

**Question Paper Name :** B Arch 02 Sep 2021 Shift 1  
**Subject Name :** B ARCH  
**Creation Date :** 2021-09-02 17:51:14  
**Duration :** 180  
**Total Marks :** 400  
**Display Marks:** Yes

## B ARCH

**Group Number :** 1  
**Group Id :** 864351275  
**Group Maximum Duration :** 0  
**Group Minimum Duration :** 180  
**Show Attended Group? :** No  
**Edit Attended Group? :** No  
**Break time :** 0  
**Group Marks :** 400  
**Is this Group for Examiner? :** No

## Mathematics Section A

**Section Id :** 8643511065  
**Section Number :** 1  
**Section type :** Online  
**Mandatory or Optional :** Mandatory

Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	80
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511292
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 86435122820 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1

If  $5f(x) + 3f(-x) = 2x - 5$ ,  $x \neq 0$  and  $S = \{x \in \mathbf{R} : f(x) = f\left(\frac{1}{x}\right), x \neq 0\}$ . Then S :

Options :

86435175781. is an empty set

86435175782. contains exactly one element

86435175783. contains exactly two elements

86435175784. contains more than two elements

Question Number : 2 Question Id : 86435122821 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 4 Wrong Marks : 1

Let the median of the numbers  $x-2, x+2, x + \frac{3}{2}, x + \frac{1}{2}, x - \frac{7}{2}, x - \frac{9}{2}$  be  $\frac{9}{4}$ . If  $\mu$  and  $\sigma^2$  are the mean and the variance respectively of these numbers, then the value of  $\mu + 6\sigma^2$  is equal to :

**Options :**

86435175785. 39

86435175786. 44

86435175787. 40

86435175788. 37

**Question Number : 3 Question Id : 86435122822 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

Let  $\omega = \frac{1}{2}(-1 + i\sqrt{3})$  where  $i^2 = -1$ . If  $\begin{bmatrix} 1 & \omega \\ \omega^2 & \omega + \omega^2 \end{bmatrix} \begin{bmatrix} \alpha \\ \beta \end{bmatrix} = \begin{bmatrix} 6\omega + 2 \\ 4\omega \end{bmatrix}$ , then  $\alpha - \beta$  is equal

to :

**Options :**

86435175789.  $4\omega - 1$

86435175790.  $4\omega + 3$

86435175791.  $4\omega - 7$

86435175792.  $4\omega - 3$

Question Number : 4 Question Id : 86435122823 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The number of real values of 'p' for which the following system of equations

$$(p + 3)x + (p + 2)y + z = 0$$

$$3x + (p + 3)y + z = 0$$

$$2x + 3y + z = 0$$

has a non-trivial solution is :

Options :

86435175793. 0

86435175794. 1

86435175795. 2

86435175796. 3

Question Number : 5 Question Id : 86435122824 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Let A be a square matrix of order 3 and  $|A| = 6$ . If a matrix B is obtained from A by applying the elementary operations,  $R_1 \leftrightarrow R_2$ ,  $C_2 \rightarrow 2C_2$  and  $R_3 \rightarrow R_3 + 5R_1$  in that order, then  $|-B|$  is equal to :

Options :

86435175797. 60

86435175798. -60

86435175799. 12

**Question Number : 6 Question Id : 86435122825 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

Assume that  $a, b$  and  $c$  are in A.P. and  $a^2, b^2, c^2$  are in G.P. If  $a < b < c$  and  $a + b + c = 3$ , then  $a$  is equal to :

**Options :**

86435175801.  $\frac{1}{2} - \frac{1}{\sqrt{2}}$

86435175802.  $\frac{1}{2} + \frac{1}{\sqrt{2}}$

86435175803.  $1 - \sqrt{2}$

86435175804.  $1 + \sqrt{2}$

**Question Number : 7 Question Id : 86435122826 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

If  $\sum_{n=1}^{\infty} \frac{1}{(2n-1)^4} = P$ , then  $\sum_{n=1}^{\infty} \frac{1}{n^4}$  is equal to :

**Options :**

86435175805.  $\frac{6}{5}P$

86435175806.  $\frac{16}{15}P$

86435175807.  $\frac{10}{9}P$

86435175808.  $\frac{15}{16}P$

**Question Number : 8 Question Id : 86435122827 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

The area (in square units) of the triangle formed by the tangent at the point  $(-2, -2)$  on the curve,  $xy=4$  and the coordinate axes is :

**Options :**

86435175809. 4

86435175810. 8

86435175811. 12

86435175812. 16

**Question Number : 9 Question Id : 86435122828 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

The equation  $x^2 e^{\sin x} - \cos x + 1 = 0$  in the interval  $\left(0, \frac{\pi}{2}\right)$  has :

**Options :**

86435175813. exactly one solution

86435175814. exactly two solutions

86435175815. infinitely many solutions

86435175816. No solution

**Question Number : 10 Question Id : 86435122829 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

The shortest distance between the point  $(4, 0)$  and the curve  $y = \sqrt{x}$ ,  $(x \geq 0)$  is :

**Options :**

86435175817.  $\sqrt{\frac{7}{2}}$

86435175818.  $\frac{7}{2}$

86435175819.  $\sqrt{\frac{15}{2}}$

86435175820.  $\frac{\sqrt{15}}{2}$

**Question Number : 11 Question Id : 86435122830 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

If  $[x]$  denotes the greatest integer less than or equal to  $x$ , then  $\int_{-\frac{3}{2}}^1 [x^2] dx$  is equal to :

**Options :**

86435175821.  $1 - \sqrt{2}$

86435175822.  $1 + \sqrt{2}$

86435175823.  $2 - \sqrt{2}$

86435175824.  $2 + \sqrt{2}$

**Question Number : 12 Question Id : 86435122831 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

If  $y=y(x)$  is the solution of the differential equation,  $(y - e^{-2\sqrt{x}}) dx + \sqrt{x}dy = 0, x > 0$  and

$y(1)=0$ , then  $y(4)$  is equal to :

**Options :**

86435175825.  $e^{-4}$

86435175826.  $\frac{3}{2}e^{-4}$

86435175827.  $2e^{-4}$

86435175828.  $\frac{2}{3}e^{-4}$

**Question Number : 13 Question Id : 86435122832 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

If the distance between two parallel planes  $2x + \alpha y + 2z + \gamma = 0$  and  $4x - 2y + \beta z + 8 = 0$  is 2, then the maximum value of  $(\alpha + \beta + \gamma)$  is :

**Options :**

86435175829. 5

86435175830. 13

86435175831. 15

86435175832. 17

**Question Number : 14 Question Id : 86435122833 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

PAB is an isosceles triangle with vertex at P(1, 1) and  $AP = BP = 5$ . If the equation of AB is  $4x + 3y + 8 = 0$  and the co-ordinates of the centroid of  $\Delta PAB$  are  $(\alpha, \beta)$ , then  $5(\alpha + \beta)$  is equal to :

Options :

86435175833.  $-2$

86435175834.  $-4$

86435175835.  $-1$

86435175836.  $3$

Question Number : 15 Question Id : 86435122834 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The centre of the circle, passing through the point  $(0, 1)$  and touching the curve  $y = x^2$  at  $(2, 4)$  is :

Options :

86435175837.  $\left(-\frac{16}{5}, \frac{53}{10}\right)$

86435175838.  $\left(-\frac{13}{4}, \frac{16}{3}\right)$

86435175839.  $\left(-\frac{16}{5}, \frac{57}{10}\right)$

86435175840.  $\left(-\frac{13}{4}, \frac{11}{3}\right)$

Question Number : 16 Question Id : 86435122835 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If the tangents at a point (other than the origin) of intersection of the parabolas,  $x^2 = 32y$  and  $y^2 = 108x$  are inclined at an angle  $\theta$ , then a value of  $\tan\theta$  is :

