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**Question Paper Name :** B ARCH EG 23rd Feb 2021 Shift 2  
**Subject Name :** B ARCH EG  
**Creation Date :** 2021-02-22 13:57:02  
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**Number of Questions :** 82  
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## **B ARCH EG**

**Group Number :** 1  
**Group Id :** 708191125  
**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 :** 708191389  
**Section Number :** 1  
**Section type :** 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>Mark As Answered Required? :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	708191669
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 70819111496 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

The value of the integral  $\int_{-4}^4 |9-x^2| dx$  is :

**Options :**

70819137281.  $\frac{121}{3}$

70819137282.  $\frac{122}{3}$

70819137283.  $\frac{125}{3}$

70819137284.  $\frac{128}{3}$

**Question Number : 1 Question Id : 70819111496 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

$$\int_{-4}^4 |9-x^2| dx \text{ નું મૂલ્ય } \underline{\hspace{2cm}} \text{ છે.}$$

**Options :**

70819137281.  $\frac{121}{3}$

70819137282.  $\frac{122}{3}$

70819137283.  $\frac{125}{3}$

70819137284.  $\frac{128}{3}$

**Question Number : 2 Question Id : 70819111497 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

The sum of infinite number of terms of a Geometric Progression is 3 and the sum of the squares of its terms is  $\frac{9}{2}$ . The sum of the cubes of its terms is :

**Options :**

70819137285.  $\frac{31}{13}$

70819137286.  $\frac{108}{13}$

70819137287.  $\frac{27}{2}$

70819137288.  $\frac{54}{7}$

Question Number : 2 Question Id : 70819111497 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

એક સમગુણોત્તર શ્રેણીનાં અનંત પદોનો સરવાળો 3 અને તે પદોના વર્ગોનો સરવાળો  $\frac{9}{2}$  છે. તો તે પદોનાં ઘનનો સરવાળો \_\_\_\_\_ છે.

Options :

70819137285.  $\frac{31}{13}$

70819137286.  $\frac{108}{13}$

70819137287.  $\frac{27}{2}$

70819137288.  $\frac{54}{7}$

Question Number : 3 Question Id : 70819111498 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

Which of the following Boolean expression is a tautology ?

Options :

70819137289.  $P \Leftrightarrow P \vee Q$

70819137290.  $(P \wedge Q) \Leftrightarrow P$

70819137291.  $(P \wedge (\sim P \vee Q)) \vee (\sim Q)$

70819137292.  $(p \vee \sim p) \wedge (q \vee (\sim q))$

**Question Number : 3 Question Id : 70819111498 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

નીચેનાં પૈકીની કઈ બૂલીય અભિવ્યક્તિ નિત્ય સત્ય છે ?

**Options :**

70819137289.  $P \Leftrightarrow P \vee q$

70819137290.  $(p \wedge q) \Leftrightarrow p$

70819137291.  $(p \wedge (\sim p \vee q)) \vee (\sim q)$

70819137292.  $(p \vee \sim p) \wedge (q \vee (\sim q))$

**Question Number : 4 Question Id : 70819111499 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

Let  $|a| < 1, |b| < 1, |c| < 1$  and  $x = \sum_{n=0}^{\infty} a^n, y = \sum_{n=0}^{\infty} b^n, z = \sum_{n=0}^{\infty} c^n$ . If  $\frac{1}{x}, \frac{1}{y}, \frac{1}{z}$  are in Arithmetic

Progression, then :

**Options :**

70819137293. a, b and c are in Arithmetic Progression

70819137294. a, b and c are in Geometric Progression

70819137295. a, 2b and c are in Arithmetic Progression

70819137296. a, b and c satisfy  $2b^2 = ac$

Question Number : 4 Question Id : 70819111499 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ધારો કે  $|a| < 1, |b| < 1, |c| < 1$  અને  $x = \sum_{n=0}^{\infty} a^n, y = \sum_{n=0}^{\infty} b^n, z = \sum_{n=0}^{\infty} c^n$  છે. જો  $\frac{1}{x}, \frac{1}{y}, \frac{1}{z}$  સમાંતર શ્રેણીમાં

હોય, તો :

Options :

70819137293. a, b અને c સમાંતર શ્રેણીમાં છે.

70819137294. a, b અને c સમગુણોત્તર શ્રેણીમાં છે.

70819137295. a, 2b અને c સમાંતર શ્રેણીમાં છે.

