

# National Testing Agency

<b>Question Paper Name :</b>	B Arch and Planning 2 Sep 2021 Shift 2
<b>Subject Name :</b>	B PLANNING AND B ARCH
<b>Creation Date :</b>	2021-09-03 09:39:41
<b>Duration :</b>	210
<b>Total Marks :</b>	500
<b>Display Marks:</b>	Yes

## B PLANNING AND B ARCH

<b>Group Number :</b>	1
<b>Group Id :</b>	864351273
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	210
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	500
<b>Is this Group for Examiner? :</b>	No

## Mathematics Section A

<b>Section Id :</b>	8643511056
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory

<b>Number of Questions :</b>	20
<b>Number of Questions to be attempted :</b>	20
<b>Section Marks :</b>	80
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	8643511283
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 86435122631 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1**

The domain of the function,  $f(x) = \sqrt{\frac{\log_{0.6} |x - 2|}{|x|}}$  is :

**Options :**

86435175101.  $[1, 2) \cup [3, \infty)$

86435175102.  $[1, 2) \cup (2, 3]$

86435175103.  $(0, 1) \cup (2, 3]$

86435175104.  $(-\infty, 0) \cup [1, 2)$

**Question Number : 2 Question Id : 86435122632 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1**

Let  $\alpha$  and  $\beta$  be the roots of the quadratic equation  $x^2 + \sqrt{3}x + 1 = 0$

Then  $\alpha^{2022} + \beta^{2022}$  is equal to :

**Options :**

86435175105.  $2$

86435175106.  $-2$

86435175107.  $0$

86435175108.  $-\sqrt{3}$

**Question Number : 3 Question Id : 86435122633 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

If  $A = \begin{pmatrix} 0 & 0 & 2 \\ 1 & 0 & 0 \\ 0 & -1 & 0 \end{pmatrix}$ , then :

**Options :**

86435175109.  $A^6 = 2 A^3$

86435175110.  $2A^6 = A^3$

86435175111.  $A^{12} = 4 A^6$

86435175112.  $A^{12} = 2 A^6$

**Question Number : 4 Question Id : 86435122634 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The sum of all values of  $\lambda$ , for which the system of equations

$$x + y + z = 1$$

$$x + 2y + 4z = \lambda$$

$$x + 4y + 10z = \lambda^2$$

has infinitely many solutions, is :

**Options :**

86435175113. 2

86435175114. -2

86435175115. 3

86435175116. -3

**Question Number : 5 Question Id : 86435122635 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Let  $f(x) = \max\{x^2, x^3\}$  for all  $x \in \mathbf{R}$ . Then which of the following is **NOT** true ?

**Options :**

86435175117.  $f$  is continuous for all  $x$ .

86435175118.  $f$  is not differentiable exactly at one point in  $\mathbf{R}$ .

86435175119.  $f$  is not differentiable exactly at two points in  $\mathbf{R}$ .

86435175120.  $f'\left(-\frac{1}{2}\right) + f'\left(\frac{1}{8}\right) + f'\left(\frac{3}{2}\right) = 6$

Question Number : 6 Question Id : 86435122636 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The sum of the series

$$\frac{1}{6} + \frac{5}{6^2} + \frac{19}{6^3} + \dots + \frac{3^{10} - 2^{10}}{3^{10} \cdot 2^{10}} \text{ is :}$$

Options :

86435175121.  $\frac{511}{2^{10}}$

86435175122.  $1 + \frac{2^9 - 3^{10}}{6^{10}}$

86435175123.  $\frac{(255) \cdot 3^{10} + 2^9}{6^{10}}$

86435175124.  $\frac{(511) \cdot 3^{10} + 2^9}{6^{10}}$

Question Number : 7 Question Id : 86435122637 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$$\lim_{x \rightarrow 0} \frac{1}{x^2} \left( e^{x^2} - \cos \frac{x}{2} \right) \text{ is equal to :}$$

Options :

86435175125.

$\frac{3}{2}$

86435175126.  $\frac{5}{8}$

86435175127.  $\frac{9}{8}$

86435175128.  $\frac{9}{4}$

**Question Number : 8 Question Id : 86435122638 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

$$\text{If } \int \frac{\sqrt{\cos(x-\theta)}}{\sqrt{\cos(x+\theta)}} dx = \alpha \sin^{-1}\left(\frac{\sin x}{\cos\theta}\right) + \beta \log_e |\cos x + \sqrt{\cos^2 x - \sin^2 \theta}| + C,$$

where C is a constant of integration and  $\frac{\pi}{6} < \theta < \frac{\pi}{4}$ , then  $\alpha \sin\theta + \beta \cos\theta$  is equal to :

**Options :**

86435175129. 0

86435175130. 1

86435175131.  $\cos 2\theta$

86435175132.  $\sin 2\theta$

Question Number : 9 Question Id : 86435122639 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If  $I = \int_0^1 \tan^{-1}(\sqrt{x} + 1) dx$ ,  $J = \int_0^1 \frac{\sqrt{x} dx}{x + 2\sqrt{x} + 2}$ , then the value of  $2I + J$  is equal to :

Options :

86435175133.  $2 \tan^{-1}\left(\frac{1}{2}\right)$

86435175134.  $2 \tan^{-1}(2) - \frac{\pi}{2}$

86435175135.  $2 \tan^{-1}(2)$

86435175136.  $\tan^{-1}(2)$

Question Number : 10 Question Id : 86435122640 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Let  $y = y(x)$  be the solution of the differential equation  $x \frac{dy}{dx} = (2x + 3)e^x + xy$ ,  $x > 0$ .

If  $y(e) = (2e + 3)e^e$ , then  $\frac{d^2y}{dx^2} - \frac{dy}{dx}$  at  $x = 1$  is equal to :

Options :

86435175137.  $3e$

86435175138.  $e$

86435175139. 0

86435175140.  $2e$

**Question Number : 11 Question Id : 86435122641 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Let  $f$  be a non-zero polynomial function such that

$$f(3x) = f'(x) f''(x).$$

Then the value of  $f(6)$  is :

**Options :**

86435175141. 648

86435175142. 324

86435175143. 136

86435175144. 108

**Question Number : 12 Question Id : 86435122642 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

A rod AB of length 4 units rests against a vertical wall with A on the horizontal floor.

P is a point on AB such that  $AP : PB = 2 : 1$ . If the rod slides down along the wall in a vertical plane, then the point  $P(x, y)$  moves on the curve :

**Options :**

86435175145.  $36x^2 + 9y^2 = 64$



86435175146.  $36x^2 + 9y^2 = 16$

86435175147.  $9x^2 + 36y^2 = 64$

86435175148.  $9x^2 + 36y^2 = 16$

**Question Number : 13 Question Id : 86435122643 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Let A(1, 2) and B(3, 6) are two points on a circle of radius R, whose one of the diameters is along the line  $2x - y + 4 = 0$ . Then  $R^2$  is equal to :

**Options :**

86435175149. 17

86435175150.  $\frac{37}{3}$

86435175151.  $\frac{31}{5}$

86435175152.  $\frac{41}{5}$

**Question Number : 14 Question Id : 86435122644 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

A line perpendicular to the line  $4x = 3y$  is a tangent to the parabola  $y^2 = 3x + 1$  at a point P on it. If S is the focus of the parabola, then the equation of the line SP is :

**Options :**

86435175153.  $24x + 5y = 10$

86435175154.  $24x - y = 26$

86435175155.  $24x + 7y = 10$

86435175156.  $8x + y = 6$

**Question Number : 15 Question Id : 86435122645 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

If a line  $px + qy = 12$  is a tangent to the ellipse  $4x^2 + 9y^2 = 16$ , then pq can NOT be equal to :

**Options :**

86435175157. 29

86435175158. 26

86435175159. 23

86435175160. 21

**Question Number : 16 Question Id : 86435122646 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

If the angle between the line  $\frac{x+1}{1} = \frac{y-1}{2} = \frac{z+2}{-1}$  and the plane  $P : 2x - y - \lambda z + 4 = 0$ ,

$\lambda > 0$ , is  $\sin^{-1}\left(\frac{1}{9\sqrt{6}}\right)$ , then the distance of the point  $(-1, 1, -2)$  from the plane  $P$  is :

**Options :**

86435175161.  $\frac{2}{3}$

86435175162. 1

86435175163.  $\frac{3}{2}$

86435175164.  $\frac{2}{9}$

**Question Number : 17 Question Id : 86435122647 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Let the distinct numbers  $a, b, c$  be the  $p^{\text{th}}, q^{\text{th}}$  and  $r^{\text{th}}$  terms of a geometric progression of positive terms. Then the angle between the vectors  $\vec{u} = (\log_e a^2)\hat{i} + (\log_e b^2)\hat{j} + (\log_e c^2)\hat{k}$  and

$\vec{v} = (q-r)\hat{i} + (r-p)\hat{j} + (p-q)\hat{k}$  is :

**Options :**

86435175165. 0

86435175166.  $\frac{\pi}{4}$

86435175167.  $\frac{\pi}{3}$

86435175168.  $\frac{\pi}{2}$

**Question Number : 18 Question Id : 86435122648 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

For  $0 < x < \pi$ , the sum of the solutions of the equation  $4\left(\frac{1}{2}\sin x + \frac{1}{4}\sin^2 x + \frac{1}{8}\sin^3 x + \dots\right) = 2^{\frac{2}{3}}$  is :

**Options :**

86435175169.  $\frac{\pi}{3}$

86435175170.  $\frac{2\pi}{3}$

86435175171.  $\pi$

86435175172.  $\frac{\pi}{2}$

**Question Number : 19 Question Id : 86435122649 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The domain of the function

$$f(x) = \tan^{-1}(\sqrt{x^2 + x - 2}) + \sec^{-1}(x^2 - 5x + 3) \text{ is :}$$

**Options :**

86435175173.  $(-\infty, -2] \cup [1, \infty)$

86435175174.  $[1, 4] \cup \left[ \frac{5 + \sqrt{17}}{2}, \infty \right)$

86435175175.  $\left( -\infty, \frac{5 - \sqrt{17}}{2} \right] \cup [1, 4] \cup \left[ \frac{5 + \sqrt{17}}{2}, \infty \right)$

86435175176.  $(-\infty, -2] \cup [1, 4] \cup \left[ \frac{5 + \sqrt{17}}{2}, \infty \right)$

**Question Number : 20 Question Id : 86435122650 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is equivalent to  $p \leftrightarrow q$  ?

