

National Testing Agency

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Subject Name: Paper II EH
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Paper II

Group Number : 1
Group Id : 416529142
Group Maximum Duration : 0
Group Minimum Duration : 180
Revisit allowed for view? : No
Revisit allowed for edit? : No
Break time: 0
Group Marks: 390

Mathematics

Section Id : 416529208
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 30
Number of Questions to be attempted: 30
Section Marks: 120
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Sub-Section Id: 416529314
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 41652911596 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 :

Options :

41652945322. 4

41652945323. 6

41652945324. 11

41652945325. 15

Question Number : 1 Question Id : 41652911596 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 :

41652945322. 4

41652945323. 6

41652945324. 11

41652945325. 15

Question Number : 2 Question Id : 41652911597 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 locus of the point $w = \operatorname{Re}(z) + \frac{1}{z}$,

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

Options :

41652945326. a parabola

41652945327. a circle

41652945328. an ellipse

41652945329. a hyperbola

Question Number : 2 Question Id : 41652911597 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 $w = \operatorname{Re}(z) + \frac{1}{z}$, जहाँ

$|z|=3$, का बिन्दुपथ है :

Options :

41652945326. एक परवलय

41652945327. एक वृत्त

41652945328. एक दीर्घवृत्त

41652945329. एक अतिपरवलय

Question Number : 3 Question Id : 41652911598 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

$$x^2 - p_1x + 2 = 0, x^2 - p_2x + 3 = 0,$$

$$x^2 - p_3x + 6 = 0$$

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

Options :

41652945330. 3, 4, 5

41652945331. 2, 3, 6

41652945332. 1, 3, 6

41652945333. 3, 5, 6

Question Number : 3 Question Id : 41652911598 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

$$x^2 - p_1x + 2 = 0, x^2 - p_2x + 3 = 0,$$

$$x^2 - p_3x + 6 = 0$$

के प्रत्येक युग्म का एक उभयनिष्ठ मूल है, तो

p_1, p_2, p_3 के धनात्मक मान क्रमशः हैं :

Options :

41652945330. 3, 4, 5

41652945331. 2, 3, 6

41652945332. 1, 3, 6

41652945333. 3, 5, 6

Question Number : 4 Question Id : 41652911599 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 $a, b, c \in \mathbb{R}$. If $abc = 1$, $AA^T = 64I_3$ and $\det(A) > 0$, then $(a^3 + b^3 + c^3)$, is :

Options :

41652945334. 21

41652945335. 11

41652945336. 9

41652945337. 7

Question Number : 4 Question Id : 41652911599 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 $A = \begin{bmatrix} 3a & b & c \\ b & 3c & a \\ c & a & 3b \end{bmatrix}$, 3×3 का एक आव्यूह

है जबकि $a, b, c \in \mathbb{R}$. यदि $abc = 1$, $AA^T = 64I_3$
तथा $\det(A) > 0$, तो $(a^3 + b^3 + c^3)$ है :

Options :

41652945334. 21

41652945335. 11

41652945336. 9

41652945337. 7

Question Number : 5 Question Id : 41652911600 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 :

Options :

41652945338. 1

41652945339. -1

41652945340. 2

41652945341. -2

Question Number : 5 Question Id : 41652911600 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 रेखिक समीकरण निकाय

$$x + ay + z = 1$$

$$ax + y + z = 1$$

$$x + y + az = 1$$

का कोई हल नहीं है, है :

Options :

41652945338. 1

41652945339. -1

41652945340. 2

41652945341. -2

Question Number : 6 Question Id : 41652911601 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 number of points of intersection of 4 distinct circles and 8 distinct straight lines, is :

Options :

41652945342. 66

41652945343. 64

41652945344. 104

41652945345. 40

Question Number : 6 Question Id : 41652911601 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 :

41652945342. 66

41652945343. 64

41652945344. 104

41652945345. 40

Question Number : 7 Question Id : 41652911602 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 :

41652945346. 512

41652945347. 252

41652945348. 256

41652945349. 352

Question Number : 7 Question Id : 41652911602 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 :

41652945346. 512

41652945347. 252

41652945348. 256

41652945349. 352

Question Number : 8 Question Id : 41652911603 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 :

41652945350. $2y = x + 3z$

41652945351. $4y = x + 3z$

41652945352. $2y = x + z$

41652945353. $y = x + z$

Question Number : 8 Question Id : 41652911603 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 श्रेणी 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

अशून्य वास्तविक संख्यायें हैं, तो :

Options :

41652945350. $2y = x + 3z$

41652945351. $4y = x + 3z$

41652945352. $2y = x + z$

41652945353. $y = x + z$

Question Number : 9 Question Id : 41652911604 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 the first 19 terms of the series

$1^2 + 2 \cdot 2^2 + 3^2 + 2 \cdot 4^2 + 5^2 + \dots$ is :

Options :

41652945354. 4200

41652945355. 4410

41652945356. 3800

41652945357. 3610

Question Number : 9 Question Id : 41652911604 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

श्रेणी

$1^2 + 2 \cdot 2^2 + 3^2 + 2 \cdot 4^2 + 5^2 + \dots$

के प्रथम 19 पदों का योग है :

Options :

41652945354. 4200

41652945355. 4410

41652945356. 3800

41652945357. 3610

Question Number : 10 Question Id : 41652911605 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 $f: \mathbb{R} \rightarrow \mathbb{R}$ be a differentiable function such that $f(3) = 7$ and $f'(3) = 1$, then the value of

$\lim_{x \rightarrow 3} \int_7^{f(x)} \frac{3t^2}{(x-3)} dt$, is :

Options :

41652945358. 21

41652945359. 147

41652945360. 441

41652945361. 105

Question Number : 10 Question Id : 41652911605 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 $f: \mathbb{R} \rightarrow \mathbb{R}$ एक अवलनीय फलन इस प्रकार है कि

$f(3) = 7$ तथा $f'(3) = 1$, तो

$\lim_{x \rightarrow 3} \int_7^{f(x)} \frac{3t^2}{(x-3)} dt$ का मान है :

Options :

41652945358. 21

41652945359. 147

41652945360. 441

41652945361. 105

Question Number : 11 Question Id : 41652911606 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

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

is differentiable on \mathbb{R} , then $f(2)$ equals :

Options :

41652945362. 16

41652945363. -4

41652945364. 20

41652945365. 12

Question Number : 11 Question Id : 41652911606 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 $f(x) = \begin{cases} ax^2 + bx + 4, & x \geq -1 \\ bx^2 + a, & x < -1 \end{cases}$ द्वारा

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

Options :

41652945362. 16

41652945363. -4

41652945364. 20

41652945365. 12

Question Number : 12 Question Id : 41652911607 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 :

41652945366. $[0, 1]$

41652945367. $[-1, 0]$

41652945368. $\left[-\frac{1}{2}, \frac{1}{2}\right]$

41652945369. $[-1, 1]$

Question Number : 12 Question Id : 41652911607 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 :

41652945366. $[0, 1]$

41652945367. $[-1, 0]$

41652945368. $\left[-\frac{1}{2}, \frac{1}{2}\right]$

41652945369. $[-1, 1]$

Question Number : 13 Question Id : 41652911608 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 equation $x^3 + e^x + 5 = 0$ ($x \in \mathbb{R}$), has :

Options :

41652945370. no solution

41652945371. exactly one solution

41652945372. exactly two solutions

41652945373. infinitely many solutions

Question Number : 13 Question Id : 41652911608 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 :

41652945370. का कोई हल नहीं है।

41652945371. का मात्र एक हल है।

41652945372. के मात्र दो हल हैं।

41652945373. के अनन्त हल हैं।

Question Number : 14 Question Id : 41652911609 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 :

41652945374. $\frac{1}{2\sqrt{x}}$ and $\cos x$

41652945375. \sqrt{x} and $-\sin x$

41652945376. $\frac{2}{\sqrt{x}}$ and $-\cos x$

41652945377. $2\sqrt{x}$ and $\sin x$

Question Number : 14 Question Id : 41652911609 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 :

41652945374. $\frac{1}{2\sqrt{x}}$ तथा $\cos x$

41652945375. \sqrt{x} तथा $-\sin x$

41652945376. $\frac{2}{\sqrt{x}}$ तथा $-\cos x$

41652945377. $2\sqrt{x}$ तथा $\sin x$

Question Number : 15 Question Id : 41652911610 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

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

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

Options :

41652945378. $4 + 2\sqrt{2}$

41652945379. $4 - 2\sqrt{2}$

41652945380. 1

41652945381. $\frac{15}{2} - 2\sqrt{2}$

Question Number : 15 Question Id : 41652911610 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 $f(x) = [x^2] + g(x)$, जहाँ $[x]$, x के समान या इससे कम महत्तम पूर्णांक है, तथा

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

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

Options :

41652945378. $4 + 2\sqrt{2}$

41652945379. $4 - 2\sqrt{2}$

41652945380. 1

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

41652945381.