Options :

86435175841.  $3$

86435175842.  $\frac{9}{13}$

86435175843.  $\frac{13}{9}$

86435175844.  $\frac{4}{3}$

Question Number : 17 Question Id : 86435122836 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The condition for a line to be perpendicular to three lines

$$\vec{r} = (-1, 2, 3) + \lambda_1(a, b, c), \lambda_1 \in \mathbf{R},$$

$$\vec{r} = (0, 2, 3) + \lambda_2(b, c, a), \lambda_2 \in \mathbf{R}$$

and  $\vec{r} = (1, -1, 6) + \lambda_3(c, a, b), \lambda_3 \in \mathbf{R},$

given that  $a + b + c \neq 0$ , is :

Options :

86435175845.  $a + 2b + 3c = 0$

86435175846.  $a - b + 2c = 0$

86435175847.  $a^2 + b^2 + c^2 = a + b + c$

86435175848.  $a^2 + b^2 + c^2 = ab + bc + ca$

Question Number : 18 Question Id : 86435122837 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If  $\vec{a}$  and  $\vec{b}$  be unit vectors such that the scalar triple product  $\left[ \vec{a} \ \vec{b} \ (\vec{a} \times \vec{b}) \right] = \frac{3}{4}$ , then

an angle between  $\vec{a}$  and  $\vec{b}$  is :

Options :

86435175849.  $\frac{\pi}{3}$

86435175850.  $\frac{\pi}{6}$

86435175851.  $\frac{\pi}{4}$

86435175852.  $\frac{\pi}{2}$

Question Number : 19 Question Id : 86435122838 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

If each of the three independent variables  $X$ ,  $Y$  and  $Z$  assumes values  $-1$ ,  $0$  and  $1$  with equal probabilities, then  $P(X+Y+Z=0)$  is equal to :

Options :

86435175853.  $\frac{2}{9}$

86435175854.  $\frac{4}{27}$

86435175855.  $\frac{8}{27}$

86435175856.  $\frac{7}{27}$

Question Number : 20 Question Id : 86435122839 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The converse of the statement, "If a number  $x$  is even, then  $x^2$  is even", is :

Options :

86435175857. Both  $x^2$  and  $x$  are even

86435175858. " $x$  is even" is sufficient for " $x^2$  is even"

86435175859.

If a number  $x^2$  is not even, then  $x$  is not even

86435175860. If a number  $x^2$  is even, then  $x$  is even

## Mathematics Section B

Section Id :	8643511066
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 :	8643511293
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 86435122840 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

The number of elements in the set  $\{x \in \mathbf{R} : \operatorname{Re}[(x+1-3i)^2-10|x|+23-7i]=0, i^2=-1\}$  is \_\_\_\_\_.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 22 Question Id : 86435122841 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

The coefficient of  $x^{29}$  in  $(x-1)(x^2-2)(x^3-3)(x^4-4)\dots(x^8-8)$  is \_\_\_\_\_.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 23 Question Id : 86435122842 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

If 12 points are given on the boundary of a circle such that any two consecutive points subtend the same angle ' $\theta$ ' at its centre, then the number of isosceles (including equilateral) triangles that can be formed by taking vertices on the given 12 points, is \_\_\_\_\_.

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 : 86435122843 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

Let  $f$  be differentiable in the interval  $(0, \infty)$  such that  $f(1)=1$  and  $\lim_{t \rightarrow x} \frac{t^3 f(x) - x^3 f(t)}{t - x} = 1,$

$x \in (0, \infty)$ . Then  $40f(2)$  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 :** 86435122844 **Question Type :** SA

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

If the area of the region bounded by the parabola  $y=2x^2$ , curve  $y=|x-3|$  and the  $x$ -axis in the first quadrant is  $A$ , then  $6A$  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 :** 26 **Question Id :** 86435122845 **Question Type :** SA

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

If  $\sin^{-1}\left(\sin\frac{33\pi}{7}\right) + 2\cos^{-1}\left(\cos\frac{23\pi}{7}\right) + 3\tan^{-1}\left(\tan\frac{13\pi}{7}\right) = k\pi$ , then  $7k$  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 :** 86435122846 **Question Type :** SA

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

If  $A = \begin{bmatrix} 3 & 1 \\ 1 & 2 \end{bmatrix}$  and  $B = \text{adj}(2A) + \text{adj}(2^2A) + \dots + \text{adj}(2^{10}A)$ , then the sum of all the elements of the matrix B 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 :** 28 **Question Id :** 86435122847 **Question Type :** SA

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

The value of  $\lim_{x \rightarrow 0} \frac{2 \left\{ e^x + \log_e \left( \frac{1 - 2x}{e} \right) \right\}}{x - \tan 3x}$  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 : 86435122848 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

If  $33 \int \frac{(1 - \cos\theta)^{2/7}}{(1 + \cos\theta)^{9/7}} d\theta = k \left( \tan \frac{\theta}{2} \right)^{11/7} + C$  (C is a constant of integration), then k 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 : 86435122849 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

Two vertical poles 20 m and 80 m high, stand apart on a horizontal plane. The height (in meters) of the point of intersection of the lines joining the top of each pole to the foot of the other is \_\_\_\_\_.

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>	8643511067
<b>Section Number :</b>	3
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50
<b>Number of Questions to be attempted :</b>	50
<b>Section Marks :</b>	200
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	8643511294
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 31 Question Id : 86435122850 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which City lies on two continents ?

**Options :**

86435175871. Venice

86435175872. Istanbul

86435175873. Mexico

86435175874. Moscow

Question Number : 32 Question Id : 86435122851 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which software among listed below is used to prepare drawings (drafting tool) ?

Options :

86435175875. Photoshop

86435175876. ppt

86435175877. Autocad

86435175878. Primavera

Question Number : 33 Question Id : 86435122852 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which city of Uttarakhand has IIM ?

Options :

86435175879. Rishikesh

86435175880. Dehradoon

86435175881. Roorkee

86435175882. Kashipur

Question Number : 34 Question Id : 86435122853 Question Type : MCQ Option Shuffling : Yes

**Is Question Mandatory : No**

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

'Ugadi' festival celebrated in which State of India ?

**Options :**

86435175883. Maharashtra

86435175884. Kerala

86435175885. Gujarat

86435175886. Karnataka

**Question Number : 35 Question Id : 86435122854 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'Rock Garden' is situated in which of the following city ?

**Options :**

86435175887. New Delhi

86435175888. Chandigarh

86435175889. Bangalore

86435175890. Jaipur

**Question Number : 36 Question Id : 86435122855 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Among the following, which one temple is situated in Ranakpur ?

**Options :**

86435175891. Rishabhanath Temple

86435175892. ISCON Temple

86435175893. Buddhist Temple

86435175894. Hindu Temple

**Question Number : 37 Question Id : 86435122856 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Building located near the coasts will require to consider which of the following climate phenomena primarily ?

- (a) Storm            (b) Flood            (c) Land slide  
(d) Fog              (e) Hail              (f) Erosion

**Options :**

86435175895. (a), (c), (d)

86435175896. (a), (e), (d)

86435175897. (a), (b), (f)

86435175898. (a), (b), (c)

Question Number : 38 Question Id : 86435122857 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following city is located in Hot and Dry Climatic Zone ?

Options :

86435175899. Delhi

86435175900. Jaisalmer

86435175901. Bhopal

86435175902. Jhansi

Question Number : 39 Question Id : 86435122858 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'Hindware' in Indian Market is known for which of the following product ?