**Options :**

86435175177.  $(\sim p \wedge \sim q) \vee (p \vee q)$

86435175178.  $(p \wedge q) \vee (\sim p \wedge \sim q)$

86435175179.  $(p \vee q) \wedge (\sim p \vee \sim q)$

86435175180.  $(p \wedge q) \vee (p \vee q)$

## Mathematics Section B

Section Id :	8643511057
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	5
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511284
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 86435122651 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

Three fair dice are thrown. The number of ways to obtain a total of 11 is \_\_\_\_\_.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

**Question Number : 22 Question Id : 86435122652 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

If a plane, that contains the line  $\vec{r} = (1, -1, 1) + \lambda(2, 3, -6), \lambda \in \mathbb{R}$ , passes through the point  $(2, 0, 2)$  and is at a distance  $d$  from the origin, then the value of  $73 d^2$  is \_\_\_\_\_.

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

1

**Question Number : 23 Question Id : 86435122653 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

Number of real roots of the equation

$$\sqrt{x+2} - \sqrt{x-2} = \sqrt{4x-1} \text{ is } \underline{\hspace{2cm}}.$$

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

1

**Question Number : 24 Question Id : 86435122654 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

Between 1 and 31,  $n$  numbers have been inserted in such a way that the resulting sequence is an A.P. If the ratio of  $(n-1)^{\text{th}}$  and  $7^{\text{th}}$  inserted numbers is  $9 : 5$ , then  $n$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

1

**Question Number : 25 Question Id : 86435122655 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

The sum of absolute maximum and absolute minimum values of the function  $f(x) = |4x^2 + 3x - 10| + x^2 - 2x + 5$ ,  $x \in [-3, 1]$  is \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

1

**Question Number : 26 Question Id : 86435122656 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

If the area (in sq. units) of the region bounded by the curve  $y = |x - 2| + |2x - 3| + |3x - 4|$  and the line  $y = 3$  is A, then  $12A$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**



1

**Question Number : 27 Question Id : 86435122657 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

The coefficient of  $a^4b^6c^6$  in the expansion of  $(ab + bc + ca)^8$  is \_\_\_\_\_.

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

1

**Question Number : 28 Question Id : 86435122658 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

The number of ordered pairs  $(a, b)$ , such that the function  $f(x) = 4x^3 - (3a + 2b)x^2 + 2abx$  is

decreasing in  $\left[\frac{3}{2}, \frac{5}{3}\right]$  and increasing in  $\mathbf{R} - \left[\frac{3}{2}, \frac{5}{3}\right]$ , is \_\_\_\_\_.

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

1

**Question Number : 29 Question Id : 86435122659 Question Type : SA**

**Correct Marks : 4 Wrong Marks : 0**

Three numbers are randomly picked from the set  $\{0, 1, 2, 3, 4, 5, 6, 7, 8, 9\}$  one after another without replacement. If  $p$  be the probability that the smallest of these three numbers is less than 4, then  $18p$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

1

**Question Number :** 30 **Question Id :** 86435122660 **Question Type :** SA

**Correct Marks :** 4 **Wrong Marks :** 0

If the mean of the numbers 3, 4, a, b, 10 is 6 and their standard deviation is  $\sqrt{6.8}$ , then  $a^3 + b^3$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

1

## Aptitude Test

<b>Section Id :</b>	8643511058
<b>Section Number :</b>	3
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50

**Number of Questions to be attempted :** 50  
**Section Marks :** 200  
**Enable Mark as Answered Mark for Review and Clear Response :** Yes  
**Sub-Section Number :** 1  
**Sub-Section Id :** 8643511285  
**Question Shuffling Allowed :** Yes

**Question Number : 31 Question Id : 86435122661 Question Type : MCQ Option Shuffling : Yes**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

**Match List - I with List - II :**

<b>List - I</b>	<b>List - II</b>
(A) Jaisalmer	(I) Pink city
(B) Jodhpur	(II) Golden city
(C) Jaipur	(III) Lake city
(D) Udaipur	(IV) Blue city

**Options :**

86435175191. (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

86435175192. (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

86435175193. (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

86435175194. (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

**Question Number : 32 Question Id : 86435122662 Question Type : MCQ Option Shuffling : Yes**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List - I with List - II :

List - I	List - II
(A) Jod Gumbaz	(I) Mahabalipuram
(B) Cave temples	(II) Madhurai
(C) Rangnatha temple	(III) Bijapur
(D) Minakshi temple	(IV) Srirangam

**Options :**

86435175195. (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

86435175196. (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

86435175197. (A)-(IV), (B)-(I), (C)-(III), (D)-(II)

86435175198. (A)-(I), (B)-(IV), (C)-(III), (D)-(II)

**Question Number : 33 Question Id : 86435122663 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which is the largest monestry in India ?

**Options :**

86435175199. Tawang

86435175200. Leh

86435175201. Dharamshala

86435175202. Labrang

**Question Number : 34 Question Id : 86435122664 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Where is 'Junagadh fort' choose the correct option amongst the following ?

**Options :**

86435175203. Udaipur

86435175204. Jodhpur

86435175205. Bikaner

86435175206. Jaisalmer

**Question Number : 35 Question Id : 86435122665 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

'Kyoto protocol' summit was held in which country ?

**Options :**

86435175207. Japan

86435175208. Korea

86435175209. Malyasia

86435175210. China

**Question Number : 36 Question Id : 86435122666 Question Type : MCQ (**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

What was Delhi's old name ?

**Options :**

86435175211. Old Delhi

86435175212. Shahjahanpur

86435175213. Shahpur Jat

86435175214. Shahajahanabad

**Question Number : 37 Question Id : 86435122667 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List - I with List - II :

**List - I :** Name of the cities/towns where traditional Ghats are situated.

**List - II :** Name of the river on which traditional Ghats are constructed.

**List - I**

**List - II**

(A) Maheshwar, MP

(I) Ganga

(B) Kolhapur, Maharashtra

(II) Shipra

(C) Ujjain, MP

(III) Narmada

(D) Varanasi, UP

(IV) Panchganga

**Options :**

86435175215. (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

86435175216. (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

86435175217. (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

86435175218. (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

**Question Number : 38 Question Id : 86435122668 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

'Rani Ki Vav' is an example of :

**Options :**

86435175219. Haveli

86435175220. Stepwell

86435175221. Temple

86435175222. Fort

**Question Number : 39 Question Id : 86435122669 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

'Al-Khazneh' the treasury is located in :

**Options :**

86435175223. Jordan

86435175224. Turkey

86435175225. UAE

86435175226. Saudi-Arabia

**Question Number : 40 Question Id : 86435122670 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Proposed 'Central Vista' project is located in which city ?

**Options :**

86435175227. New Delhi

86435175228. Lucknow

86435175229. Mumbai

86435175230. Varanasi

**Question Number : 41 Question Id : 86435122671 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Originally there were five 'Jantar Mantars' (Architectural Observatories) constructed by 'Raja Jai Singh'. Which out of those got destroyed in the 19<sup>th</sup> century ?

**Options :**

86435175231. Jantar Mantar at Ujjain.

86435175232. Jantar Mantar at Mathura.

86435175233. Jantar Mantar at Varanasi.



86435175234. Jantar Mantar at Delhi.

**Question Number : 42 Question Id : 86435122672 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The local term 'Barsati' in a building mean.

**Options :**

86435175235. Mumty

86435175236. Balcony

86435175237. Canopy

86435175238. Parapet

**Question Number : 43 Question Id : 86435122673 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Lingraj temple is situated in :

**Options :**

86435175239. Cuttack

86435175240. Puri

86435175241. Bhubaneshwar

86435175242. Konark

**Question Number : 44 Question Id : 86435122674 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Porcelain is a product made up of :

**Options :**

86435175243. Steel

86435175244. Stone

86435175245. Clay

86435175246. Timber

**Question Number : 45 Question Id : 86435122675 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Bhagalpur is known for :

**Options :**

86435175247. Cotton

86435175248. Silk

86435175249. Tea

86435175250. Rice

**Question Number : 46 Question Id : 86435122676 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following terms is used to describe trade between two or more countries ?

**Options :**

86435175251. Internal trade

86435175252. External trade

86435175253. International trade

86435175254. Local trade

**Question Number : 47 Question Id : 86435122677 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Who has designed the 'India Habitat Center' building situated at New Delhi ?

**Options :**

86435175255. B.V. Doshi

86435175256. Joseph Allein Stein

86435175257. Charles Correa

86435175258. I.M. Pei

Question Number : 48 Question Id : 86435122678 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

X.....Y  
S U C C E S S

Mirror the words along X-Y axis and choose the correct option amongst the following.

Options :

86435175259. S U C C E S S

86435175260. S U C C E S S

86435175261. S U C C E S S

86435175262. S S E C C U S

Question Number : 49 Question Id : 86435122679 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Match List - I with List - II :

List - I

List - II

(A) Dubai

(I)



(B) London

(II)



(C) New York

(III)



(D) Kuala Lumpur

(IV)



Choose correct answer.