70819137296. a, b અને c, એ  $2b^2 = ac$  નું સમાધાન કરે છે.

Question Number : 5 Question Id : 70819111500 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$\sum_{n=1}^{\infty} \frac{2n^2 + 7n + 5}{n!}$  is equal to :

Options :

70819137297.  $15e + 5$

70819137298.  $15e - 5$

70819137299.  $16e - 5$

70819137300.  $16e - 7$

**Question Number : 5 Question Id : 70819111500 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

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

$$\sum_{n=1}^{\infty} \frac{2n^2 + 7n + 5}{n!} = \text{_____}.$$

**Options :**

70819137297.  $15e + 5$

70819137298.  $15e - 5$

70819137299.  $16e - 5$

70819137300.  $16e - 7$

**Question Number : 6 Question Id : 70819111501 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

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

The least positive integral value of  $\lambda$  such that  $10^{50} + (3 \times (4)^{52}) + \lambda$  is divisible by 9 is :

**Options :**

70819137301. 5

70819137302. 3

70819137303. 7

70819137304. 1

Question Number : 6 Question Id : 70819111501 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$10^{50} + (3 \times (4)^{52}) + \lambda$  એ 9 વડે વિભાજ્ય અને તેવી  $\lambda$  ની નાનામાં નાની ધન પૂર્ણાંક સંખ્યા \_\_\_\_\_ છે.

Options :

70819137301. 5

70819137302. 3

70819137303. 7

70819137304. 1

Question Number : 7 Question Id : 70819111502 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

There are 4, 5 and 6 points on the three parallel and co-planar lines. If no set of four or more points is cyclic and no set of three points lying on distinct lines is collinear, then the number of circles passing through exactly three points is :

Options :

70819137305. 455

70819137306. 421

70819137307. 435

70819137308. 441

Question Number : 7 Question Id : 70819111502 Question Type : MCQ Option Shuffling : Yes Is



**Question Mandatory : No**

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

ત્રણ સમાંતર અને સમતલીય રેખાઓ પર 4, 5 અને 6 બિંદુઓ આવેલા છે. જો ચાર કે તેથી વધુ બિંદુઓ ચક્રિય હોય તેવો કોઈ ગણ ન હોય અને બિન્ન રેખા પર આવેલા ત્રણ બિંદુઓ સમરેખ હોય, તેવો કોઈ ગણ ન હોય, તો બરાબર ત્રણ બિંદુઓ માંથી પસાર થતાં વર્તુળોની સંખ્યા \_\_\_\_\_ છે.

**Options :**

70819137305. 455

70819137306. 421

70819137307. 435

70819137308. 441

**Question Number : 8 Question Id : 70819111503 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

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

If  $y = \frac{ax - b}{(x - 1)(x - 4)}$  has an extremum at the point  $(2, -1)$ , then the values of a and b are :

**Options :**

70819137309.  $a = 1, b = 0$

70819137310.  $a = 0, b = 1$

70819137311.  $a = 0, b = -1$

70819137312.  $a = -1, b = 1$

**Question Number : 8 Question Id : 70819111503 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

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

જો  $y = \frac{ax - b}{(x-1)(x-4)}$  ને બિંદુ  $(2, -1)$  આગળ આત્યાંતિક મૂલ્ય હોય, તો  $a$  અને  $b$  ના મૂલ્યો \_\_\_\_\_ છે.

**Options :**

70819137309.  $a=1, b=0$

70819137310.  $a=0, b=1$

70819137311.  $a=0, b=-1$

70819137312.  $a=-1, b=1$

**Question Number : 9 Question Id : 70819111504 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

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

The distance between the planes  $\vec{r} \cdot (2\hat{i} + \hat{j} - 2\hat{k}) + 5 = 0$  and  $\vec{r} \cdot (6\hat{i} + 3\hat{j} - 6\hat{k}) + 2 = 0$  is :

**Options :**

70819137313.  $\frac{9}{13}$

70819137314.  $\frac{15}{4}$

70819137315.  $\frac{13}{9}$

70819137316.  $\frac{1}{13}$

Question Number : 9 Question Id : 70819111504 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

સમતલો  $\vec{r} \cdot (2\hat{i} + \hat{j} - 2\hat{k}) + 5 = 0$  અને  $\vec{r} \cdot (6\hat{i} + 3\hat{j} - 6\hat{k}) + 2 = 0$  વચ્ચેનું અંતર \_\_\_\_\_ છે.