Question Number : 16 Question Id : 41652911611 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 :

$$\frac{9}{2}$$

41652945382.

$$\frac{27}{4}$$

41652945383.

$$\frac{27}{2}$$

41652945384.

$$\frac{9}{4}$$

41652945385.

Question Number : 16 Question Id : 41652911611 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : 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 :

$$\frac{9}{2}$$

41652945382.

$$\frac{27}{4}$$

41652945383.

$$\frac{27}{2}$$

41652945384.

$$\frac{9}{4}$$

41652945385.

Question Number : 17 Question Id : 41652911612 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

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

passing through the point (1, 0) is :

Options :

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

41652945386.

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

41652945387.

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

41652945388.

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

41652945389.

Question Number : 17 Question Id : 41652911612 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

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

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

Options :

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

41652945386.

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

41652945387.

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

41652945388.

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

41652945389.

Question Number : 18 Question Id : 41652911613 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 :

Options :

41652945390. $\left(\frac{5}{2}, -\frac{7}{2}\right)$

41652945391. $(3, 1)$

41652945392. $\left(\frac{3}{2}, -\frac{7}{2}\right)$

41652945393. $\left(-\frac{3}{2}, \frac{7}{2}\right)$

Question Number : 18 Question Id : 41652911613 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 :

41652945390. $\left(\frac{5}{2}, -\frac{7}{2}\right)$

41652945391. $(3, 1)$

41652945392. $\left(\frac{3}{2}, -\frac{7}{2}\right)$

41652945393. $\left(-\frac{3}{2}, \frac{7}{2}\right)$

Question Number : 19 Question Id : 41652911614 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 :

41652945394. $(2, 2\sqrt{2})$

41652945395. $(2, \sqrt{2})$

41652945396. $(\sqrt{2}, 2\sqrt{2})$

41652945397. $(2\sqrt{2}, 2)$

Question Number : 19 Question Id : 41652911614 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 :

41652945394. $(2, 2\sqrt{2})$

41652945395. $(2, \sqrt{2})$

41652945396. $(\sqrt{2}, 2\sqrt{2})$

41652945397. $(2\sqrt{2}, 2)$

Question Number : 20 Question Id : 41652911615 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 :

41652945398. 4

41652945399. 3

41652945400. 5

41652945401. 8

Question Number : 20 Question Id : 41652911615 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 :

41652945398. 4

41652945399. 3

41652945400. 5

41652945401. 8

Question Number : 21 Question Id : 41652911616 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 :

41652945402. -33

41652945403. -36

41652945404. 33

41652945405. 36

Question Number : 21 Question Id : 41652911616 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 :

Options :

41652945402. -33

41652945403. -36

41652945404. 33

41652945405. 36

Question Number : 22 Question Id : 41652911617 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

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

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

Options :

41652945406. $\frac{\sqrt{3}}{2}$

41652945407. $\sqrt{2} - 1$

41652945408. $\frac{1}{\sqrt{3}}$

41652945409. $\frac{1}{\sqrt{2}}$

Question Number : 22 Question Id : 41652911617 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 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। यदि SA तथा S'A एक दूसरे पर लम्बवत हैं, तो दीर्घवृत्त की उत्केन्द्रता है :

Options :

41652945406. $\frac{\sqrt{3}}{2}$

41652945407. $\sqrt{2} - 1$

41652945408. $\frac{1}{\sqrt{3}}$

41652945409. $\frac{1}{\sqrt{2}}$

Question Number : 23 Question Id : 41652911618 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 length of the perpendicular from the point (1, 2, 6) on the line

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

Options :

41652945410. $\sqrt{2}$

41652945411. $\sqrt{3}$

41652945412. 2

41652945413. $\sqrt{5}$

Question Number : 23 Question Id : 41652911618 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 :

41652945410. $\sqrt{2}$

41652945411. $\sqrt{3}$

41652945412. 2

41652945413. $\sqrt{5}$

Question Number : 24 Question Id : 41652911619 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 :

41652945414. 0

41652945415. 2

41652945416. $\sqrt{2}$

41652945417. $\sqrt{3}$

Question Number : 24 Question Id : 41652911619 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 :

41652945414. 0

41652945415. 2

41652945416. $\sqrt{2}$

41652945417. $\sqrt{3}$

Question Number : 25 Question Id : 41652911620 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 \vec{a} and

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

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

Options :

41652945418. $\frac{2}{3}$

41652945419. $\frac{2}{5}$

41652945420. $\frac{1}{3}$

41652945421. $\frac{1}{5}$

Question Number : 25 Question Id : 41652911620 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 सदिशों \vec{a} तथा \vec{b} के बीच एक कोण $\frac{2\pi}{3}$ है।

यदि $|\vec{b}| = 2|\vec{a}|$ तथा सदिशों $\vec{a} + x\vec{b}$ और

$\vec{a} - \vec{b}$ के बीच का कोण समकोण है, तो x का मान है :

Options :

41652945418. $\frac{2}{3}$

41652945419. $\frac{2}{5}$

41652945420. $\frac{1}{3}$

41652945421. $\frac{1}{5}$

Question Number : 26 Question Id : 41652911621 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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 :

41652945422. $\frac{1}{20}$

41652945423. $\frac{1}{40}$

41652945424. $\frac{3}{40}$

41652945425. $\frac{1}{10}$

Question Number : 26 Question Id : 41652911621 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 क्रमशः 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 :

41652945422. $\frac{1}{20}$

41652945423. $\frac{1}{40}$

41652945424. $\frac{3}{40}$

41652945425. $\frac{1}{10}$

Question Number : 27 Question Id : 41652911622 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 $m \geq 11$ is an integer, is 4.

Then m is equal to :

Options :

41652945426. 14

41652945427. 15

41652945428. 16

41652945429. 17

Question Number : 27 Question Id : 41652911622 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 आँकड़ों के समूह

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

जहाँ $m \geq 11$ एक पूर्णांक है, की माध्याका के सापेक्ष

माध्य विचलन 4 है, तो m बराबर है :

Options :

41652945426. 14

41652945427. 15

41652945428. 16

41652945429. 17

Question Number : 28 Question Id : 41652911623 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

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

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

Options :

41652945430. -1

41652945431. 0

41652945432. 1

41652945433. -3

Question Number : 28 Question Id : 41652911623 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

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

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

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

Options :

41652945430. -1

41652945431. 0

41652945432. 1

41652945433. -3

Question Number : 29 Question Id : 41652911624 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

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

when $0 < x < 1$, is equal to :

Options :

41652945434. x

41652945435. $\sqrt{1+x^2}$

41652945436. $\frac{1}{\sqrt{x^2+1}}$

41652945437. $\frac{x}{\sqrt{1+x^2}}$

Question Number : 29 Question Id : 41652911624 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

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

जब कि $0 < x < 1$, बराबर है :

Options :

41652945434. x

41652945435. $\sqrt{1+x^2}$

41652945436. $\frac{1}{\sqrt{x^2+1}}$

41652945437. $\frac{x}{\sqrt{1+x^2}}$

Question Number : 30 Question Id : 41652911625 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 :

41652945438. $p \wedge q$

41652945439. $\sim p \wedge q$

41652945440. $(q \vee \sim p) \vee p$

41652945441. $(q \vee \sim p) \wedge q$

Question Number : 30 Question Id : 41652911625 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 :

41652945438. $p \wedge q$

41652945439. $\sim p \wedge q$

41652945440. $(q \vee \sim p) \vee p$

41652945441. $(q \vee \sim p) \wedge q$

Section Number : 2
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 9
Number of Questions to be attempted: 9
Section Marks: 200
Display Number Panel: Yes
Group All Questions: No

Sub-Section Number: 1
Sub-Section Id: 416529315
Question Shuffling Allowed : Yes

Question Id : 41652911626 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (31 to 35)

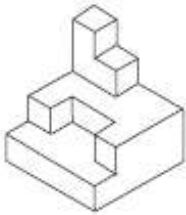
Question Label : Comprehension

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

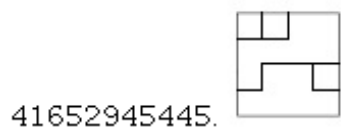
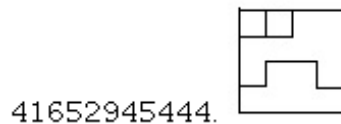
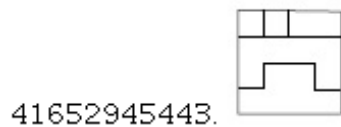
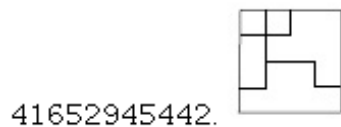
Sub questions

Question Number : 31 Question Id : 41652911627 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

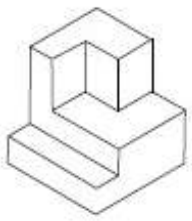


Options :



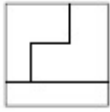
Question Number : 32 Question Id : 41652911628 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

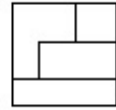


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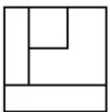
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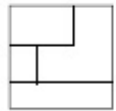
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41652945448.