Options :

86435175263. (A)-(I), (B)-(III), (C)-(IV), (D)-(II)

86435175264. (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

86435175265. (A)-(III), (B)-(II), (C)-(IV), (D)-(I)

86435175266. (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Match List - I with List - II :

**List - I**

**List - II**

(A) Empire state building

(I)



(B) Opera House

(II)



(C) Hagia Sophia

(III)



(D) Guggenheim Museum

(IV)



Choose correct answer from the options given below :

**Options :**

86435175267. (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

86435175268. (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

86435175269. (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

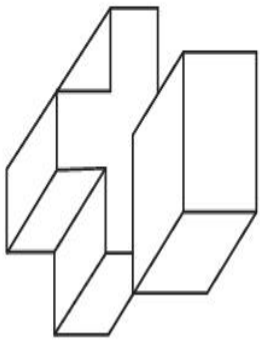
86435175270. (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

**Question Number : 51 Question Id : 86435122681 Question Type : MCQ Option Shuffling : Yes**

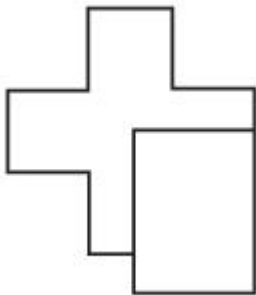
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

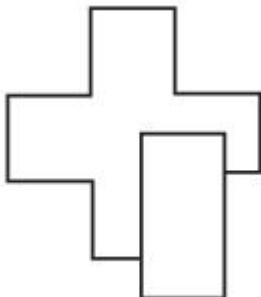
The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figure's.



**Options :**

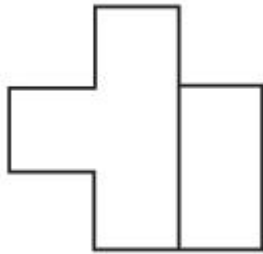
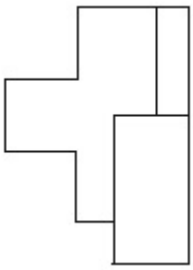


86435175271.



86435175272.

86435175273.

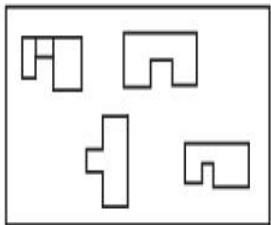


86435175274.

**Question Number : 52 Question Id : 86435122682 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The problem figure shows the top view of an object. Identify the correct elevation looking in the direction of arrow, amongst the answer figure's.

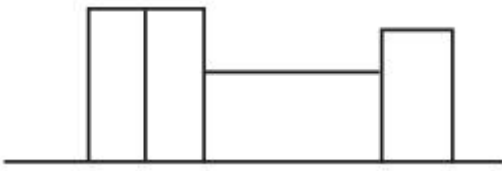


**Options :**

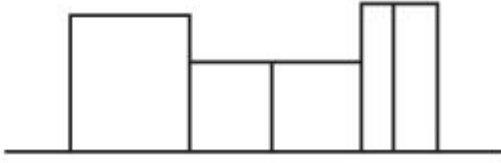


86435175277.





86435175278.



**Question Number : 53 Question Id : 86435122683 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

A tennis ball is cut according to the pattern of the grooves of a screw. Which of the following is the correct output :

**Options :**

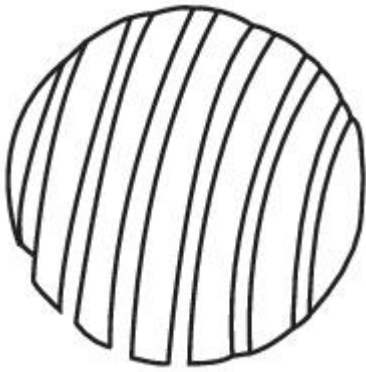


86435175279.



86435175280.

86435175281.



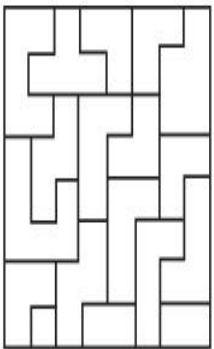
86435175282.

**Question Number : 54 Question Id : 86435122684 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

One of the following answer figure is hidden in the problem figure in same size and direction select correct one.



**Options :**

86435175283.



86435175284.



86435175285.



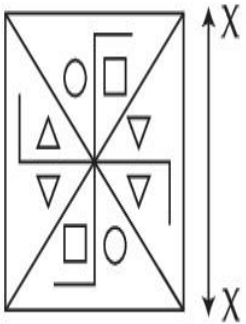
86435175286.



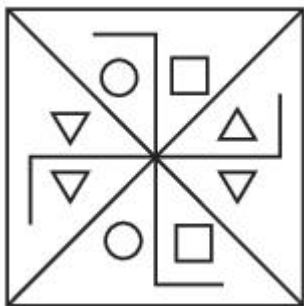
**Question Number : 55 Question Id : 86435122685 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

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

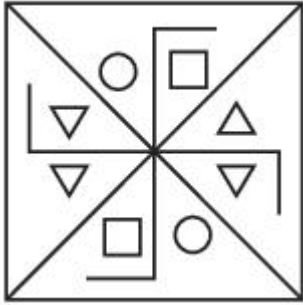
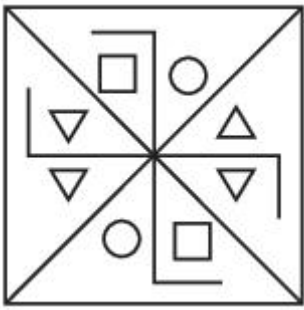


**Options :**

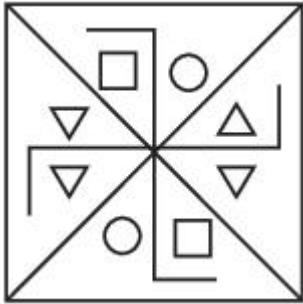


86435175287.

86435175288.



86435175289.



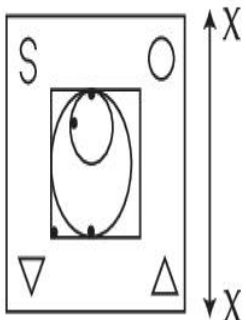
86435175290.

**Question Number : 56 Question Id : 86435122686 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

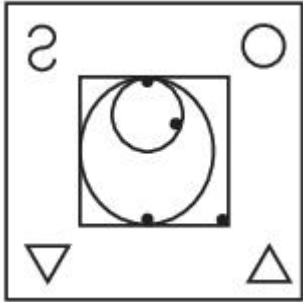
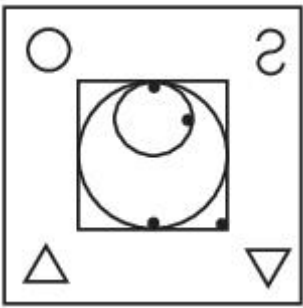
**Correct Marks : 4 Wrong Marks : 1**

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

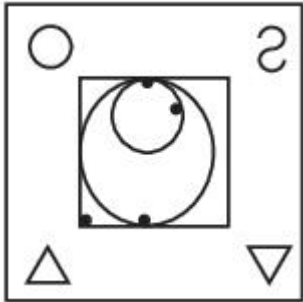


**Options :**

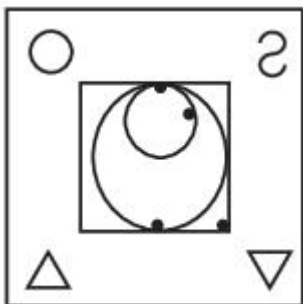
86435175291.



86435175292.



86435175293.



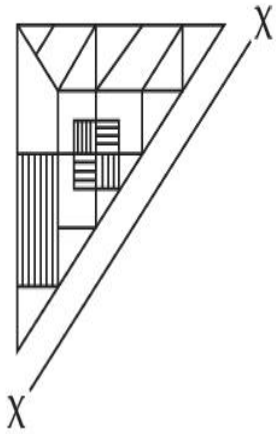
86435175294.

Question Number : 57 Question Id : 86435122687 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

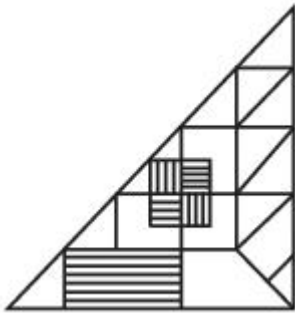
Correct Marks : 4 Wrong Marks : 1

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

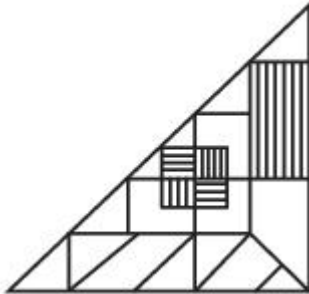


Options :

86435175295.



86435175296.

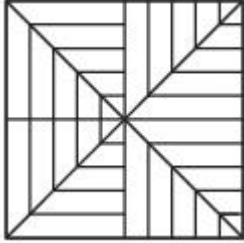
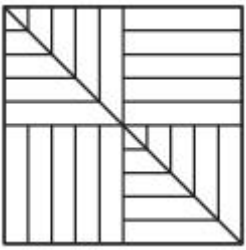


86435175297.



86435175298.



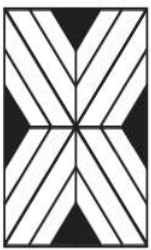


86435175302.

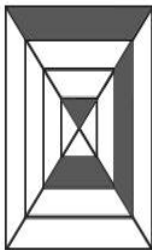
**Question Number : 59 Question Id : 86435122689 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the answer figure will complete the sequence of the problem figure ? Choose the correct one.



(a)



(b)



(c)

?