Options :

86435175903. Bricks

86435175904. Lifts

86435175905. Sanitary ware

86435175906. Textiles

Question Number : 40 Question Id : 86435122859 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

What is the full form of ASI ?

Options :

86435175907. Archeological Survey of India

86435175908. Architectural Survey of India

86435175909. Astro Survey of India

86435175910. American Survey of India

Question Number : 41 Question Id : 86435122860 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Step construction is mainly used in :

Options :

86435175911. Desert area

86435175912. Plain land

86435175913. Hilly area

86435175914. In water

Question Number : 42 Question Id : 86435122861 Question Type : MCQ Option Shuffling : Yes

**Is Question Mandatory : No**

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

If a building is given on the scale of 1 : 100, what would be the suitable scale for enlarging its building drawings ?

**Options :**

86435175915. 1 : 200

86435175916. 1 : 50

86435175917. 1 : 500

86435175918. 1 : 250

**Question Number : 43 Question Id : 86435122862 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which site of Chandigarh, among the following is a World Heritage Site ?

**Options :**

86435175919. Sukhna Lake

86435175920. Capital Complex

86435175921. Sector 17

86435175922. Rock Garden

**Question Number : 44 Question Id : 86435122863 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'Char Baug' concept of garden is found in which of the following style ?

**Options :**

86435175923. Japanese

86435175924. Chinese

86435175925. Mughal

86435175926. Hindu

**Question Number : 45 Question Id : 86435122864 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which city is planned on concept of 'nine mandalas' of Vastupurush ?

**Options :**

86435175927. Jaipur

86435175928. Gandhinagar

86435175929. Chandigarh

86435175930. Chennai

**Question Number : 46 Question Id : 86435122865 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which was the first Country who got zero Covid positive rate of patients ?

**Options :**

86435175931. China

86435175932. Australia

86435175933. New Zealand

86435175934. Netherlands

**Question Number : 47 Question Id : 86435122866 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which planned capital city of India has Union Territory status ?

**Options :**

86435175935. Gandhinagar

86435175936. Naya Raipur

86435175937. Chandigarh

86435175938. Amarawati

**Question Number : 48 Question Id : 86435122867 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'Warli Painting' Art comes from which State of India ?

**Options :**

86435175939. Uttarakhand

86435175940. Maharashtra

86435175941. Punjab

86435175942. Haryana

**Question Number : 49 Question Id : 86435122868 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'Pagoda' building feature is found in which kind of Architecture Style ?

**Options :**

86435175943. Jain

86435175944. Hindu

86435175945. Buddhist

86435175946. Mughal

**Question Number : 50 Question Id : 86435122869 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Match List - I with List - II.

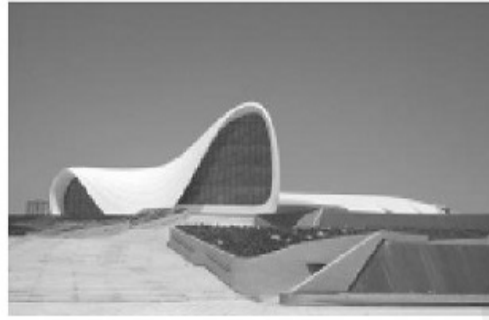
List - I

Name of the building

List - II

Pictures

(A) Heydar Aliver Cultural Centre, Baku (I)



(B) Burj Khalifa, Dubai (II)



(C) Salk Institute, San Diego (III)



(D) Millenium Park (IV)



Options :

86435175947. (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

86435175948. (A)-(IV), (B)-(I), (C)-(III), (D)-(II)

86435175949. (A)-(I), (B)-(IV), (C)-(II), (D)-(III)

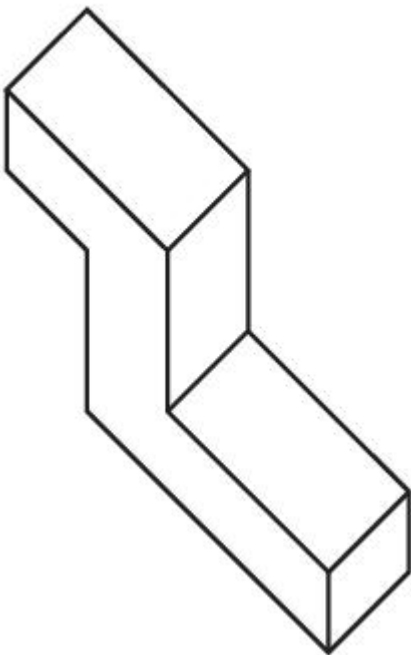
86435175950. (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

Question Number : 51 Question Id : 86435122870 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Identify the No. of surfaces in the given figure.



Options :

86435175951. 13

86435175952. 9

86435175953. 10

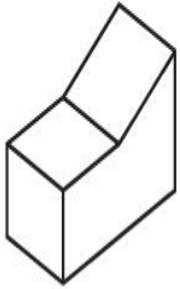
86435175954. 12

Question Number : 52 Question Id : 86435122871 Question Type : MCQ Option Shuffling : Yes

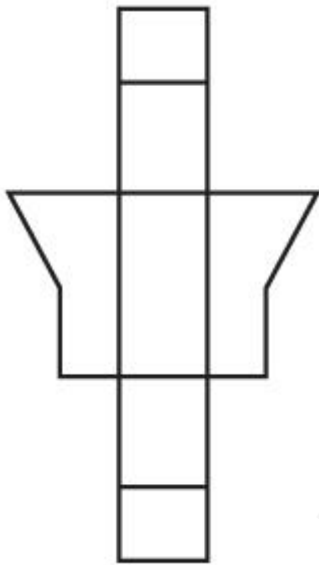
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

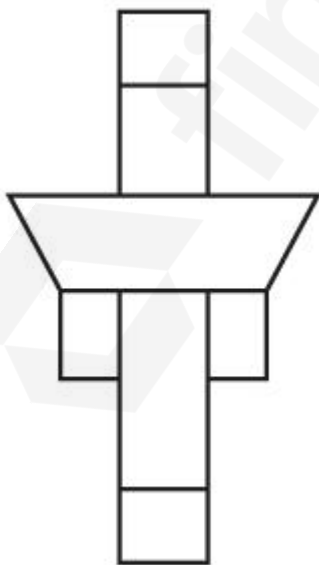
The 3D figure shows the view of an object. Identify the correct view when the figure is opened up, amongst the answer figures.



Options :

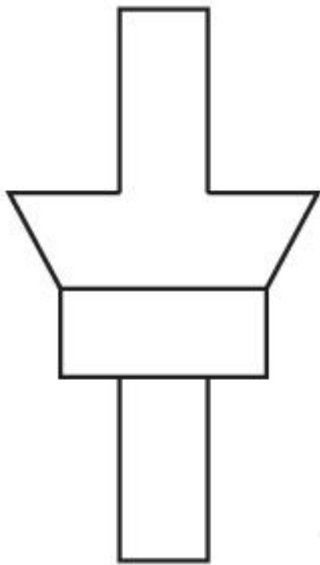
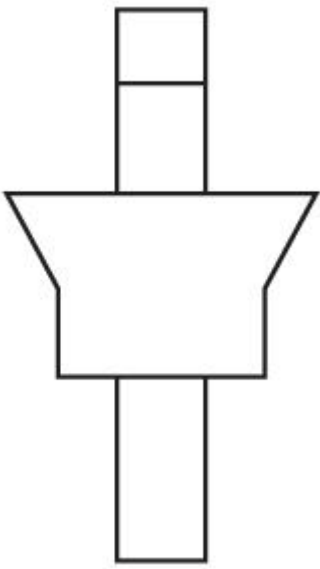


86435175955.



86435175956.

86435175957.