Options :

70819137313.  $\frac{9}{13}$

70819137314.  $\frac{15}{4}$

70819137315.  $\frac{13}{9}$

70819137316.  $\frac{1}{13}$

Question Number : 10 Question Id : 70819111505 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The probability of solving a problem in Mathematics by two students X and Y are  $\frac{1}{4}$  and  $\frac{1}{5}$  respectively. If both of them try to solve the problem independently, then the probability that the problem will be solved by exactly one of them is equal to :

Options :

70819137317.  $\frac{7}{20}$

70819137318.  $\frac{1}{20}$

70819137319.  $\frac{19}{20}$

70819137320.  $\frac{12}{20}$

**Question Number : 10 Question Id : 70819111505 Question Type : MCQ Option Shuffling : Yes**  
**Is Question Mandatory : No**

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

બે વિદ્યાર્થીઓ X અને Y દ્વારા ગણિતનો એક પ્રશ્ન ઉકેલી શકાય તેની સંભાવના અનુક્રમે  $\frac{1}{4}$  અને  $\frac{1}{5}$  છે. જો તેમનાં બંને આ પ્રશ્ન ઉકેલવાનો સ્વતંત્ર રીતે પ્રયત્ન કરે, તો બંને માંથી બરાબર અંક બે દ્વારા આ પ્રશ્ન ઉકેલી શકાય તેની સંભાવના \_\_\_\_\_ છે.

**Options :**

70819137317.  $\frac{7}{20}$

70819137318.  $\frac{1}{20}$

70819137319.  $\frac{19}{20}$

70819137320.  $\frac{12}{20}$

**Question Number : 11 Question Id : 70819111506 Question Type : MCQ Option Shuffling : Yes**  
**Is Question Mandatory : No**

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

The polar form of the complex number  $\frac{1+i}{1-i}$  is equal to :

**Options :**

70819137321.  $\cos \frac{\pi}{2} + i \sin \frac{\pi}{2}$

70819137322.  $\cos \frac{\pi}{2} - i \sin \frac{\pi}{2}$

70819137323.  $\cos \frac{\pi}{4} + i \sin \frac{\pi}{4}$

70819137324.  $\cos \frac{\pi}{4} - i \sin \frac{\pi}{4}$

**Question Number : 11 Question Id : 70819111506 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

સંકર સંખ્યા  $\frac{1+i}{1-i}$  નું ધ્રુવીય સ્વરૂપ \_\_\_\_\_ છે.

**Options :**

70819137321.  $\cos \frac{\pi}{2} + i \sin \frac{\pi}{2}$

70819137322.  $\cos \frac{\pi}{2} - i \sin \frac{\pi}{2}$

70819137323.  $\cos \frac{\pi}{4} + i \sin \frac{\pi}{4}$

70819137324.  $\cos \frac{\pi}{4} - i \sin \frac{\pi}{4}$

**Question Number : 12 Question Id : 70819111507 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

If the equation of a line which divides the line segment joining the points (1, 0) and (3, 0) in the ratio 2 : 1 and is also perpendicular to it, is  $ax=7$ , then the value of a is equal to :

**Options :**

70819137325. 2

70819137326. 3

70819137327. 4

70819137328. 1

**Question Number : 12 Question Id : 70819111507 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

બે બિંદુઓ (1, 0) અને (3, 0) ને જોડતા રેખાખંડનું 2 : 1 નાં ગુણોત્તરમાં વિભાજન કરતી અને તેને લંબ હોય તેવી રેખાનું સમીકરણ  $ax=7$  હોય, તો a નું મૂલ્ય \_\_\_\_\_ છે.

**Options :**

70819137325. 2

70819137326. 3

70819137327. 4

70819137328. 1

**Question Number : 13 Question Id : 70819111508 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

Equation of the circle, which is the mirror image of the circle  $x^2+y^2-2x=0$  with respect to the line  $x+y=2$ , is :

**Options :**

70819137329.  $x^2 + y^2 - 2x + 4y + 3 = 0$

70819137330.  $x^2 + y^2 - 4x - 2y + 4 = 0$

70819137331.  $2(x^2 + y^2) - x + y + 1 = 0$

70819137332.  $x^2 + y^2 - 2x - 4y + 3 = 0$

**Question Number : 13 Question Id : 70819111508 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

વર્તુળ  $x^2 + y^2 - 2x = 0$  ની રેખા  $x + y = 2$  ને સાપેક્ષ આરસી પ્રતિબિંબ દ્વારા મળતા વર્તુળનું સમીકરણ \_\_\_\_\_ છે.