(d)

**Options :**



86435175303.

86435175304.





86435175305.



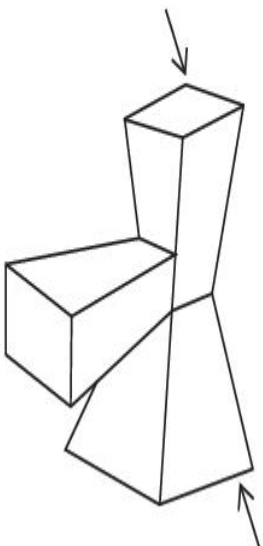
86435175306.

**Question Number : 60 Question Id : 86435122690 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

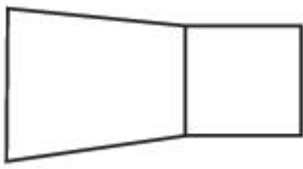
**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows the view of an object. Find out the odd shape from the answer figures which is not related to 3D figure.

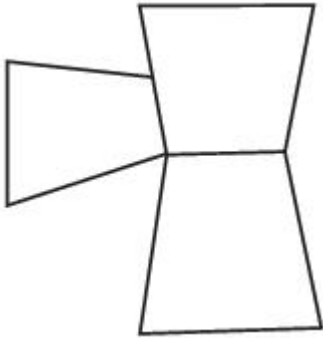


**Options :**

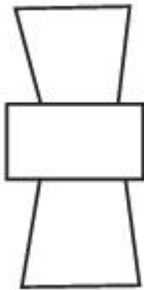
86435175307.



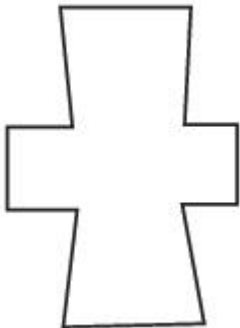
86435175308.



86435175309.



86435175310.

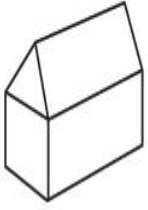


**Question Number : 61 Question Id : 86435122691 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

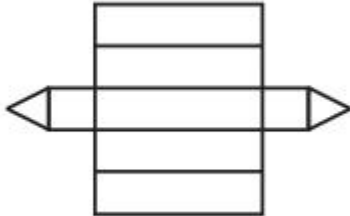
**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows the view of an object. Identify the correct view when figure opened up amongst the answer figures.

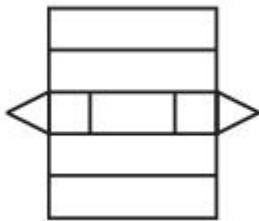


**Options :**

86435175311.



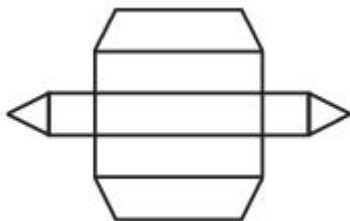
86435175312.



86435175313.



86435175314.



**Question Number : 62 Question Id : 86435122692 Question Type : MCQ Option Shuffling : Yes**

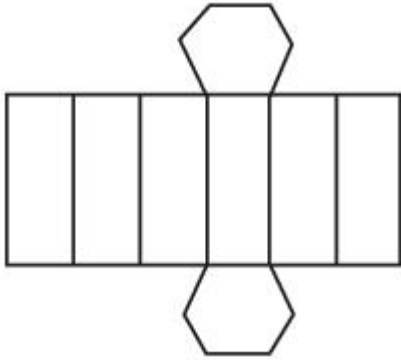
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

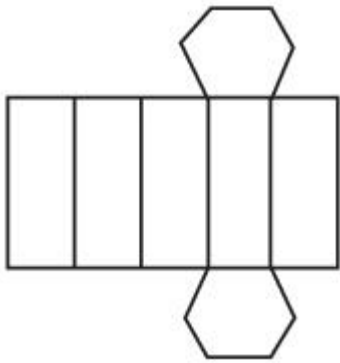
The 3D figure shows the view of an object. Identify the correct view when the figure opened up from amongst the answer figures.



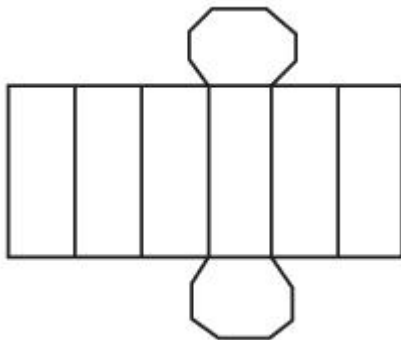
**Options :**



86435175315.



86435175316.



86435175317.



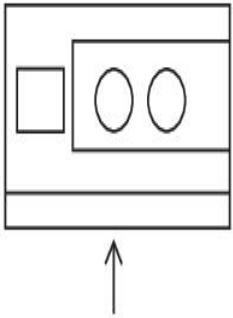
86435175318.

Question Number : 63 Question Id : 86435122693 Question Type : MCQ Option Shuffling : Yes

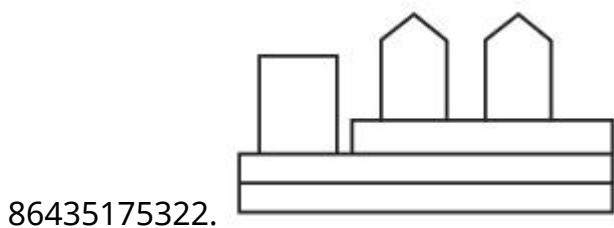
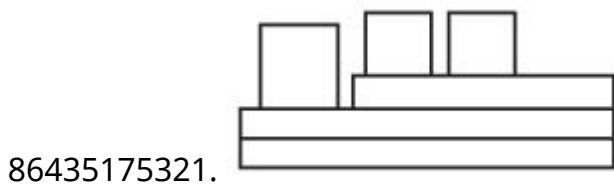
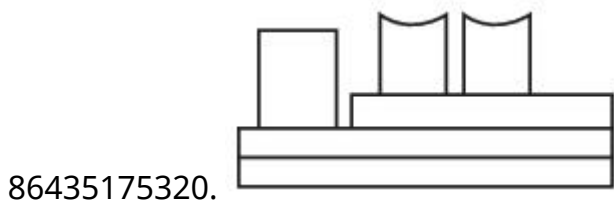
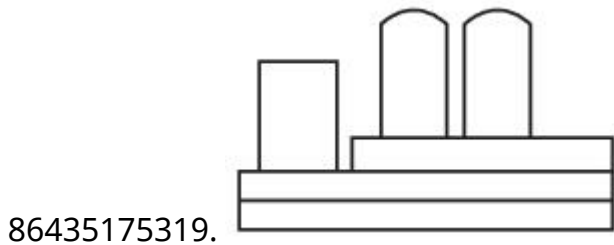
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The problem figure shows the top view of an object. Identify the correct elevation amongst the answer figure looking in the direction of the arrow.



Options :

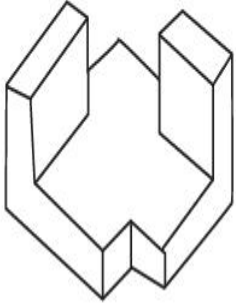


Question Number : 64 Question Id : 86435122694 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

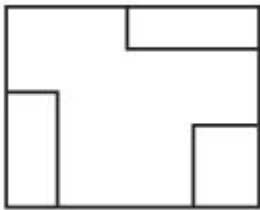
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct top view, from amongst the answer figure.

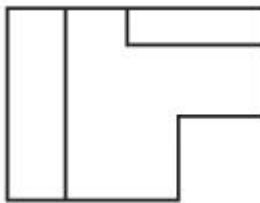


Options :

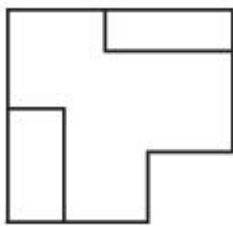
86435175323.



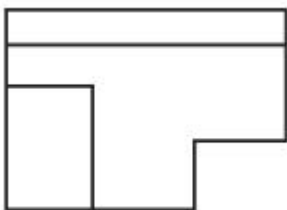
86435175324.



86435175325.



86435175326.

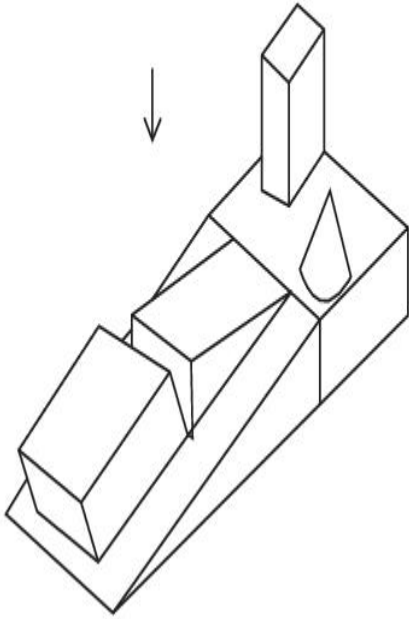


Question Number : 65 Question Id : 86435122695 Question Type : MCQ (

**Is Question Mandatory : No**

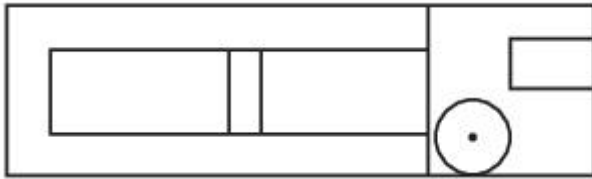
**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows the view of an object. Identify the correct view in the direction of the arrow, from the answer figure's.