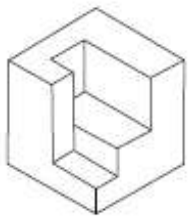


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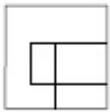
Question Number : 33 Question Id : 41652911629 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

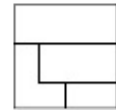


Options :

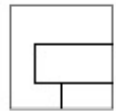
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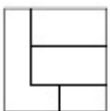
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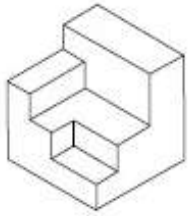


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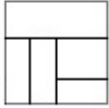
Question Number : 34 Question Id : 41652911630 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Options :

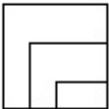
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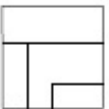
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41652945456.

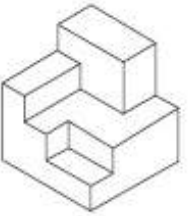


41652945457.



Question Number : 35 Question Id : 41652911631 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

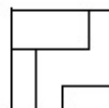


Options :

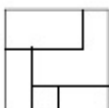
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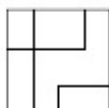
41652945459.



41652945460.



41652945461.



Question Id : 41652911626 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (31 to 35)

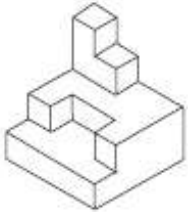
Question Label : Comprehension

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 Id : 41652911627 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

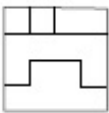
Correct Marks : 4 Wrong Marks : 1



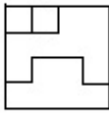
Options :



41652945442.



41652945443.



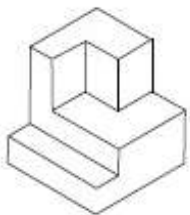
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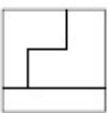
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Question Number : 32 Question Id : 41652911628 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

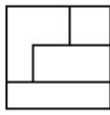


Options :

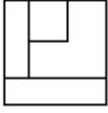


41652945446.

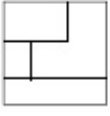
41652945447.



41652945448.

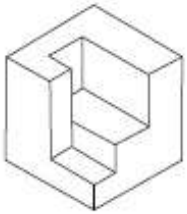


41652945449.



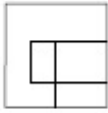
Question Number : 33 Question Id : 41652911629 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

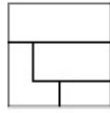


Options :

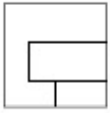
41652945450.



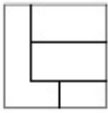
41652945451.



41652945452.

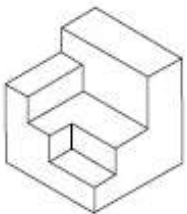


41652945453.



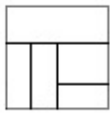
Question Number : 34 Question Id : 41652911630 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Options :

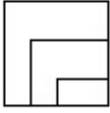
41652945454.



41652945455.



41652945456.

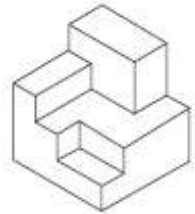


41652945457.



Question Number : 35 Question Id : 41652911631 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

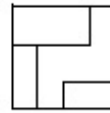


Options :

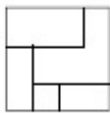
41652945458.



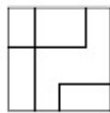
41652945459.



41652945460.



41652945461.



Sub-Section Number: 2
Sub-Section Id: 416529316
Question Shuffling Allowed : Yes

Question Id : 41652911632 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (36 to 39)

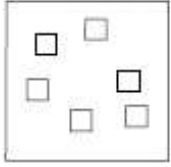
Question Label : Comprehension

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.

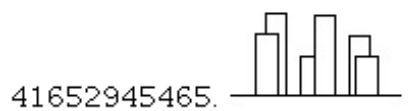
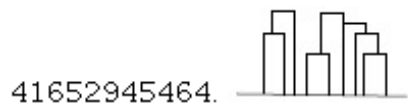
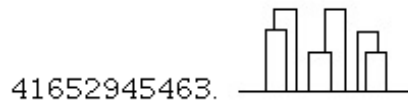
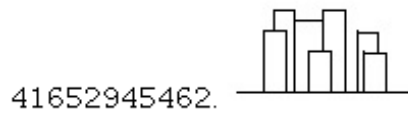
Sub questions

Question Number : 36 Question Id : 41652911633 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

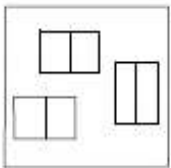


Options :

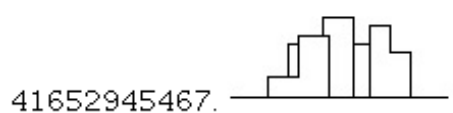
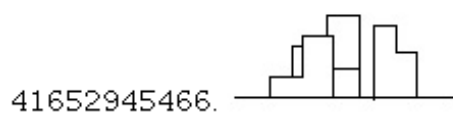


Question Number : 37 Question Id : 41652911634 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

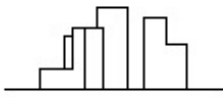
Correct Marks : 4 Wrong Marks : 1



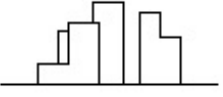
Options :



41652945468.

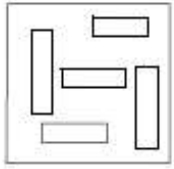


41652945469.



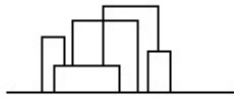
Question Number : 38 Question Id : 41652911635 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

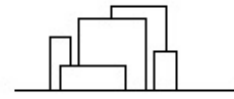


Options :

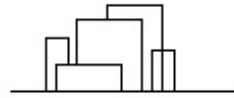
41652945470.



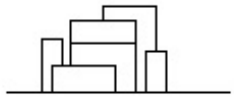
41652945471.



41652945472.

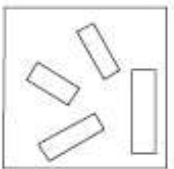


41652945473.



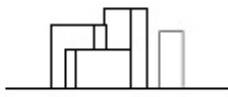
Question Number : 39 Question Id : 41652911636 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

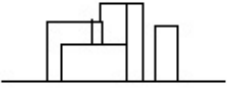


Options :

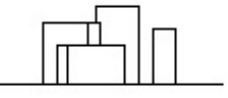
41652945474.



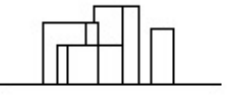
41652945475.



41652945476.



41652945477.



Question Id : 41652911632 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (36 to 39)

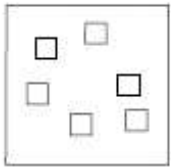
Question Label : Comprehension

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

Sub questions

Question Number : 36 Question Id : 41652911633 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 :

41652945462.



41652945463.



41652945464.

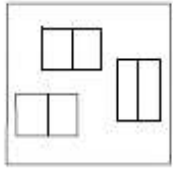


41652945465.

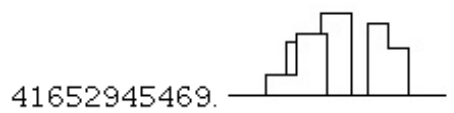
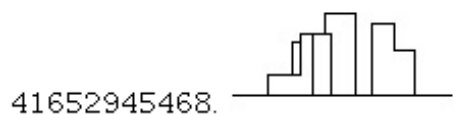
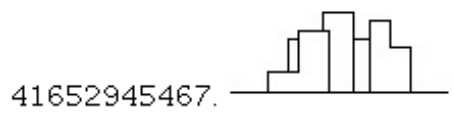
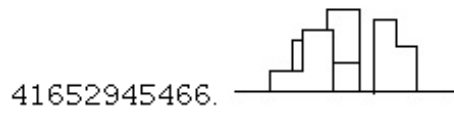


Question Number : 37 Question Id : 41652911634 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

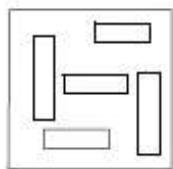


Options :

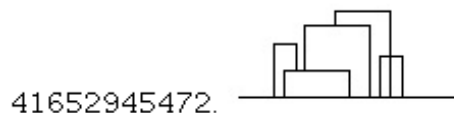
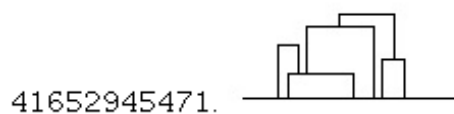
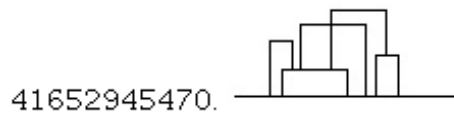


Question Number : 38 Question Id : 41652911635 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

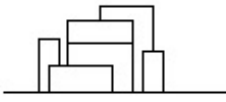
Correct Marks : 4 Wrong Marks : 1



Options :

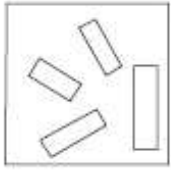


41652945473.



