस्वीर स्मृति से ड्रा करें।

Question Number: 83 Question Type: SUBJECTIVE Display Question Number: Yes Correct Marks: 30

(c) પુરૂષનાં ખમીસના કાપડની સુંદર રંગ સભર ડિઝાઈન બનાવો. 30 Marks

અથવા

આપના મનપંસદ ફિલ્મી સિતારાનું શક્ય હોય તેટલું વાસ્તવિક ચિત્ર દોરો.

અથવા

તમારી શાળાની આસપાસનાં વાતાવરણને દર્શાવતું, તમારી સ્મૃતિ પર આધારિત ચિત્ર દોરો.