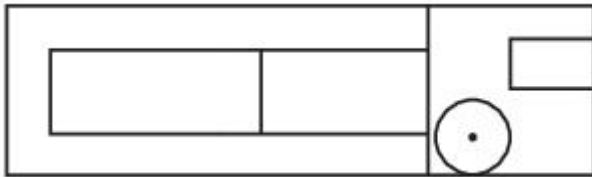


**Options :**

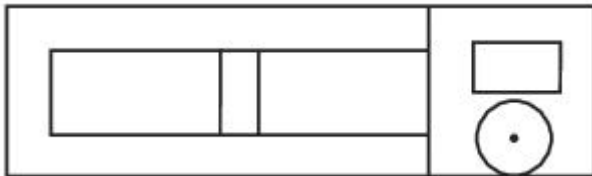
86435175327.



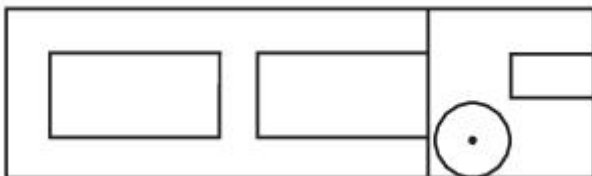
86435175328.



86435175329.



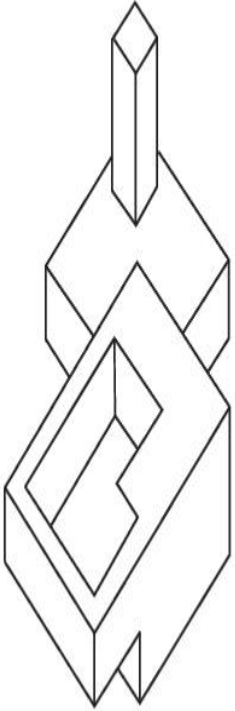
86435175330.



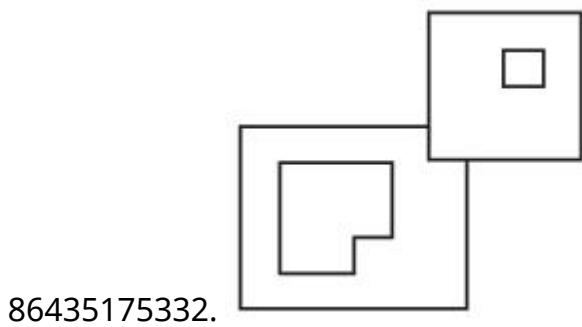
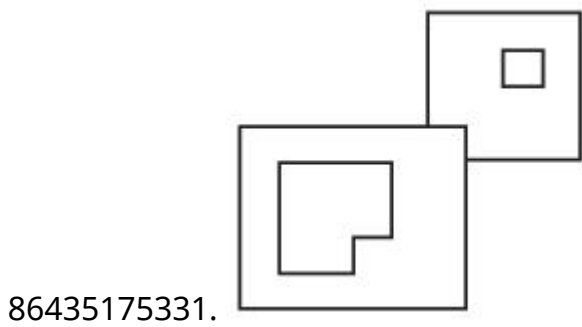
Question Number : 66 Question Id : 86435122696 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figures.

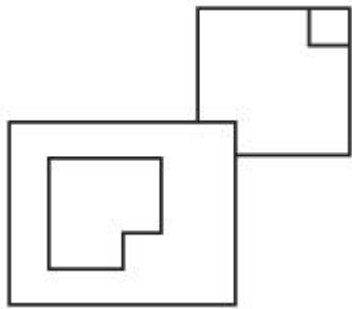
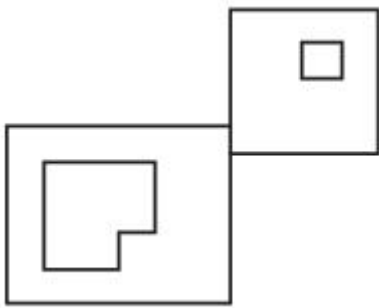


Options :



86435175333.





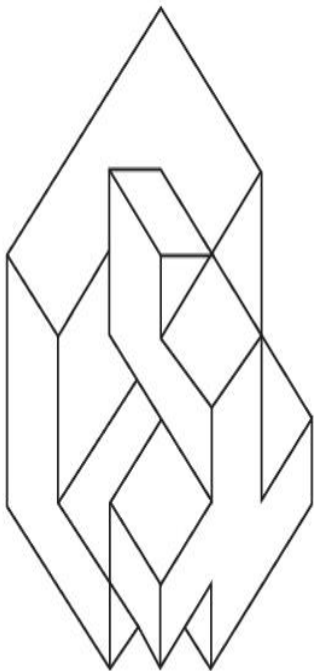
86435175334.

**Question Number : 67 Question Id : 86435122697 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

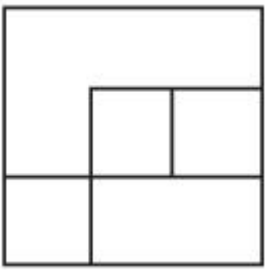
**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figure's.

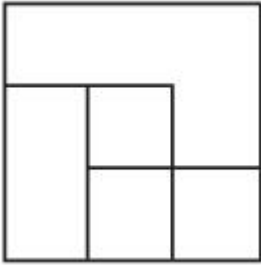


**Options :**

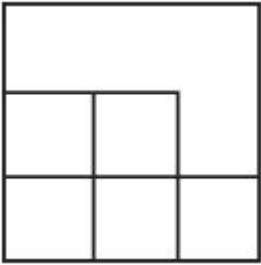
86435175335.



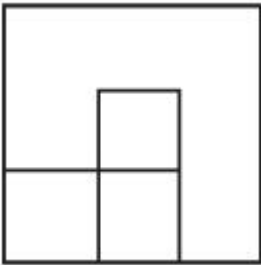
86435175336.



86435175337.



86435175338.

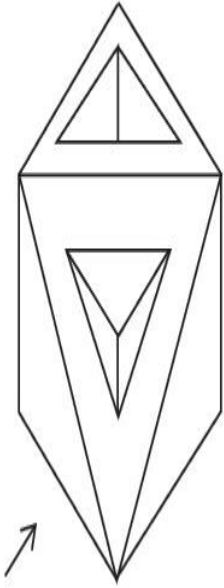


**Question Number : 68 Question Id : 86435122698 Question Type : MCQ Option Shuffling : Yes**

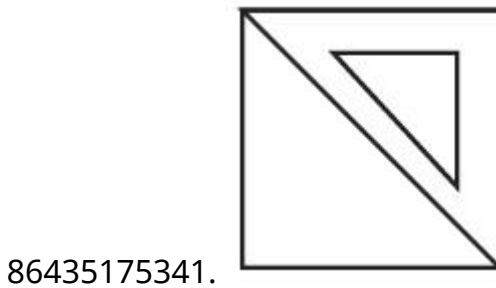
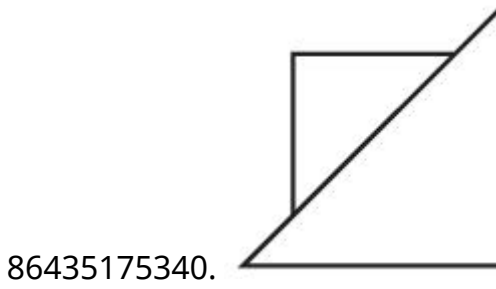
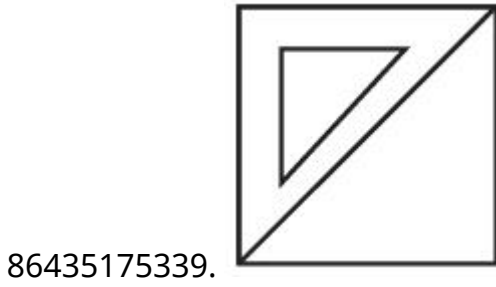
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

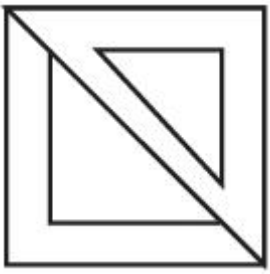
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from answer figure's.



**Options :**



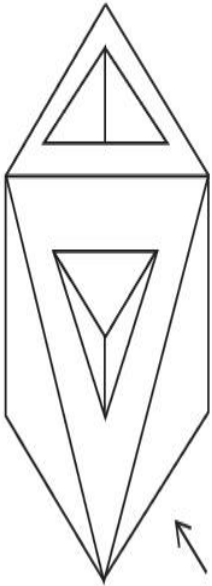
86435175342.



**Question Number : 69 Question Id : 86435122699 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

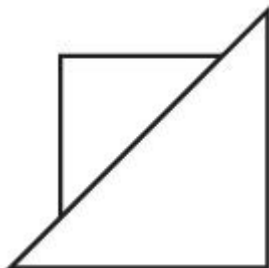
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from given answer figures.



**Options :**



86435175343.



86435175344.

86435175345.



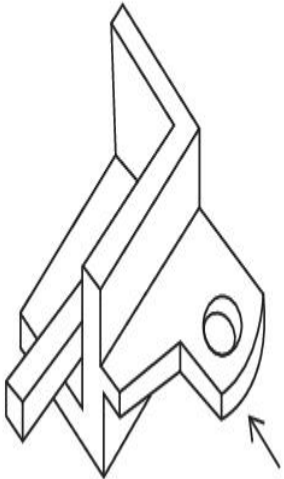
86435175346.



**Question Number : 70 Question Id : 86435122700 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

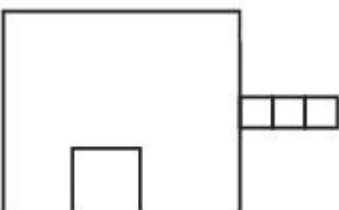
**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow amongst the answer figures.