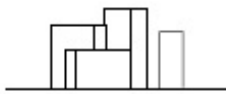
Question Number : 39 Question Id : 41652911636 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

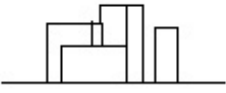


Options :

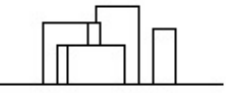
41652945474.



41652945475.



41652945476.



41652945477.



Sub-Section Number: 3
Sub-Section Id: 416529317
Question Shuffling Allowed : Yes

Question Id : 41652911637 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension
Questions : No

Question Numbers : (40 to 44)

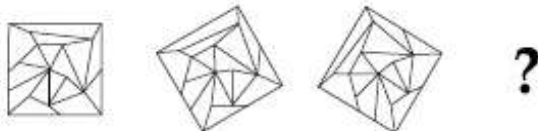
Question Label : Comprehension

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

Sub questions

Question Number : 40 Question Id : 41652911638 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 :

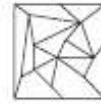
41652945478.



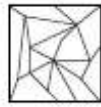
41652945479.



41652945480.

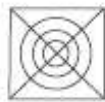


41652945481.



Question Number : 41 Question Id : 41652911639 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



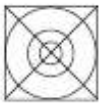
?

Options :

41652945482.



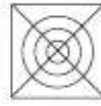
41652945483.



41652945484.



41652945485.



Question Number : 42 Question Id : 41652911640 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 :

41652945486.



41652945487.



41652945488.



41652945489.



Question Number : 43 Question Id : 41652911641 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 :

41652945490.



41652945491.



41652945492.



41652945493.



Question Number : 44 Question Id : 41652911642 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 :

41652945494.



41652945495.



41652945496.





41652945497.

Question Id : 41652911637 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (40 to 44)

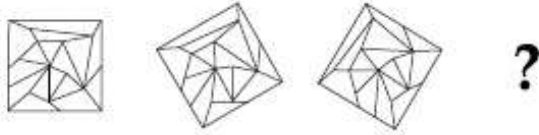
Question Label : Comprehension

निर्देश : उत्तर आकृतियों में से कौन सी आकृति को तीन प्रश्न आकृतियों में लगाने से अनुक्रम (sequence) पूरा हो जायेगा ?

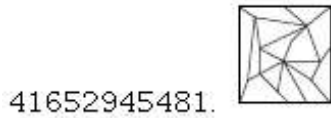
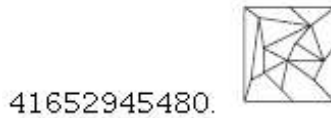
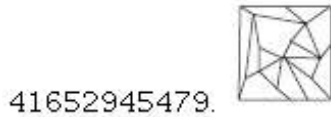
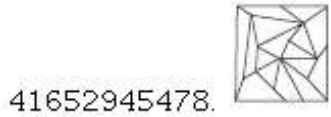
Sub questions

Question Number : 40 Question Id : 41652911638 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

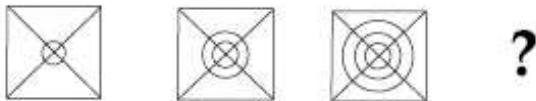


Options :

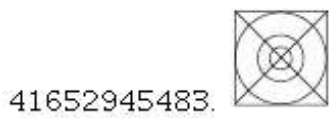
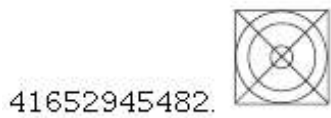


Question Number : 41 Question Id : 41652911639 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Options :



41652945484.

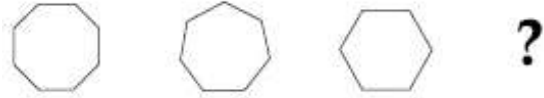


41652945485.



Question Number : 42 Question Id : 41652911640 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 :

41652945486.



41652945487.



41652945488.

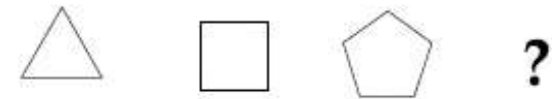


41652945489.



Question Number : 43 Question Id : 41652911641 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 :

41652945490.



41652945491.



41652945492.



41652945493.

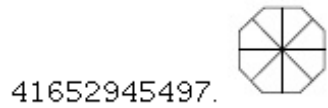
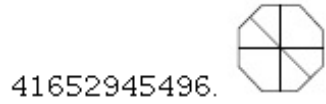
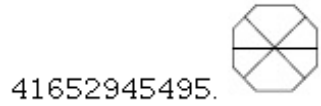
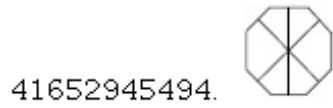


Question Number : 44 Question Id : 41652911642 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Options :



Sub-Section Number: 4
Sub-Section Id: 416529318
Question Shuffling Allowed : Yes

Question Id : 41652911643 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension
Questions : No

Question Numbers : (45 to 47)

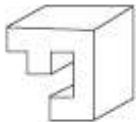
Question Label : Comprehension

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

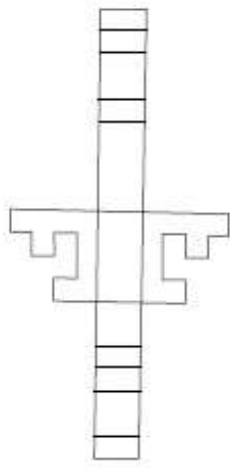
Sub questions

Question Number : 45 Question Id : 41652911644 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

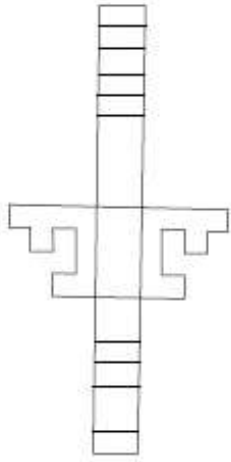
Correct Marks : 4 Wrong Marks : 1



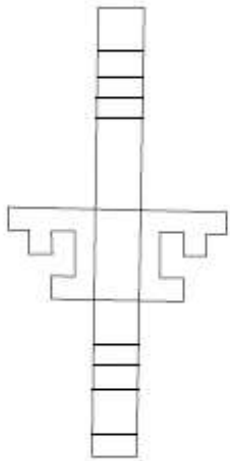
Options :



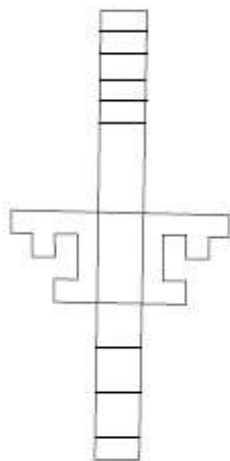
41652945498.



41652945499.



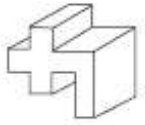
41652945500.



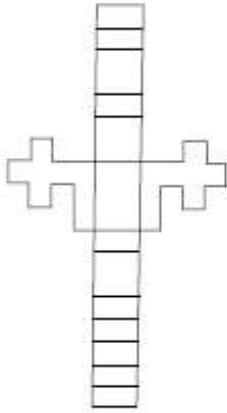
41652945501.

Question Number : 46 Question Id : 41652911645 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

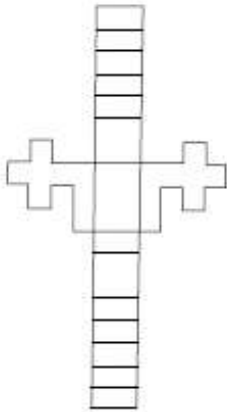
Correct Marks : 4 Wrong Marks : 1



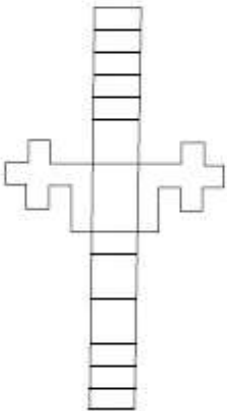
Options :



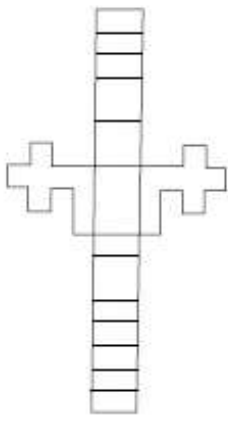
41652945502.



41652945503.



41652945504.



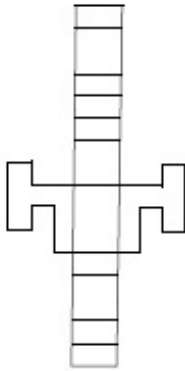
41652945505.