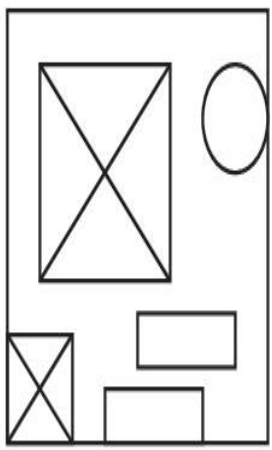
86435175958.

Question Number : 53 Question Id : 86435122872 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

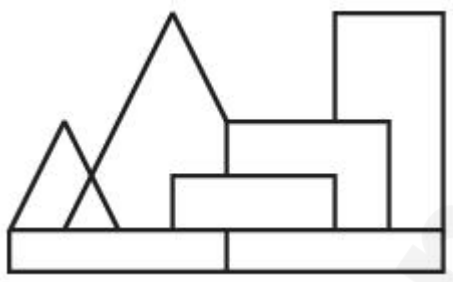
Correct Marks : 4 Wrong Marks : 1

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

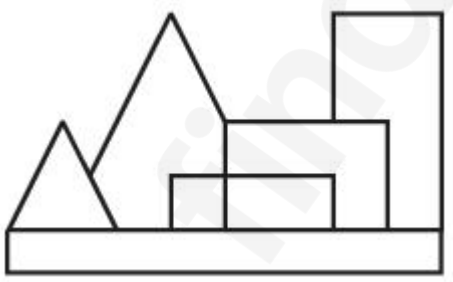


Options :

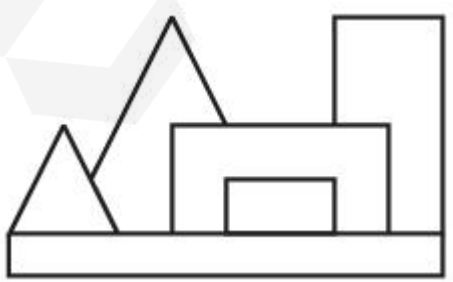
86435175959.



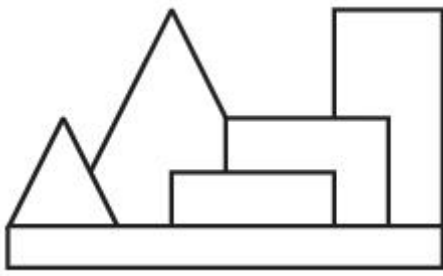
86435175960.



86435175961.



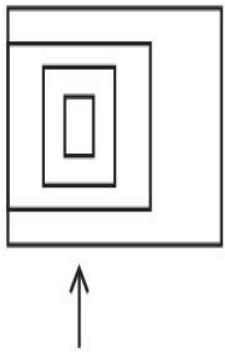
86435175962.



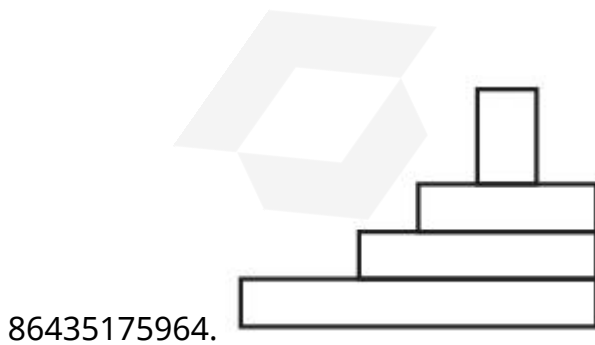
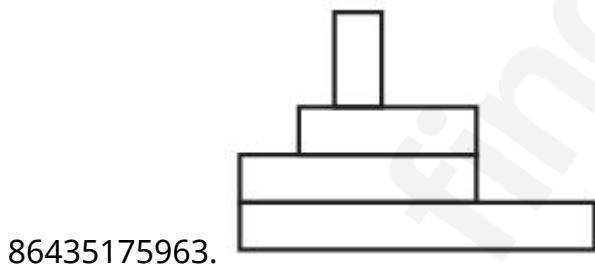
**Question Number : 54 Question Id : 86435122873 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

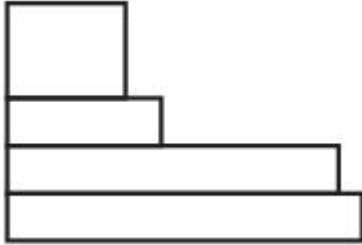
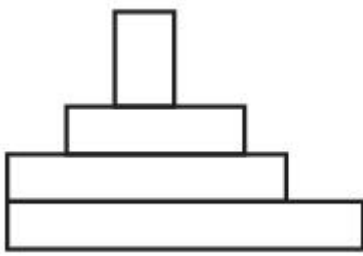
The problem figure shows the top view of an object. Identify the correct elevation looking in the direction of arrow amongst the answer figures.



**Options :**



86435175965.

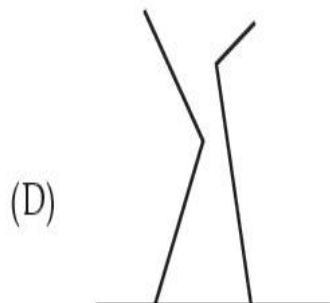
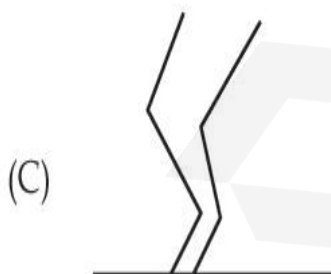
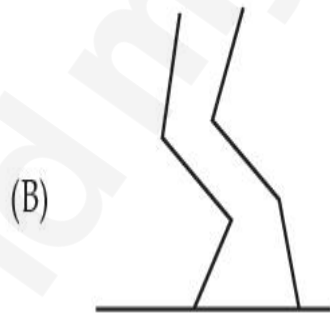
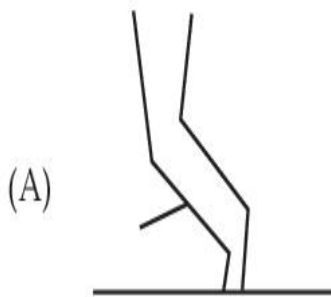


86435175966.

**Question Number : 55 Question Id : 86435122874 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

Identify the compositions of visually balanced figure, amongst the answer figures.



**Options :**

86435175967. (A) and (D)

86435175968. (B) and (D)

86435175969. (C) and (D)

86435175970. (A) and (C)

**Question Number : 56 Question Id : 86435122875 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 problem figure in same size and direction.  
Select the correct one.




**Options :**

86435175971. 

86435175972. 

86435175973. 

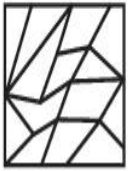
86435175974. 

**Question Number : 57 Question Id : 86435122876 Question Type : MCQ Option Shuffling : Yes**

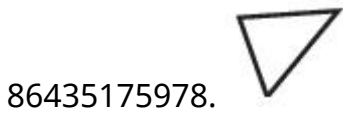
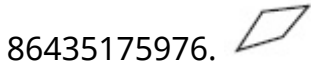
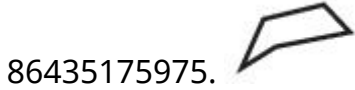
**Is Question Mandatory : No**

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

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



Options :

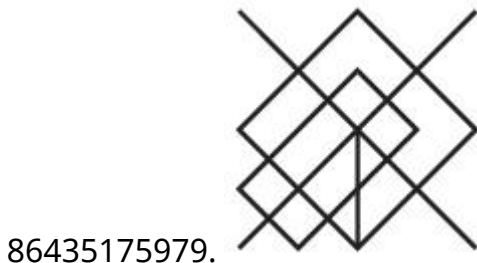


Question Number : 58 Question Id : 86435122877 Question Type : MCQ Option Shuffling : Yes  
 Is Question Mandatory : No  
 Correct Marks : 4 Wrong Marks : 1

Identify the Inherent part of problem figure, amongst the answer figures.