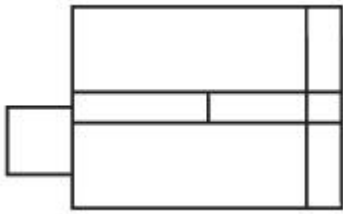


**Options :**

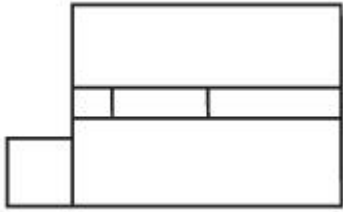
86435175347.



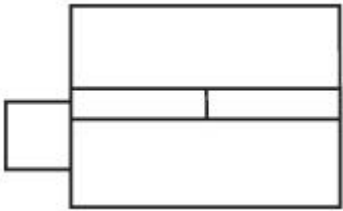
86435175348.



86435175349.



86435175350.

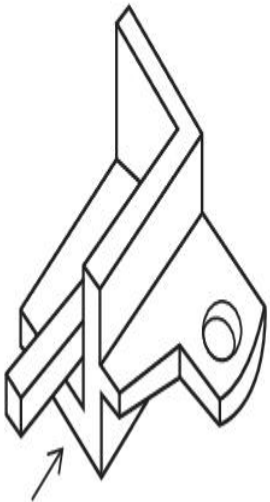


**Question Number : 71 Question Id : 86435122701 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

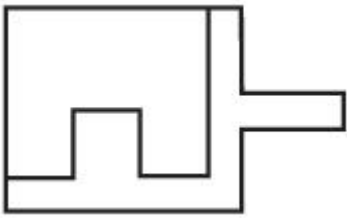
**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from answer figure's.

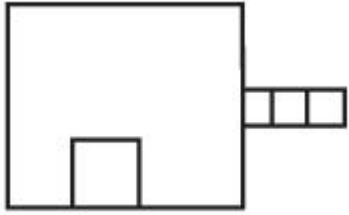


**Options :**

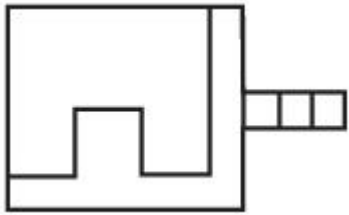
86435175351.



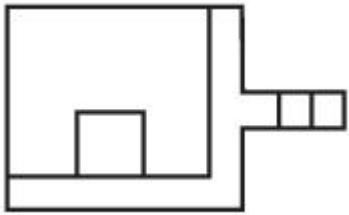
86435175352.



86435175353.



86435175354.

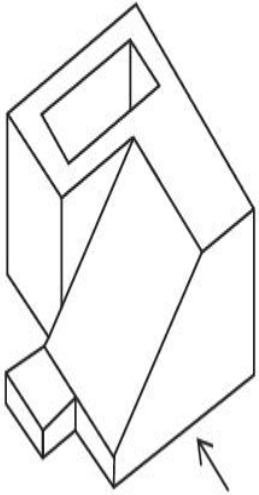


**Question Number : 72 Question Id : 86435122702 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

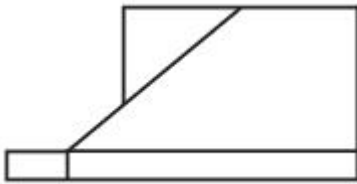
**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows view of an object. Identify the correct view looking in the direction of arrow, from the answer figure's.

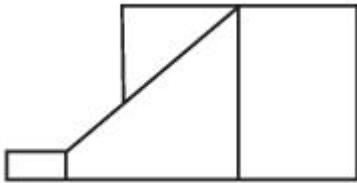


Options :

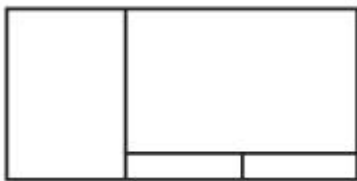
86435175355.



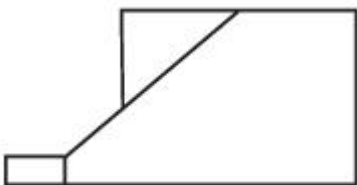
86435175356.



86435175357.



86435175358.



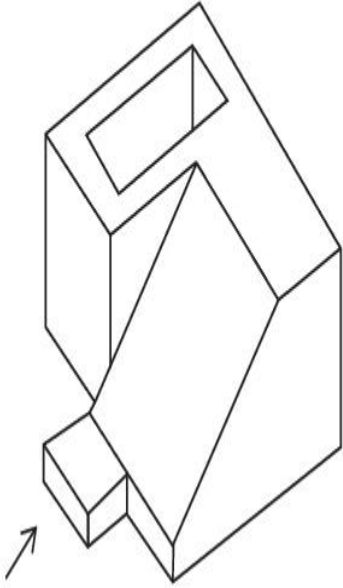
Question Number : 73 Question Id : 86435122703 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

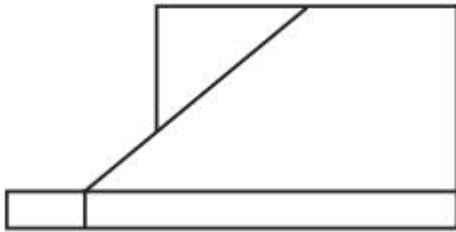


The 3D figure shows view of an object, looking in the direction of arrow, identify the correct elevation from the answer figures.

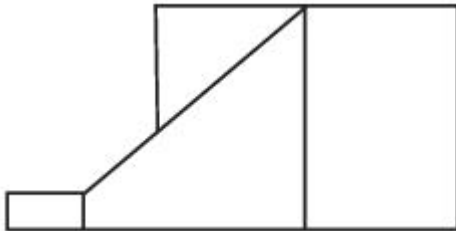


**Options :**

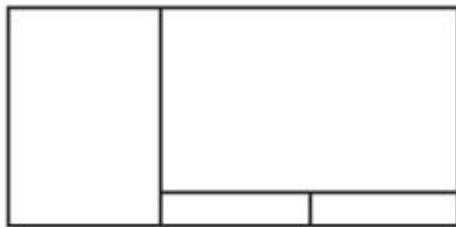
86435175359.



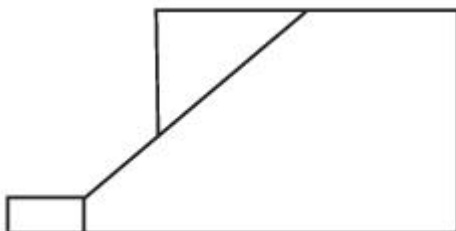
86435175360.



86435175361.



86435175362.

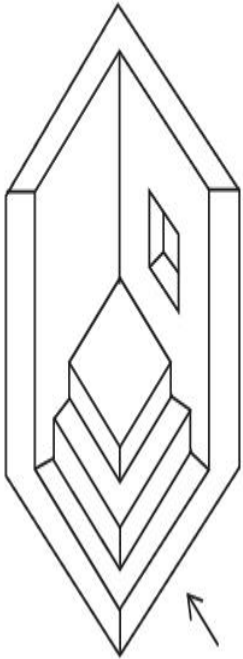


Question Number : 74 Question Id : 86435122704 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

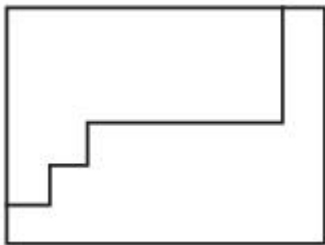
Correct Marks : 4 Wrong Marks : 1

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from the answer figure's.



Options :

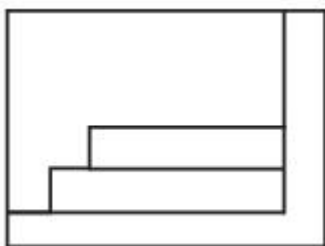
86435175363.



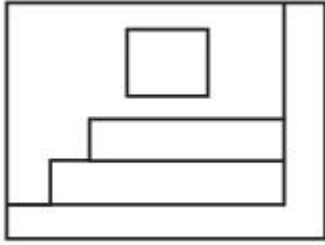
86435175364.



86435175365.



86435175366.

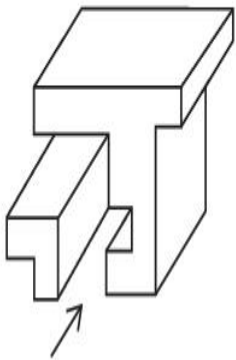


**Question Number : 75 Question Id : 86435122705 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

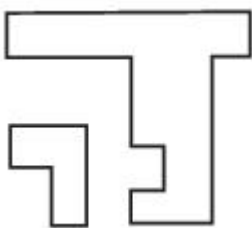
**Correct Marks : 4 Wrong Marks : 1**

The 3D figures shows the view of an object. Identify the correct view looking in the direction of arrow, from the given answer figures.

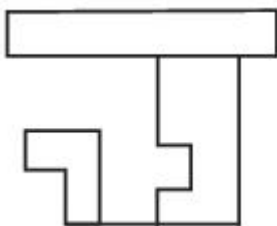


**Options :**

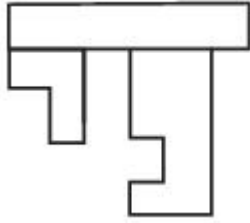
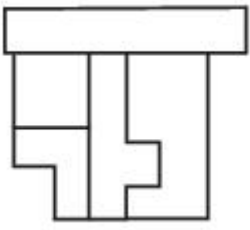
86435175367.



86435175368.



86435175369.



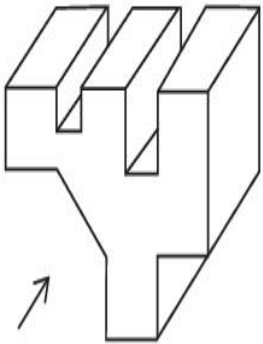
86435175370.