Question Number : 47 Question Id : 41652911646 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

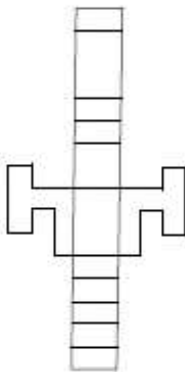
Correct Marks : 4 Wrong Marks : 1



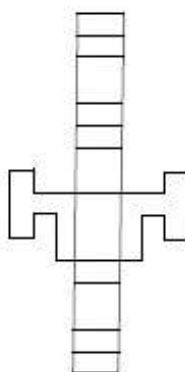
Options :



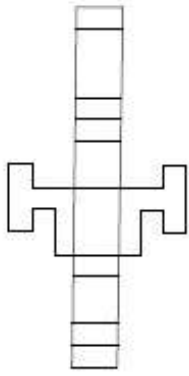
41652945506.



41652945507.



41652945508.



41652945509.

Question Id : 41652911643 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (45 to 47)

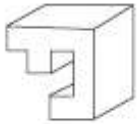
Question Label : Comprehension

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

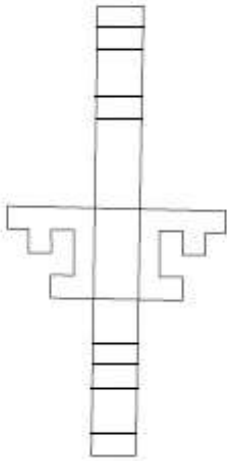
Sub questions

Question Number : 45 Question Id : 41652911644 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

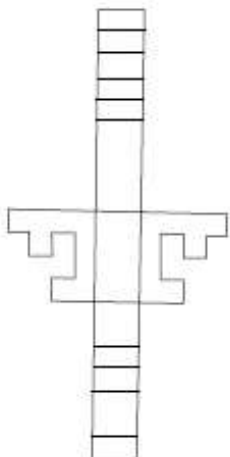
Correct Marks : 4 Wrong Marks : 1



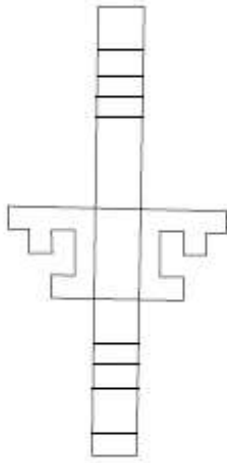
Options :



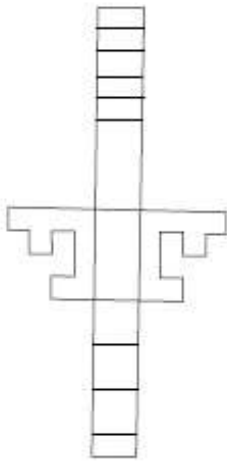
41652945498.



41652945499.



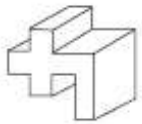
41652945500.



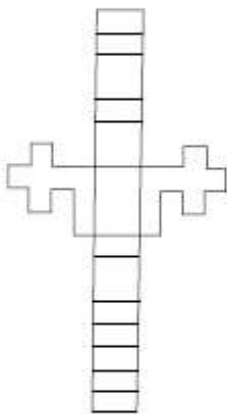
41652945501.

Question Number : 46 Question Id : 41652911645 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

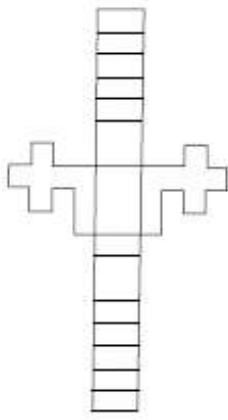
Correct Marks : 4 Wrong Marks : 1



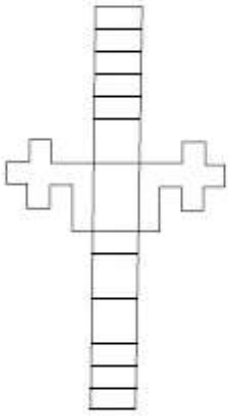
Options :



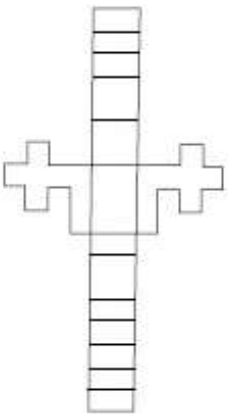
41652945502.



41652945503.



41652945504.

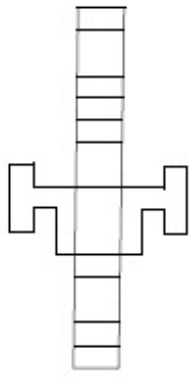


41652945505.

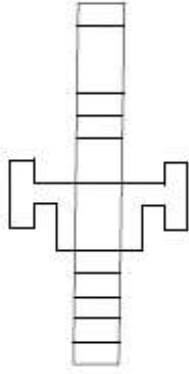
Question Number : 47 Question Id : 41652911646 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 4 Wrong Marks : 1



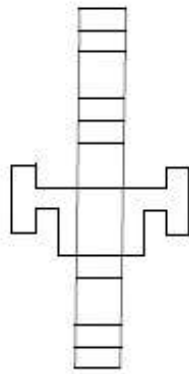
Options :



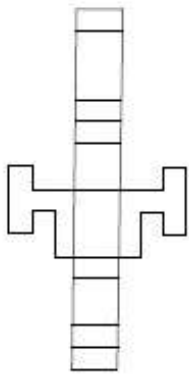
41652945506.



41652945507.



41652945508.



41652945509.

Sub-Section Number: 5
Sub-Section Id: 416529319
Question Shuffling Allowed : Yes

Question Id : 41652911647 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.

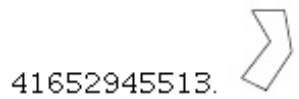
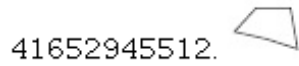
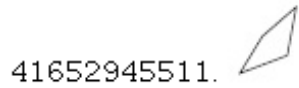
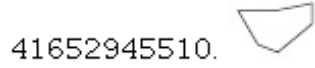
Sub questions

Question Number : 48 Question Id : 41652911648 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 :

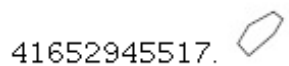
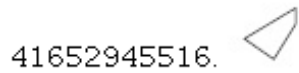
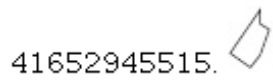
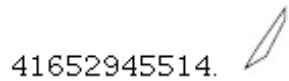


Question Number : 49 Question Id : 41652911649 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

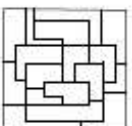


Options :





Question Number : 50 Question Id : 41652911650 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 :

41652945518. 

41652945519. 

41652945520. 


41652945521. 


Question Number : 51 Question Id : 41652911651 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 :

41652945522. 

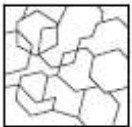
41652945523. 

41652945524. 


41652945525. 


Question Number : 52 Question Id : 41652911652 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 :

41652945526. 

41652945527. 

41652945528. 

41652945529. 

Question Id : 41652911647 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 सही है, चुनिए।

Sub questions

Question Number : 48 Question Id : 41652911648 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 :

41652945510.

41652945511.

41652945512.

41652945513.

Question Number : 49 Question Id : 41652911649 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 :

41652945514.

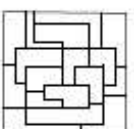
41652945515.

41652945516.


41652945517.


Question Number : 50 Question Id : 41652911650 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 :

41652945518. 

41652945519. 

41652945520. 


41652945521. 


Question Number : 51 Question Id : 41652911651 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 :

41652945522. 

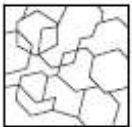
41652945523. 

41652945524. 


41652945525. 


Question Number : 52 Question Id : 41652911652 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 :

41652945526. 

41652945527. 

41652945528. 

41652945529. 

Question Id : 41652911653 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (53 to 57)

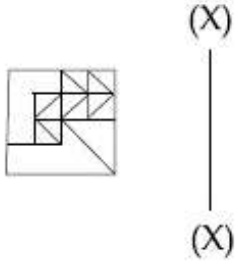
Question Label : Comprehension

Directions : Which one of the answer figures is the correct mirror image of the problem figure with respect to X - X ?

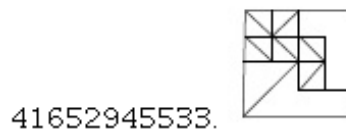
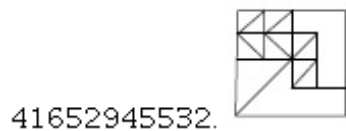
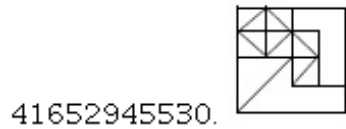
Sub questions

Question Number : 53 Question Id : 41652911654 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

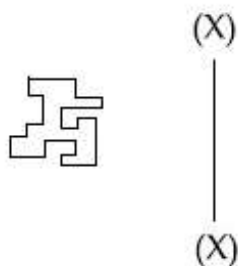


Options :



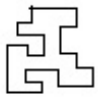
Question Number : 54 Question Id : 41652911655 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Options :

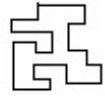
41652945534.