Options :



86435175980.



86435175981.



86435175982.



Question Number : 59 Question Id : 86435122878 Question Type : MCQ Option Shuffling : Yes

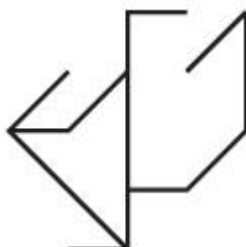
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Identify the Inherent part of problem figure, amongst the answer figures.



Options :



86435175983.

86435175984.



86435175985.



86435175986.



Question Number : 60 Question Id : 86435122879 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the following answer figure is the correct Mirror Image of the problem figure with respect to X-X ?



Options :

86435175987.



86435175988.



86435175989.



86435175990.



**Question Number : 61 Question Id : 86435122880 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which one of the answer figures is the correct Mirror Image of the problem figure with respect to X-X ?



**Options :**

86435175991.



86435175992.



86435175993.



86435175994.



Question Number : 62 Question Id : 86435122881 Question Type : MCQ Option Shuffling : Yes

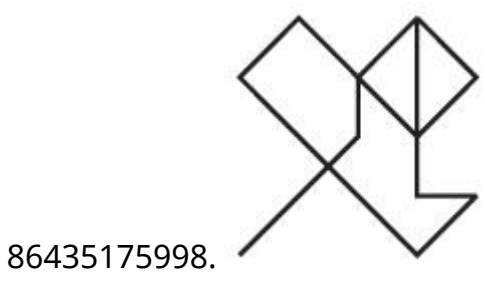
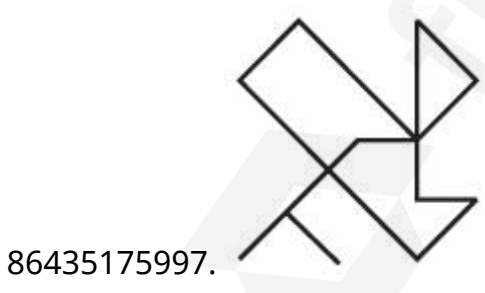
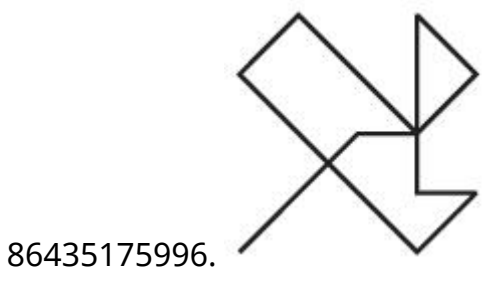
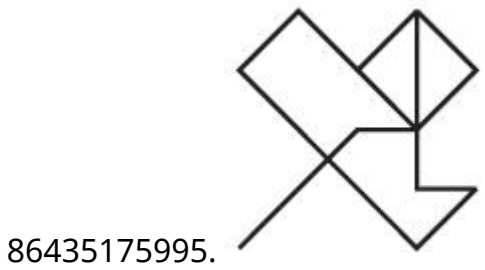
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the answer figures is the correct Mirror Image of the problem figure with respect to X-X ?



Options :

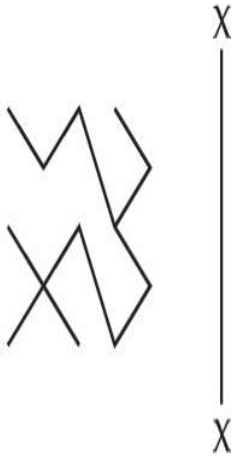


Question Number : 63 Question Id : 86435122882 Question Type : MCQ Option Shuffling : Yes

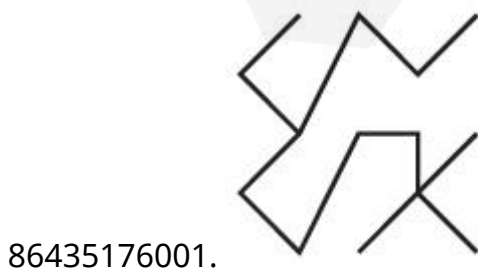
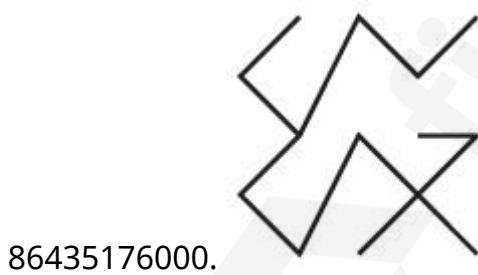
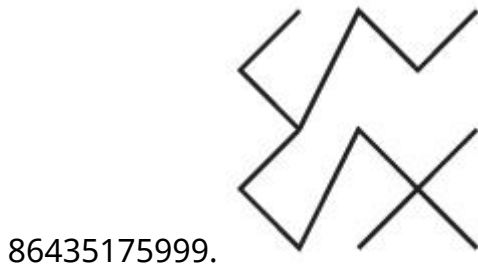
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which one of the answer figures is the correct Mirror Image of the problem figure with respect to X-X ?



Options :



86435176002.

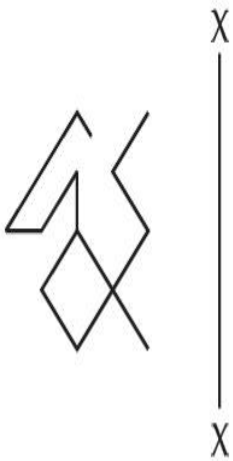


Question Number : 64 Question Id : 86435122883 Question Type : MCQ Option Shuffling : Yes

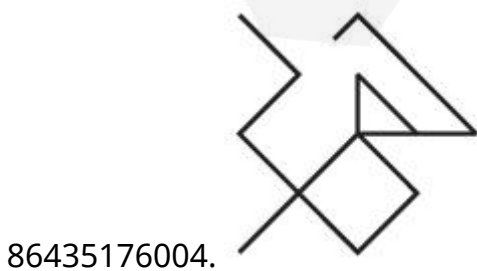
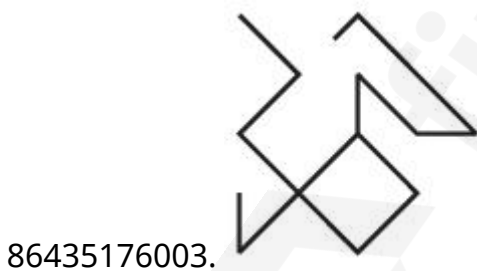
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

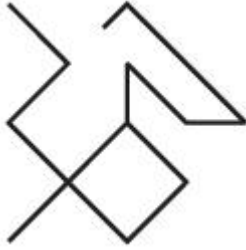
Which one of the answer figures is the correct Mirror Image of the problem figure with respect to X-X ?



Options :



86435176005.

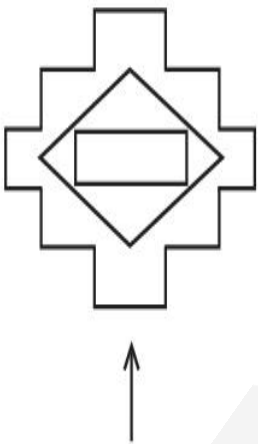


86435176006.