**Question Number : 76 Question Id : 86435122706 Question Type : MCQ Option Shuffling : Yes**

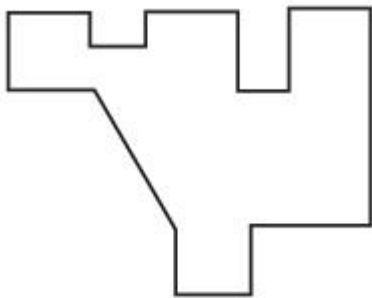
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from the given answer figure's.

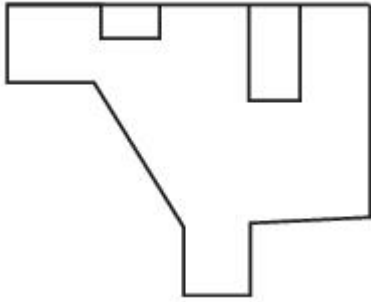
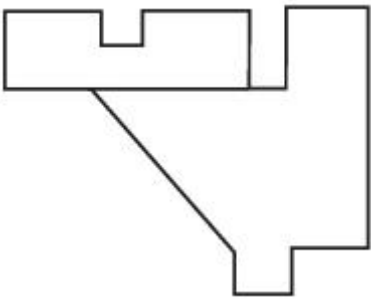


**Options :**

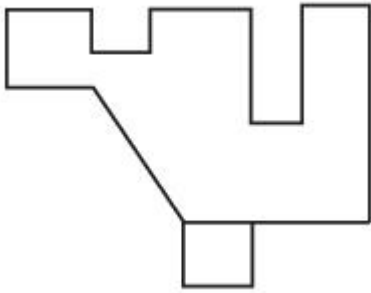


86435175371.

86435175372.



86435175373.

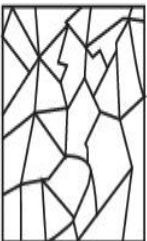


86435175374.

**Question Number : 77 Question Id : 86435122707 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**


One of the following answer figure is hidden in the problem figure in same size and direction. Select to correct one.





**Options :**



86435175375.

86435175376. 

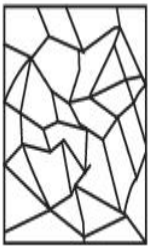
86435175377. 

86435175378. 


**Question Number : 78 Question Id : 86435122708 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**


**Correct Marks : 4 Wrong Marks : 1**


One of the following answer figure is hidden in the problem figure in same size and direction.  
Select correct one.




**Options :**

86435175379. 

86435175380. 

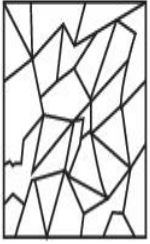
86435175381. 

86435175382. 

**Question Number : 79 Question Id : 86435122709 Question Type : MCQ (**  
**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

One of the following answer figure is hidden in the problem figure in same size and direction.  
Select correct one.



**Options :**

86435175383.

86435175384.

86435175385.

86435175386.

**Question Number : 80 Question Id : 86435122710 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Monsoon first reach to which state of India ?

**Options :**

86435175387. Gujarat

86435175388. Maharashtra

86435175389. Kerala

## Planning

<b>Section Id :</b>	8643511059
<b>Section Number :</b>	4
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	25
<b>Number of Questions to be attempted :</b>	25
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	8643511286
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 81 Question Id : 86435122711 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which is the most populated city in the world ?

**Options :**

86435175391. Delhi

86435175392. Shanghai

86435175393. Tokyo



86435175394. Sao Paulo

**Question Number : 82 Question Id : 86435122712 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which country organised the 'Earth Summit' in 1992 ?

**Options :**

86435175395. Sweden

86435175396. United Kingdom

86435175397. Brazil

86435175398. U.S.A.

**Question Number : 83 Question Id : 86435122713 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Find the correct sequence in descending order for the hierarchy of plans with reference to the area.

**Options :**

86435175399. Regional Plan, Zonal Plan, Master Plan, Layout Plan.

86435175400. Regional Plan, Master Plan, Zonal Plan, Layout Plan.

86435175401. Master Plan, Regional Plan, Layout Plan, Zonal Plan

86435175402. Zonal Plan, Layout Plan, Master Plan, Regional Plan.

**Question Number : 84 Question Id : 86435122714 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Central government programme known as HRIDAY primarily focuses on :

**Options :**

86435175403. Hill towns

86435175404. Heritage cities

86435175405. Highland resources

86435175406. Highways, roads and infrastructure

**Question Number : 85 Question Id : 86435122715 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of these cities are depicted in Charles Dickens's, "A Tale of two cities" ?

- (A) London
- (B) New York
- (C) Venice
- (D) Paris
- (E) Warsaw

Choose the correct answer from the options given below :

**Options :**

86435175407. (A) and (B) only

86435175408. (A) and (D) only

86435175409. (C) and (D) only

86435175410. (B) and (E) only

**Question Number : 86 Question Id : 86435122716 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

**Match List - I with List - II.**

**List - I**

**List - II**

(A) Paris

(I) Petronas Tower

(B) New York

(II) Gardens by the Bay

(C) Singapore

(III) Louvre Museum

(D) Kuala Lumpur

(IV) Times Square

Choose the **correct** answer from the options given below :

**Options :**

86435175411. (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

86435175412. (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

86435175413. (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

86435175414. (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

**Question Number : 87 Question Id : 86435122717 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which among the following states in India is more prone to earthquake

**Options :**

86435175415. Kerala

86435175416. Assam

86435175417. West Bengal

86435175418. Madhya Pradesh

**Question Number : 88 Question Id : 86435122718 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which type of soil is available in the largest quantity in India ? Choose the correct answer.

**Options :**

86435175419. Black (Regular) soil

86435175420. Red soil

86435175421. Alluvial soil

86435175422. Mountain soil

**Question Number : 89 Question Id : 86435122719 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

How many towns are there in India based on 2011 census

**Options :**

86435175423. 3000

86435175424. 4727

86435175425. 5687

86435175426. 7935

**Question Number : 90 Question Id : 86435122720 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In which city did "Lottery Committee" initiate town planning during 18<sup>th</sup> century ?

**Options :**

86435175427. Calcutta

86435175428. Delhi

86435175429. Bombay

86435175430. Amritsar

**Question Number : 91 Question Id : 86435122721 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In defining a settlement as 'urban', which one of the following is the correct option ?

**Options :**

86435175431. 75% workers to be engaged in agricultural

86435175432. 75% of male workers to be engaged in non-agricultural pursuits.

86435175433. 75% of workers to be engaged in non-agricultural pursuits.

86435175434. 75% of female workers to be engaged in non-agricultural pursuits.

**Question Number : 92 Question Id : 86435122722 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

First printing press of Europe was named :

**Options :**

86435175435. Erasmus Printing Press

86435175436. The Gutenberg Press

86435175437. Britannica Press

86435175438. Vernacular Press

**Question Number : 93 Question Id : 86435122723 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

**Statement I :**

The thirteenth Five-Year Plan of India is being prepared for 2020-2025.

**Statement II :**

Since its inception in 1951, twelve five year plans have been prepared.

In the light of above statements, choose the **most appropriate** answer from the options given below :

**Options :**

86435175439. Both **statement I** and **statement II** are correct.

86435175440. Both **statement I** and **statement II** are incorrect.

86435175441. **Statement I** is correct but **statement II** is incorrect.

86435175442. **Statement I** is incorrect but **statement II** is correct.

**Question Number : 94 Question Id : 86435122724 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

With how many states does the state of Madhya Pradesh share its border with ?

**Options :**

86435175443. 5

86435175444. 7

86435175445. 6

86435175446. 4

Question Number : 95 Question Id : 86435122725 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Arrange the following ratio scales in the ascending order :

(A) 1 : 4,000

(B) 1 : 5,000

(C) 1 : 30,000

(D) 1 : 250

(E) 1 : 750

Choose the correct answer from the options given below :

Options :

86435175447. (A) → (B) → (C) → (D) → (E)

86435175448. (D) → (E) → (A) → (B) → (C)

86435175449. (C) → (A) → (B) → (D) → (E)

86435175450. (C) → (B) → (A) → (E) → (D)

Question Number : 96 Question Id : 86435122726 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

To show proportion of an item to the whole, the preferred chart type would be :

Options :

86435175451. Pine diagram

86435175452. Scatter Plot

86435175453. Pie chart



86435175454. Gantt chart

**Question Number : 97 Question Id : 86435122727 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

**Assertion A :**

The U.S. has hegemony in the world based on its military power.

**Reason R :**

The U.S. absorbs about 65% of India's total experts in the software sector.

In the light of above statements, choose the **most appropriate** answer from the options given below :

**Options :**

86435175455. Both (A) and (R) are correct and (R) is the correct explanation of (A).

86435175456. Both (A) and (R) are correct but (R) is not the correct explanation of (A).

86435175457. (A) is correct but (R) is not correct.

86435175458. (A) is not correct but (R) is correct.

**Question Number : 98 Question Id : 86435122728 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Burning wood for household cooking and heating is hazardous to health. Wood smoke contains dangerous toxins that can cause change in human cells. As such there must be some legislation to regulate use of wood-stoves and open-air fires.

Which of the following statements, if true, provide/s support for the above argument ?

- (A) Dangerous toxins is higher in vehicle exhaust than in wood smoke.
- (B) Smoke produced by coal-burning stoves is more toxic than wood-burning stoves.
- (C) In areas where the legislation is to be implemented, the concentration of smoke results in poor air-quality.
- (D) No significant beneficial effect on air quality by banning of wood for cooking.
- (E) In areas where the legislation is to be implemented, wood is used by more than 50% households.