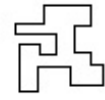
41652945535.



41652945536.

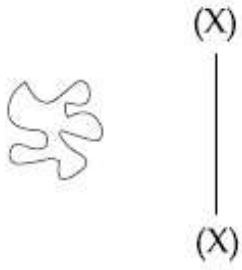


41652945537.



Question Number : 55 Question Id : 41652911656 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 :

41652945538.



41652945539.



41652945540.



41652945541.



Question Number : 56 Question Id : 41652911657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

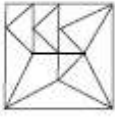


(X)

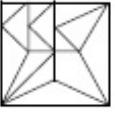


(X)

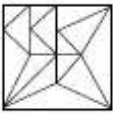
Options :



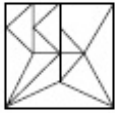
41652945542.



41652945543.



41652945544.



41652945545.

Question Number : 57 Question Id : 41652911658 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



(X)



(X)

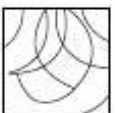
Options :



41652945546.



41652945547.



41652945548.

41652945549.



Question Id : 41652911653 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (53 to 57)

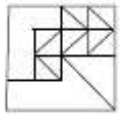
Question Label : Comprehension

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 Id : 41652911654 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

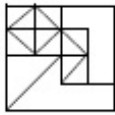
Correct Marks : 4 Wrong Marks : 1



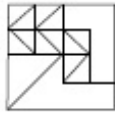
(X)
—
(X)

Options :

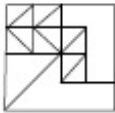
41652945530.



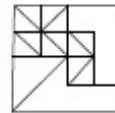
41652945531.



41652945532.

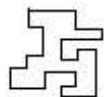


41652945533.



Question Number : 54 Question Id : 41652911655 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

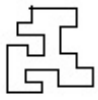
Correct Marks : 4 Wrong Marks : 1



(X)
—
(X)

Options :

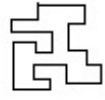
41652945534.



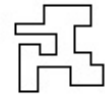
41652945535.



41652945536.



41652945537.



Question Number : 55 Question Id : 41652911656 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



(X)



(X)

Options :

41652945538.



41652945539.



41652945540.



41652945541.



Question Number : 56 Question Id : 41652911657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

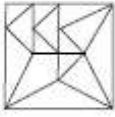


(X)

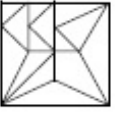


(X)

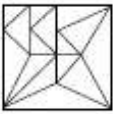
Options :



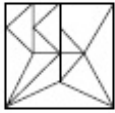
41652945542.



41652945543.



41652945544.



41652945545.

Question Number : 57 Question Id : 41652911658 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

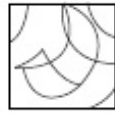


(X)



(X)

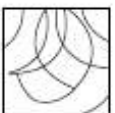
Options :



41652945546.



41652945547.



41652945548.

41652945549.



Sub-Section Number: 7
Sub-Section Id: 416529321
Question Shuffling Allowed : Yes

Question Id : 41652911659 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (58 to 62)

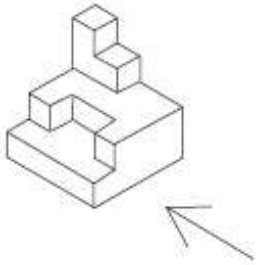
Question Label : Comprehension

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.

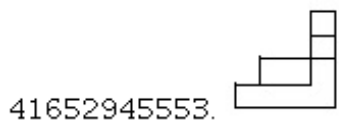
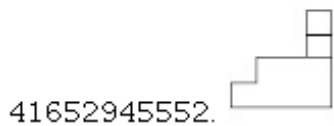
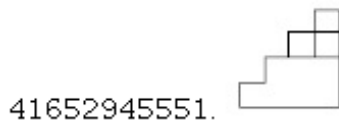
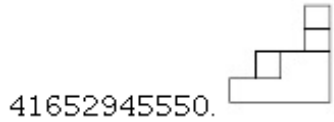
Sub questions

Question Number : 58 Question Id : 41652911660 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

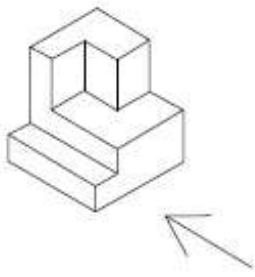


Options :

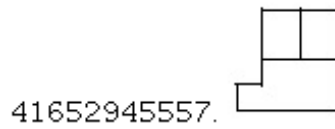
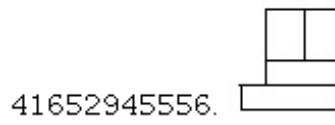
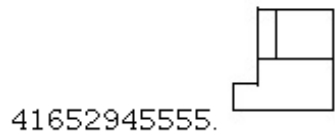
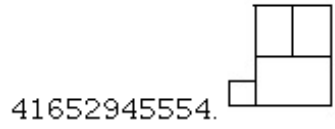


Question Number : 59 Question Id : 41652911661 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

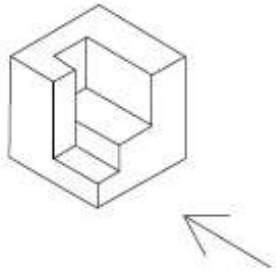
Correct Marks : 4 Wrong Marks : 1



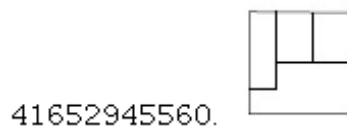
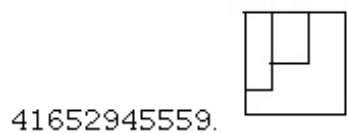
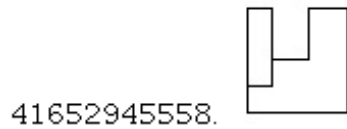
Options :



Question Number : 60 Question Id : 41652911662 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 :

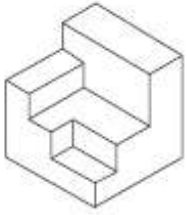


41652945561.



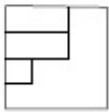
Question Number : 61 Question Id : 41652911663 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

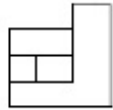


Options :

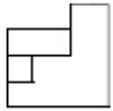
41652945562.



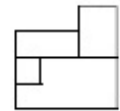
41652945563.



41652945564.

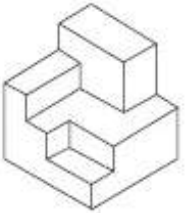


41652945565.



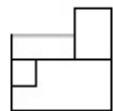
Question Number : 62 Question Id : 41652911664 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

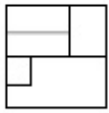


Options :

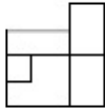
41652945566.



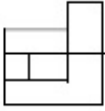
41652945567.



41652945568.



41652945569.



Question Id : 41652911659 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (58 to 62)

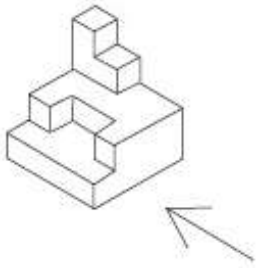
Question Label : Comprehension

निर्देश : 3 - D प्रश्न आकृति में एक वस्तु के एक दृश्य को दिखाया गया है। तीर की दिशा में देखते हुए, इसके सम्मुख दृश्य को उत्तर आकृतियों में से पहचानिये।

Sub questions

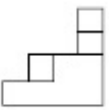
Question Number : 58 Question Id : 41652911660 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1



Options :

41652945550.



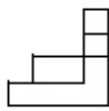
41652945551.



41652945552.

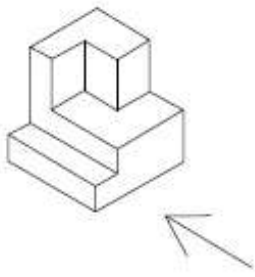


41652945553.