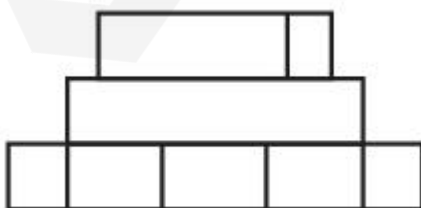
**Question Number : 65 Question Id : 86435122884 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

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

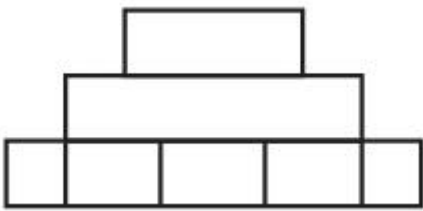


**Options :**

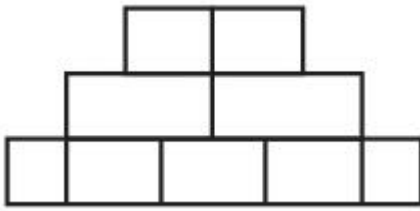


86435176007.

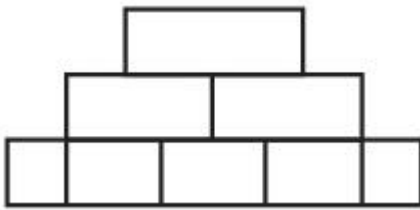
86435176008.



86435176009.



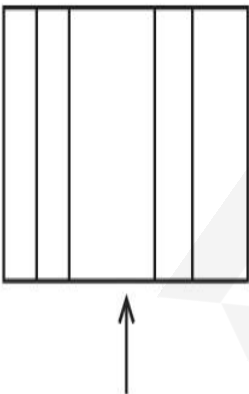
86435176010.



**Question Number : 66 Question Id : 86435122885 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

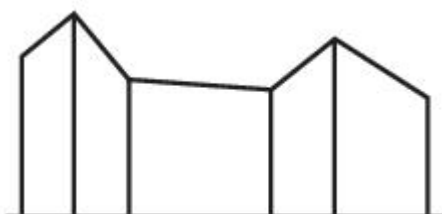
**Correct Marks : 4 Wrong Marks : 1**

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



**Options :**

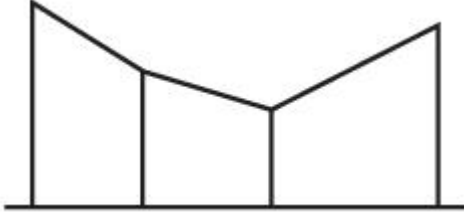
86435176011.



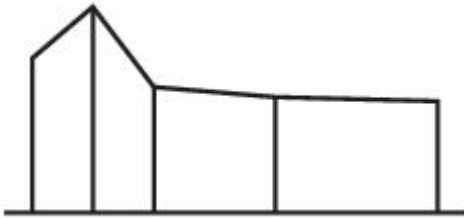
86435176012.



86435176013.



86435176014.

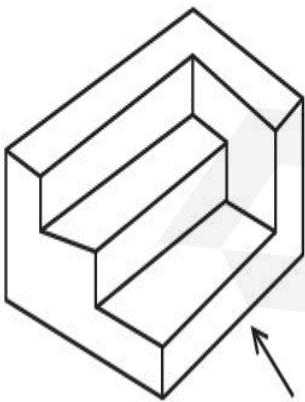


**Question Number : 67 Question Id : 86435122886 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

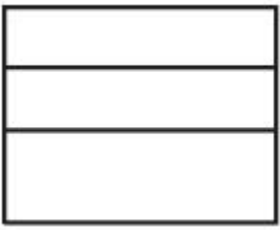
**Correct Marks : 4 Wrong Marks : 1**

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

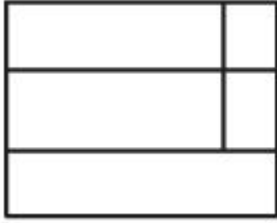


**Options :**

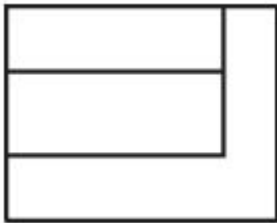
86435176015.



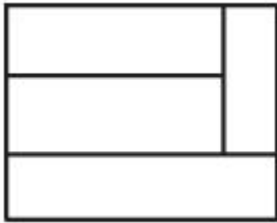
86435176016.



86435176017.



86435176018.

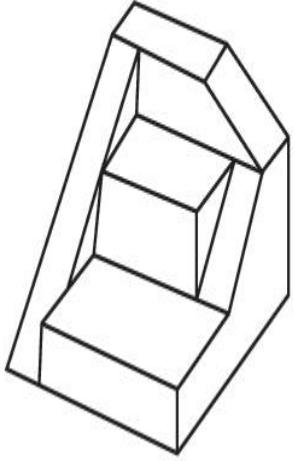


Question Number : 68 Question Id : 86435122887 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

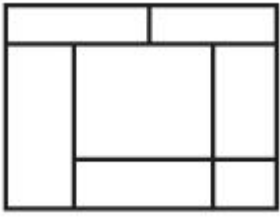
Correct Marks : 4 Wrong Marks : 1

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

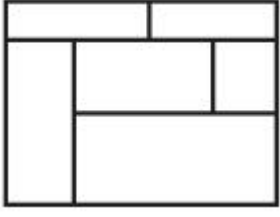


Options :

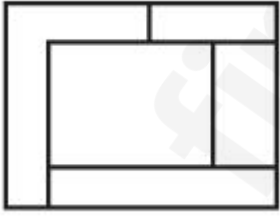
86435176019.



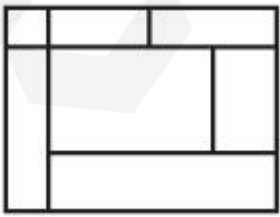
86435176020.



86435176021.



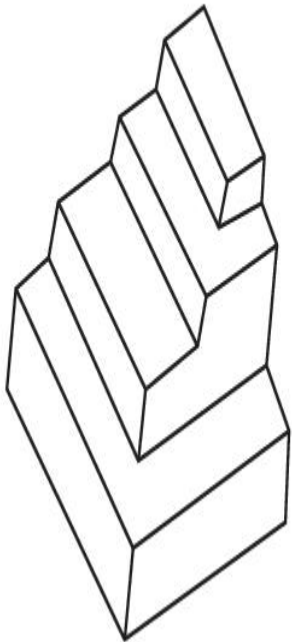
86435176022.



Is Question Mandatory : No

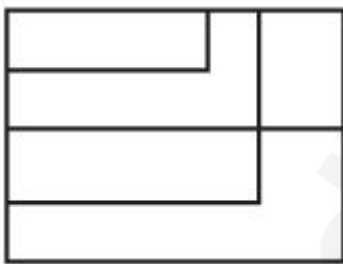
Correct Marks : 4 Wrong Marks : 1

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

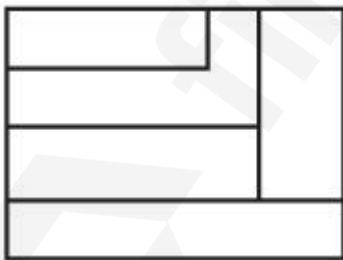


Options :

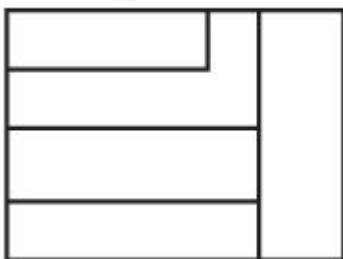
86435176023.



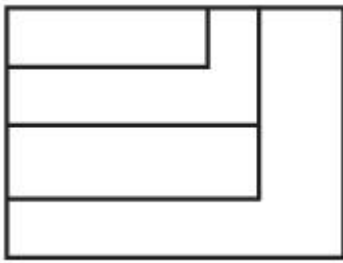
86435176024.



86435176025.