Choose the most appropriate answer from the options given below :

**Options :**

86435175459. (C) and (E) only

86435175460. (C) only

86435175461. (B) only

86435175462. (A) and (B) only

**Question Number : 99 Question Id : 86435122729 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Past weather report for city X reveals that in the month of August, whenever the temperature was  $38^{\circ}\text{C}$  or above, the humidity level was 85% or higher. From this statement it can be concluded that the report which is not accurate for city X, for the month of August is :

**Options :**

86435175463.  $37^{\circ}\text{C}$ , 82%

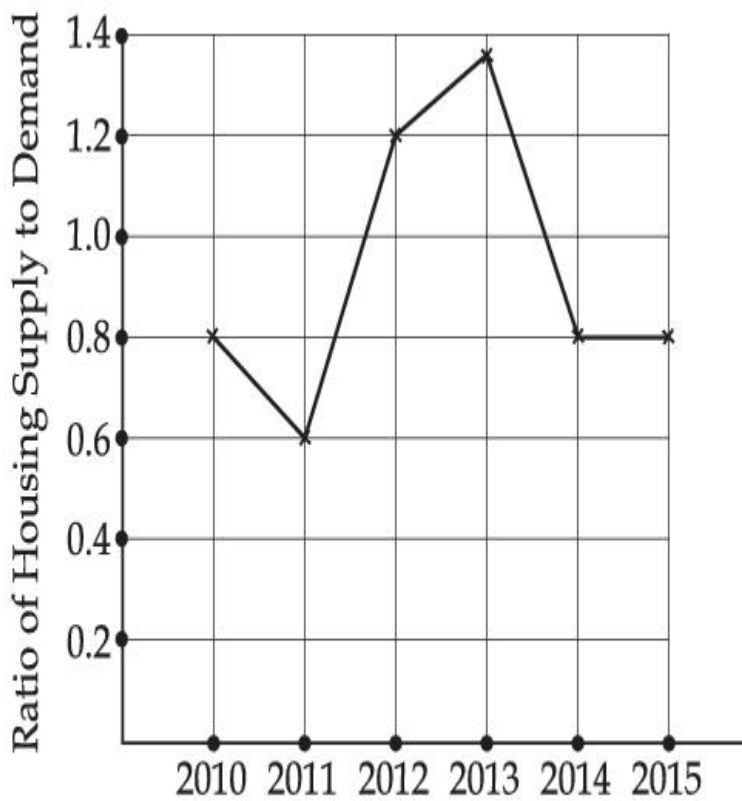
86435175464.  $38^{\circ}\text{C}$ , 84%

86435175465. 39°C, 85%

86435175466. 36°C, 80%

Question Number : 100 Question Id : 86435122730 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1



The above graph gives the ratio of housing supply to housing demand.  
How many years was the demand for housing more than its supply ?

Options :

86435175467. 4 years

86435175468. 2 years

86435175469. 1 year

86435175470. 5 years

**Question Number : 101 Question Id : 86435122731 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Population of four cities from 1991-2011 (in millions).

Year	Delhi	Greater Mumbai	Kolkatta	Hyderabad
1991	9.4	12.5	10.97	4.1
2001	13.8	16.3	13.1	5.65
2011	16.8	18.4	14.0	7.5

Which city has grown at the highest rate between 2001-2011 ?

**Options :**

86435175471. Delhi

86435175472. Kolkatta

86435175473. Greater Mumbai

86435175474. Hyderabad

**Question Number : 102 Question Id : 86435122732 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following is **not** the correct inference from the table ?

Year	Delhi	Greater Mumbai	Kolkatta	Hyderabad
1991	9.4	12.5	10.97	4.1
2001	13.8	16.3	13.1	5.65
2011	16.8	18.4	14.0	7.5

**Options :**

86435175475. Population growth rate was the highest for Delhi between 1991-2001.

86435175476. Total population of all cities in 2011 has doubled from total population in 1991.

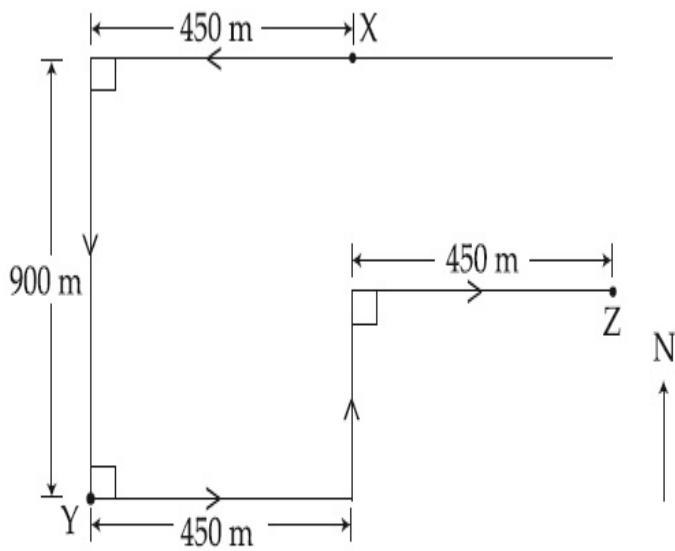
86435175477. Population of Greater Mumbai is almost half of the total population of all cities in 2011.

86435175478. Kolkatta is growing at the slowest rate amongst all four cities.

**Question Number : 103 Question Id : 86435122733 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**



John starts from his home at point X and follows the path shown in the diagram to reach the bank at point Y and then to his office at point Z.

Which of the following statements holds true ?

**Options :**

86435175479. John's bank is located west-south-west of his home.

86435175480. John's bank is located north-east of his home.

86435175481. John's home is south-east of his office.

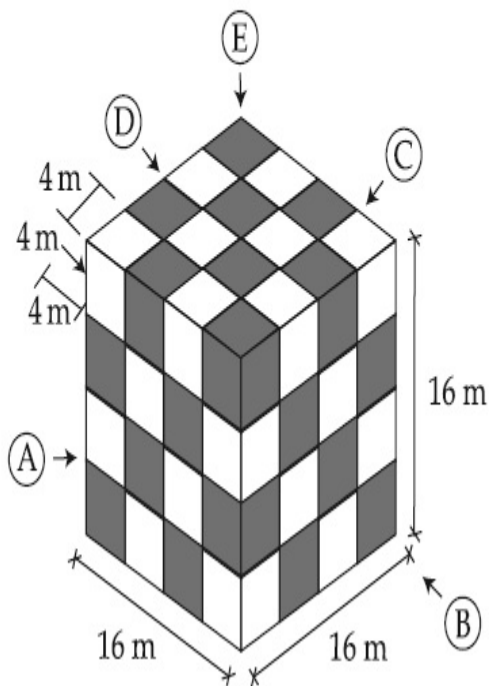
86435175482. John's home is north-west of his office.

**Question Number : 104 Question Id : 86435122734 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

The drawing below shows a building block  $16\text{ m} \times 16\text{ m} \times 16\text{ m}$ . Black and White surfaces are cubes visible on all four vertical surfaces and top surface, except the base. Calculate the total volume of black cubes that are visible from all sides except the base. Find the correct answer.



**Options :**

86435175483. 2048 cu.m.

86435175484. 1536 cu.m.

86435175485. 1664 cu.m.

86435175486. 4028 cu.m.

**Question Number : 105 Question Id : 86435122735 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

**Correct Marks : 4 Wrong Marks : 1**

In the tribal arts of India, the traditional tribal Bastar art is famous around all over the world. This art is practiced by tribal of Bastar region of India and is known throughout the world for their unique art works. The tribal communities of Bastar have been protecting this rare art from generation to generation, but in absence of publicity it is restricted to weekly 'haat' and markets. This art is made by conventional tools rather than using the modern excellent machines. Bastar art can be divided mainly into wood work, bamboo art, soil art and metal arts.

Wood art works are mainly used in wooden material to make Bastar culture, festivals, creatures of gods, statues of gods and goddesses and decorations. Bamboo art is made with bamboo sheets, chairs, living room, table, baskets, mats and home furnishings are made. In soil art, the statues of goddesses, decorative utensils, vases, pots and household furnishings are made. In the metal arts, artifacts of copper and tin mixed metal are made, mainly in which statues of goddesses, idols of worship, idols of tribal culture and home furnishings are made.

With reference to the passage above, choose the **correct** statement.

**Options :**

86435175487. Bastar art is a traditional art of Bihar.

86435175488. Bastar statues are widely worshipped in Bastar region.

86435175489. Bastar art is machine made and rarely done through conventional tools.

86435175490. Bastar art is available in metal, wood, bamboo and soil.

## Drawing

<b>Section Id :</b>	8643511060
<b>Section Number :</b>	5
<b>Section type :</b>	Offline
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	2
<b>Number of Questions to be attempted :</b>	2



**Section Marks :** 100  
**Enable Mark as Answered Mark for Review and Clear Response :** Yes  
**Sub-Section Number :** 1  
**Sub-Section Id :** 8643511287  
**Question Shuffling Allowed :** No

**Question Number : 106 Question Id : 86435122736 Question Type : SUBJECTIVE**

**Correct Marks : 50**

Draw a proportionate sketch of given reference image with black and white rendering techniques of your choice. Picture should fit in given space for this answer.



OR

Create a wall magic for a metro station using triangles of any size and overall panel size of your choice. The theme of magic is 'Environment' use colours to make the mozaic attractive and meaningful.

**Question Number : 107 Question Id : 86435122737 Question Type : SUBJECTIVE**

**Correct Marks : 50**

Consider yourself a fish in the aquarium that is in a room and a girl is standing near the aquarium and playing with the fish. Create the view of the room according the eye of fish.

OR

Create picture with fish/fishes, a girl, boat, farmers, tractor, trees and plants.