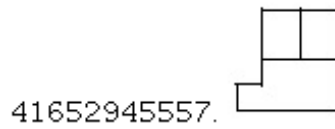
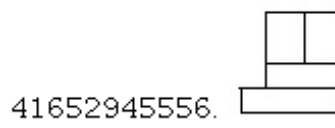
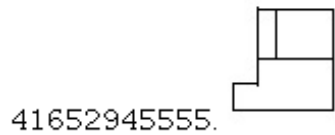
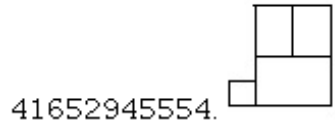


Question Number : 59 Question Id : 41652911661 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

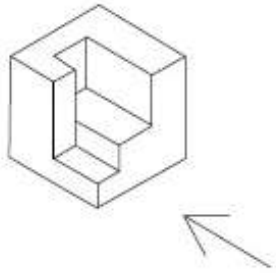
Correct Marks : 4 Wrong Marks : 1



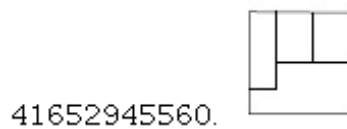
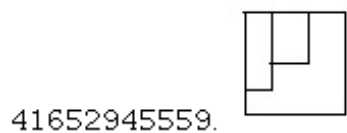
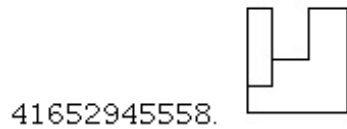
Options :



Question Number : 60 Question Id : 41652911662 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 :

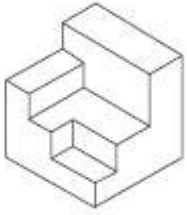


41652945561.



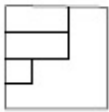
Question Number : 61 Question Id : 41652911663 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

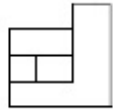


Options :

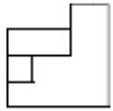
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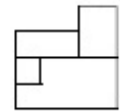
41652945563.



41652945564.

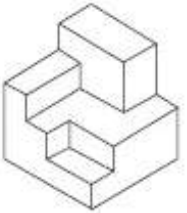


41652945565.



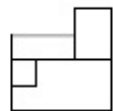
Question Number : 62 Question Id : 41652911664 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

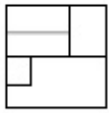


Options :

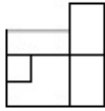
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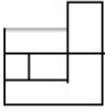
41652945567.



41652945568.



41652945569.



Sub-Section Number: 8
 Sub-Section Id: 416529322
 Question Shuffling Allowed : Yes

Question Id : 41652911665 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (63 to 65)

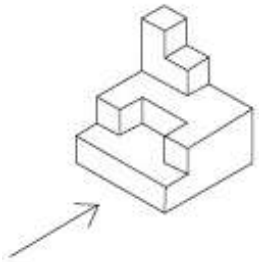
Question Label : Comprehension

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

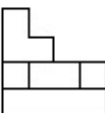
Question Number : 63 Question Id : 41652911666 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

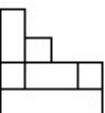


Options :

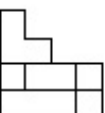
41652945570.



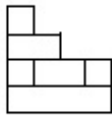
41652945571.



41652945572.

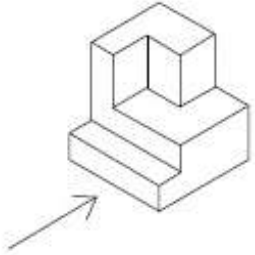


41652945573.



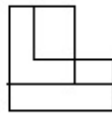
Question Number : 64 Question Id : 41652911667 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

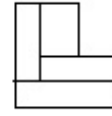


Options :

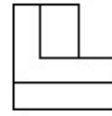
41652945574.



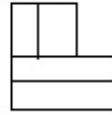
41652945575.



41652945576.

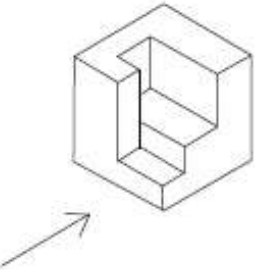


41652945577.



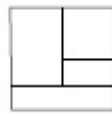
Question Number : 65 Question Id : 41652911668 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

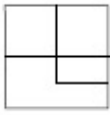


Options :

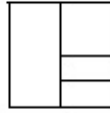
41652945578.



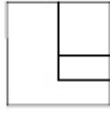
41652945579.



41652945580.



41652945581.



Question Id : 41652911665 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (63 to 65)

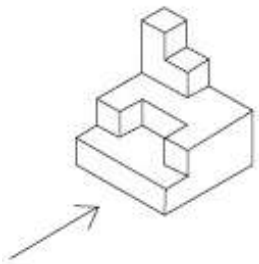
Question Label : Comprehension

निर्देश : 3 - D प्रश्न आकृति में एक वस्तु के एक दृश्य को दिखाया गया है। तीर की दिशा में देखते हुए, इसके सम्मुख दृश्य को उत्तर आकृतियों में से पहचानिये।

Sub questions

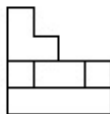
Question Number : 63 Question Id : 41652911666 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

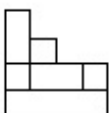


Options :

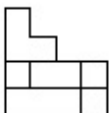
41652945570.



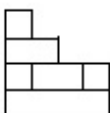
41652945571.



41652945572.

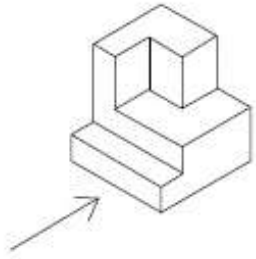


41652945573.

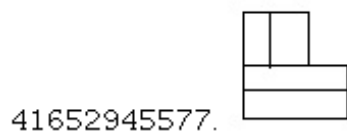
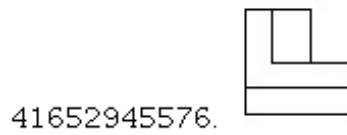
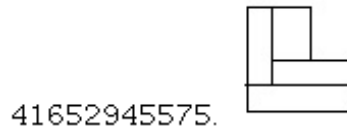
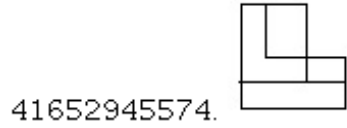


Question Number : 64 Question Id : 41652911667 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 4 Wrong Marks : 1

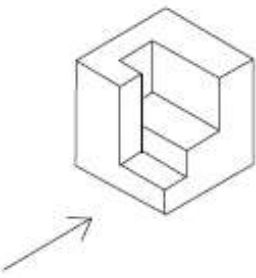


Options :

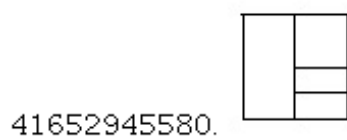
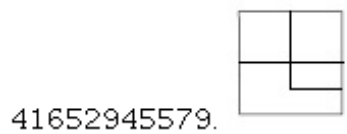
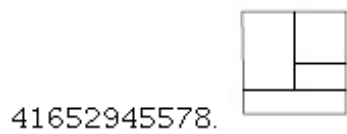


Question Number : 65 Question Id : 41652911668 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

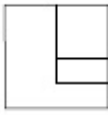
Correct Marks : 4 Wrong Marks : 1



Options :



41652945581.



Sub-Section Number: 9
Sub-Section Id: 416529323
Question Shuffling Allowed : Yes

Question Id : 41652911669 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 Id : 41652911670 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 :

41652945582. Hyderabad

41652945583. Lucknow

41652945584. Ahmedabad

41652945585. Allahabad

Question Number : 67 Question Id : 41652911671 Question Type : MCQ Option 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 :

41652945586. Buddhism

41652945587. Hinduism

41652945588. Jainism

41652945589. Zorastrianism

Question Number : 68 Question Id : 41652911672 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 :

41652945590. Coal

41652945591. Natural gas

41652945592. Ocean waves

41652945593. Oil

Question Number : 69 Question Id : 41652911673 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 :

41652945594. Jahani Mahal

41652945595. Farida Mahal

41652945596. Mumtaz Mahal

41652945597. Toba Begum

Question Number : 70 Question Id : 41652911674 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 :

41652945598. Kanchipuram

41652945599. Madurai

41652945600. Pondicherry

41652945601. Mahabalipuram

Question Number : 71 Question Id : 41652911675 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 :

41652945602. Madurai

41652945603. Delhi

41652945604. Ellora

41652945605. Agra

Question Number : 72 Question Id : 41652911676 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 of these is not a planned city of
India ?