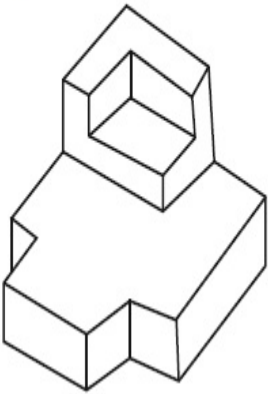
86435176026.



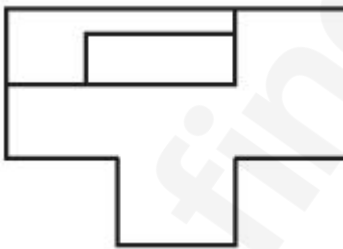
**Question Number : 70 Question Id : 86435122889 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

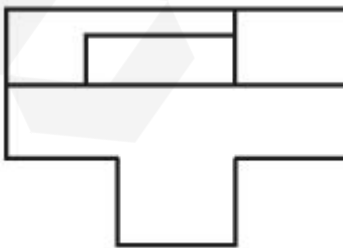
The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figures.



**Options :**

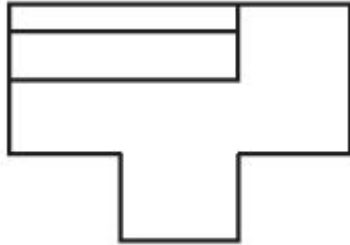
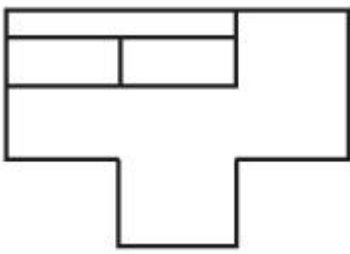


86435176027.



86435176028.

86435176029.

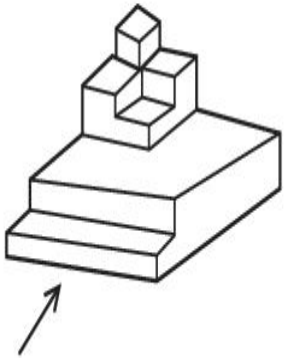


86435176030.

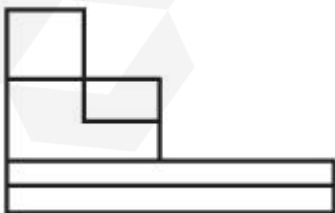
**Question Number : 71 Question Id : 86435122890 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

**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.

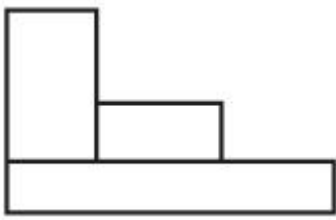


**Options :**

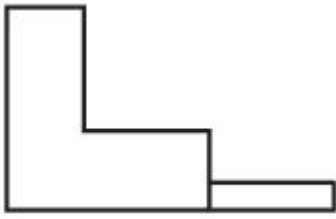


86435176031.

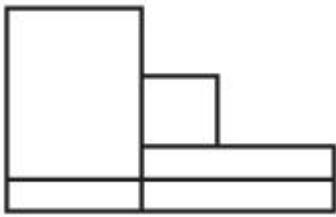
86435176032.



86435176033.



86435176034.

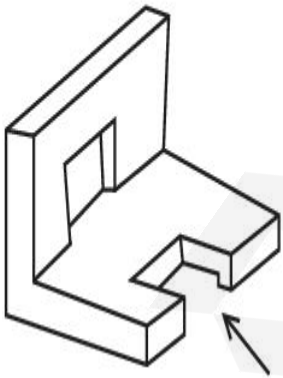


**Question Number : 72 Question Id : 86435122891 Question Type : MCQ Option Shuffling : Yes**

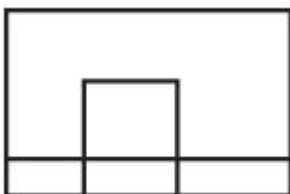
**Is Question Mandatory : No**

**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.

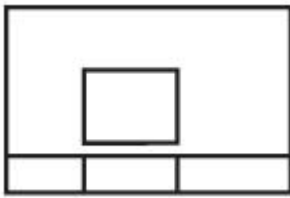


**Options :**

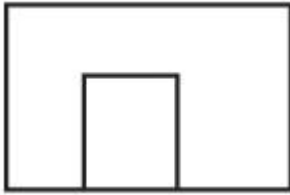


86435176035.

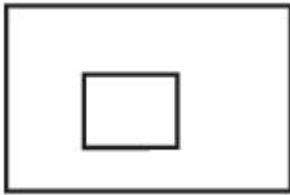
86435176036.



86435176037.



86435176038.

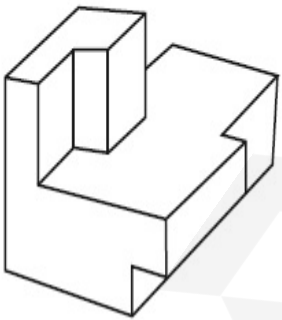


**Question Number : 73 Question Id : 86435122892 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

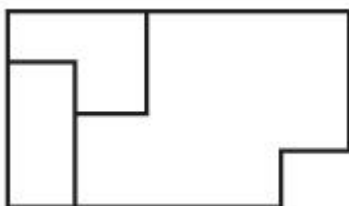
**Correct Marks : 4 Wrong Marks : 1**

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

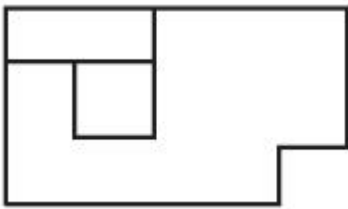


**Options :**

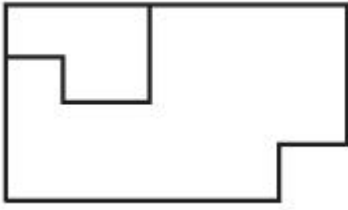
86435176039.



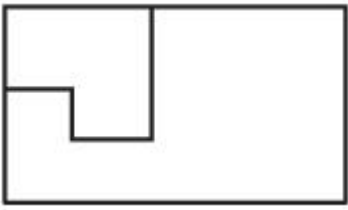
86435176040.



86435176041.



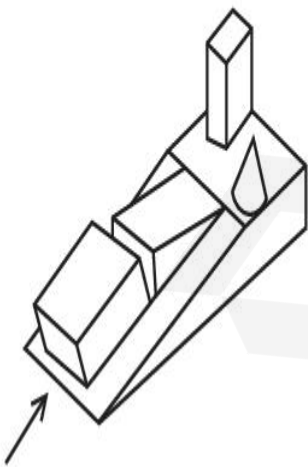
86435176042.



**Question Number : 74 Question Id : 86435122893 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

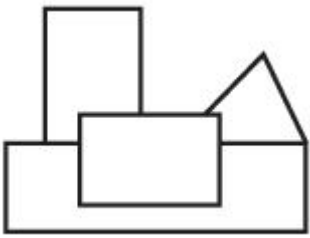
**Correct Marks : 4 Wrong Marks : 1**

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

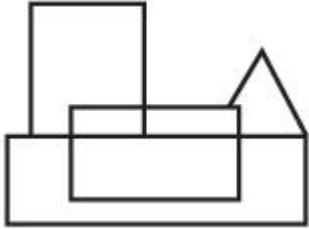


**Options :**

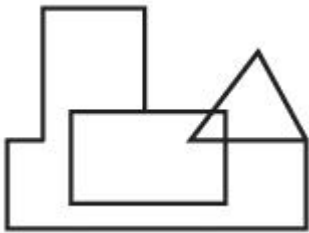
86435176043.