Options :

41652945606. Kanpur

41652945607. Bhubaneswar

41652945608. Chandigarh

41652945609. Gandhi nagar

Question Number : 73 Question Id : 41652911677 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 :

41652945610. Charles Correa

41652945611. Laurie Baker

41652945612. Le Corbusier

41652945613. B V Doshi

Question Number : 74 Question Id : 41652911678 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 :

41652945614. Pritzker's Award

41652945615. Aga Khan Award

41652945616. Rechter Prize

41652945617. Stirling Prize

Question Number : 75 Question Id : 41652911679 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 :

41652945618. James Sterling

41652945619. Frank Lloyd Wright

41652945620. Walter Gropius

41652945621. Frank Ghery

Question Number : 76 Question Id : 41652911680 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 :

41652945622. Floors

41652945623. Doors

41652945624. Roofs

41652945625. Windows

Question Number : 77 Question Id : 41652911681 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 :

41652945626. North

41652945627. South

41652945628. East

41652945629. West

Question Number : 78 Question Id : 41652911682 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 :

41652945630. Give light to buildings

41652945631. Support the portion above wall openings

41652945632. Separate the rooms

41652945633. Support the windows

Question Number : 79 Question Id : 41652911683 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 :

41652945634. Top

41652945635. Bottom

41652945636. Side

41652945637. Middle

Question Number : 80 Question Id : 41652911684 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 :

41652945638. A painting

41652945639. A Queen

41652945640. An Actress

41652945641. A Dancer

Question Id : 41652911669 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 Id : 41652911670 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 :

41652945582. हैदराबाद

41652945583. लखनऊ

41652945584. अहमदाबाद

41652945585. इलाहाबाद

Question Number : 67 Question Id : 41652911671 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, हिंदू धर्म और जैन धर्म का प्रतिनिधित्व करने वाली प्राचीन गुफाओं के लिए प्रसिद्ध है। इनमें से, सबसे बड़ी संख्या से संबंधित है :

Options :

41652945586. बौद्ध धर्म

41652945587. हिंदू धर्म

41652945588. जैन धर्म

जोरिस्ट्रियनवाद

41652945589.

Question Number : 68 Question Id : 41652911672 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 :

41652945590. कोयला

41652945591. प्राकृतिक गैस

41652945592. महासागर लहरें

41652945593. तेल

Question Number : 69 Question Id : 41652911673 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 :

41652945594. जहांती महल

41652945595. फरीदा महल

41652945596. मुमताज महल

41652945597. टोबा बेगम

Question Number : 70 Question Id : 41652911674 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 :

41652945598. कांचीपुरम

41652945599. मदुरै

41652945600. पांडिचेरी

41652945601. महाबलीपुरम

Question Number : 71 Question Id : 41652911675 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 गुफा मंदिरों को पा सकते हैं?

Options :

41652945602. मदुरै

41652945603. दिल्ली

41652945604. एलोरा

41652945605. आगरा

Question Number : 72 Question Id : 41652911676 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 :

41652945606. कानपुर

41652945607. भुवनेश्वर

41652945608. चंडीगढ़

41652945609. गांधी नगर

Question Number : 73 Question Id : 41652911677 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 :

41652945610. चार्ल्स कोरिया

41652945611. लॉरी बेकर

41652945612. ले Corbusier

41652945613. बी.वी. दोशी

Question Number : 74 Question Id : 41652911678 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 :

41652945614. प्रिट्जर का पुरस्कार

41652945615. आगा खान पुरस्कार

41652945616. पुरस्कार रेक्टर

41652945617. स्टर्लिंग पुरस्कार

Question Number : 75 Question Id : 41652911679 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 डिजाइन किया गया था?

Options :

41652945618. जेम्स स्टर्लिंग

41652945619. फ्रैंक लॉयड राइट

41652945620. वाल्टर ग्रोपियस

41652945621. फ्रैंक गेरी

Question Number : 76 Question Id : 41652911680 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 :

41652945622. फर्श

41652945623. दरवाजे

41652945624. छत

41652945625. खिड़की

Question Number : 77 Question Id : 41652911681 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 हैं :

Options :

41652945626. उत्तर

41652945627. दक्षिण

41652945628. पूर्व

41652945629. पश्चिम

Question Number : 78 Question Id : 41652911682 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 लिटेल की भूमिका क्या है ?

Options :

41652945630. इमारतों को प्रकाश दें

41652945631. दीवारों के खुले हिस्से के ऊपरी भाग को सहारा देना

41652945632. कमरे अलग करें

41652945633. खिड़कियों को सहारा देना

Question Number : 79 Question Id : 41652911683 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 :

41652945634. ऊपर

41652945635. नीचे

41652945636. साइड पर

बीच में

41652945637.

Question Number : 80 Question Id : 41652911684 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 :

41652945638. एक पेंटिंग

41652945639. एक रानी

41652945640. एक अभिनेत्री

41652945641. एक नर्तकी

Drawing

Section Id :	416529210
Section Number :	3
Section type :	Offline
Mandatory or Optional:	Mandatory
Number of Questions:	3
Number of Questions to be attempted:	3
Section Marks:	70
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	416529324
Question Shuffling Allowed :	No

Question Number : 81 Question Id : 41652911685 Question Type : SUBJECTIVE Display Question Number : Yes
Correct Marks : 20

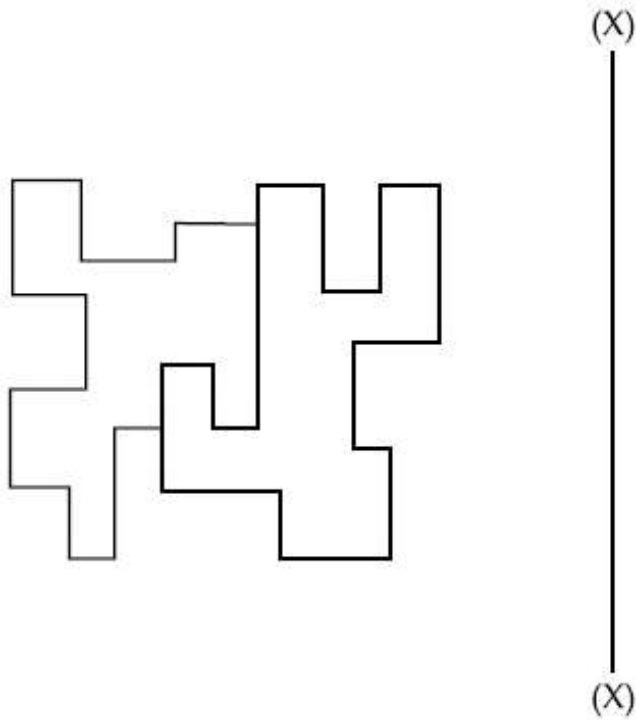
- (a) In the space provided in the answer sheet for this question, draw margin lines to form a frame. In this frame create an aesthetic composition using only equilateral triangles. These triangles can be of any size, and may be placed separate, overlapping or within each other. Design and draw to produce an aesthetic and visually exciting composition of these triangles in the frame without making it look like any form like house face etc. 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 Id : 41652911685 Question Type : SUBJECTIVE Display Question Number : Yes
Correct Marks : 20

- (a) इस प्रश्न के लिए उत्तर पत्र में प्रदान की गई जगह में, फ्रेम बनाने के लिए मार्जिन लाइन बनाएं। इस फ्रेम में केवल समतुल्य त्रिकोण का उपयोग करके एक सौंदर्य रचना बनाओ। ये त्रिभुज 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 दृष्टि से रोमांचक संरचना का निर्माण करने के लिए डिजाइन और ड्रॉ 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 दृश्य गुणवत्ता संरचना बढ़ाया गया है। ड्राइंग उपकरणों का उपयोग करने की अनुमति है। 20 Marks

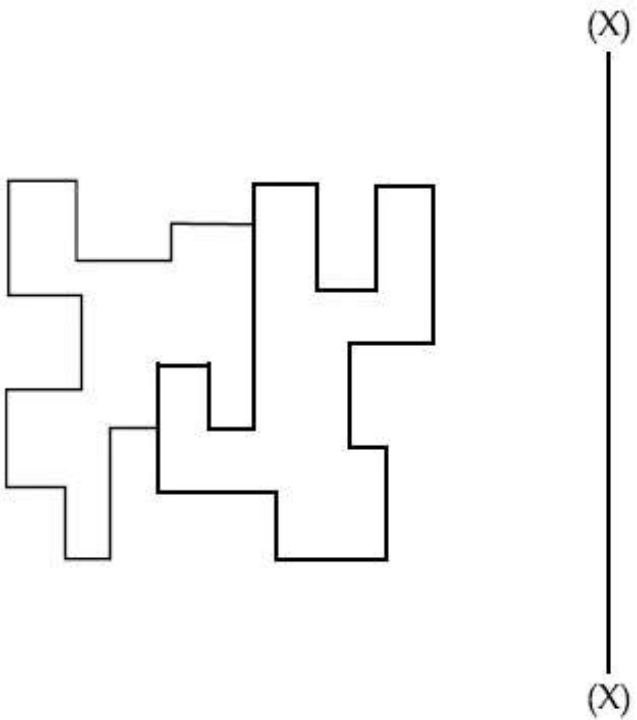
Question Number : 82 Question Id : 41652911686 Question Type : SUBJECTIVE Display Question Number : Yes
Correct Marks : 20

- (b) Draw the mirror image of the graphic 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 Id : 41652911686 Question Type : SUBJECTIVE Display Question Number : Yes Correct Marks : 20

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



Sub-Section Number: 2
Sub-Section Id: 416529325
Question Shuffling Allowed : No

Question Number : 83 Question Id : 41652911687 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 Id : 41652911687 Question Type : SUBJECTIVE Display Question Number : Yes
Correct Marks : 30

(c) नर कमीजों के कपड़े के लिए एक सुंदर रंगीन डिजाइन 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।