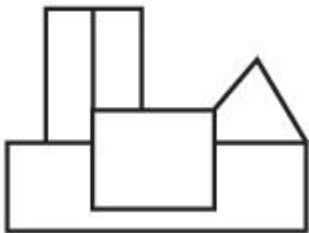
86435176044.



86435176045.



86435176046.

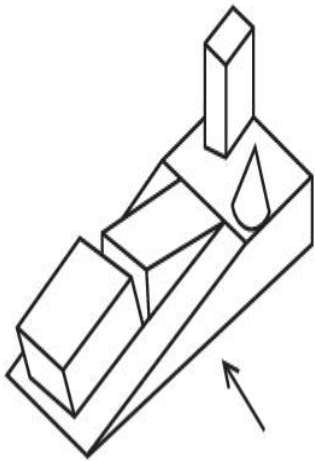


Question Number : 75 Question Id : 86435122894 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

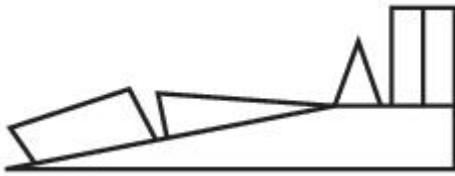
Correct Marks : 4 Wrong Marks : 1

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

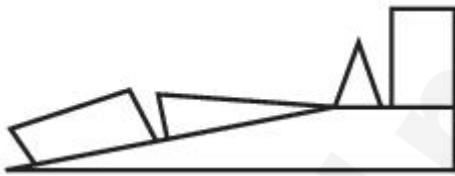


Options :

86435176047.



86435176048.



86435176049.



86435176050.

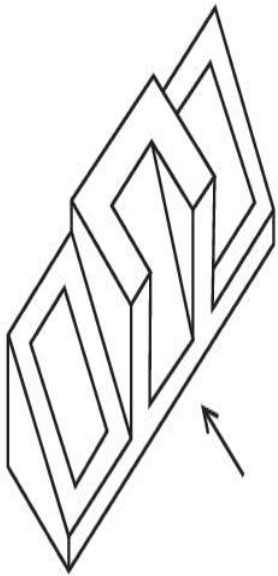


Question Number : 76 Question Id : 86435122895 Question Type : MCQ Option Shuffling : Yes

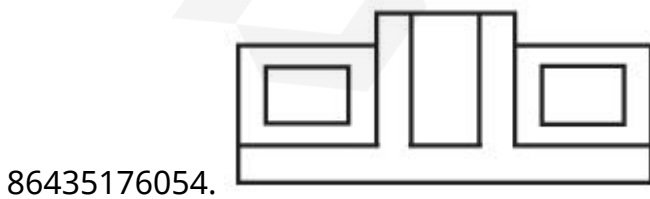
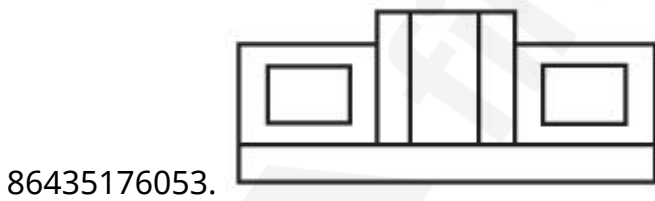
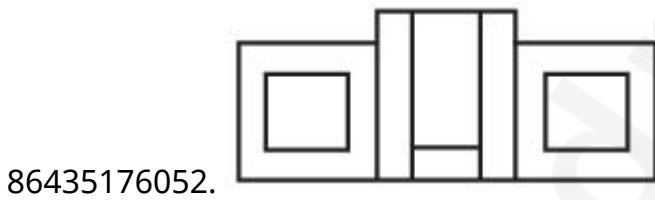
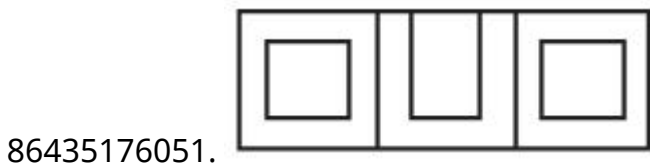
Is Question Mandatory : No

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.

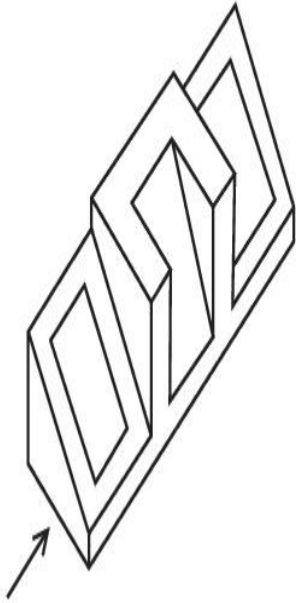


Options :



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 :

86435176055.



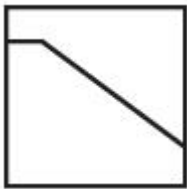
86435176056.



86435176057.



86435176058.



Question Number : 78 Question Id : 86435122897 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Greenwich lies in which Country ?

Options :

86435176059. France

86435176060. England

86435176061. Russia

86435176062. Portugal

Question Number : 79 Question Id : 86435122898 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'Manhattan Street' is part of which Country ?

Options :

86435176063. USA

86435176064. South Africa

86435176065. Canada

86435176066. New Zealand

Question Number : 80 Question Id : 86435122899 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following building does not have domical roof ?

Options :

86435176067. Pantheneon

86435176068. Taj Mahal

86435176069. Pantheon

86435176070. Gol Gumbaz

## Drawing

Section Id :	8643511068
Section Number :	4
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	2
Number of Questions to be attempted :	2
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	8643511295
Question Shuffling Allowed :	No

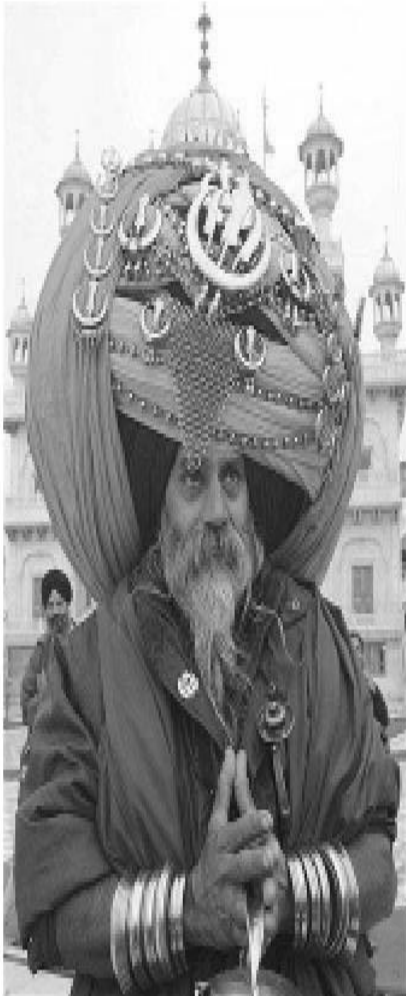
Question Number : 81 Question Id : 86435122900 Question Type : SUBJECTIVE

Correct Marks : 50

Draw proportionate sketch of given reference image using black and white rendering technique you are conversant with.

OR

Decode the image and create balanced composition, it may or may not be abstract. Use any black and white rendering technique and decide frame of your choice which will fit in given space for answer.



Question Number : 82 Question Id : 86435122901 Question Type : SUBJECTIVE

Correct Marks : 50

Draw a picture of a busy street of any traditional market of any town you visited. Use colors of your choice.

OR

Using hexagons of different sizes create a visually balanced and aesthetically appealing composition in a frame of your choice using warm colour.