**Options :**

70819137329.  $x^2 + y^2 - 2x + 4y + 3 = 0$

70819137330.  $x^2 + y^2 - 4x - 2y + 4 = 0$

70819137331.  $2(x^2 + y^2) - x + y + 1 = 0$

70819137332.  $x^2 + y^2 - 2x - 4y + 3 = 0$

**Question Number : 14 Question Id : 70819111509 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Equations of the common tangent of the ellipse  $\frac{(x+1)^2}{2^2} + \frac{(y-1)^2}{3^2} = 1$  and the circle

$(x+1)^2 + (y-1)^2 = 4$  are :

**Options :**

70819137333.  $y+3=0$  and  $x-1=0$

70819137334.  $x-3=0$  and  $y+1=0$

70819137335.  $x+3=0$  and  $x-1=0$

70819137336.  $y+3=0$  and  $y-1=0$

**Question Number : 14 Question Id : 70819111509 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

ઉપવલય  $\frac{(x+1)^2}{2^2} + \frac{(y-1)^2}{3^2} = 1$  અને વર્તુળ  $(x+1)^2 + (y-1)^2 = 4$  નાં સામાન્ય સ્પર્શકોના સમીકરણ \_\_\_\_\_ છે.

**Options :**

70819137333.  $y+3=0$  અને  $x-1=0$

70819137334.  $x-3=0$  અને  $y+1=0$

70819137335.  $x+3=0$  અને  $x-1=0$

70819137336.  $y+3=0$  અને  $y-1=0$

**Question Number : 15 Question Id : 70819111510 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

If  $A = \begin{bmatrix} 1 & a \\ 0 & 1 \end{bmatrix}$ , then  $A^k$  ( $k \in \mathbb{N}$ ) is :



**Options :**

70819137337.  $\begin{bmatrix} 1 & ka \\ 0 & 1 \end{bmatrix}$

70819137338.  $\begin{bmatrix} 1 & k^2a \\ 0 & 1 \end{bmatrix}$

70819137339.  $\begin{bmatrix} k & ka \\ 0 & k \end{bmatrix}$

70819137340.  $\begin{bmatrix} 1 & ka \\ 0 & 0 \end{bmatrix}$

**Question Number : 15 Question Id : 70819111510 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

જો  $A = \begin{bmatrix} 1 & a \\ 0 & 1 \end{bmatrix}$  હોય, તો  $A^k$  ( $k \in \mathbb{N}$ ) \_\_\_\_\_.

**Options :**

70819137337.  $\begin{bmatrix} 1 & ka \\ 0 & 1 \end{bmatrix}$

70819137338.  $\begin{bmatrix} 1 & k^2a \\ 0 & 1 \end{bmatrix}$

70819137339.  $\begin{bmatrix} k & ka \\ 0 & k \end{bmatrix}$

70819137340.

$$\begin{bmatrix} 1 & ka \\ 0 & 0 \end{bmatrix}$$

**Question Number : 16 Question Id : 70819111511 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

The values of  $s$  and  $t$ , for which the system of equations

$$x_1 + x_2 + x_3 = 5$$

$$x_1 + 2x_2 + 3x_3 = 9$$

$$x_1 + 3x_2 + sx_3 = t$$

has no solution, are :

**Options :**

70819137341.  $s = 5, t = 13$

70819137342.  $s \neq 5$

70819137343.  $s = 5, t \neq 13$

70819137344.  $t \neq 13$

**Question Number : 16 Question Id : 70819111511 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

સમીકરણ સંહિત  $x_1 + x_2 + x_3 = 5$

$$x_1 + 2x_2 + 3x_3 = 9$$

$$x_1 + 3x_2 + sx_3 = t$$

ને ઉકેલ ન હોય તેવા  $s$  અને  $t$  નાં મૂલ્યો \_\_\_\_\_ છે.

**Options :**

70819137341.  $s = 5, t = 13$

70819137342.  $s \neq 5$

70819137343.  $s=5, t \neq 13$

70819137344.  $t \neq 13$

**Question Number : 17 Question Id : 70819111512 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Derivative of  $\tan^{-1}\left(\frac{2x}{1-x^2}\right)$  with respect to  $\sin^{-1}\left(\frac{2x}{1+x^2}\right)$  in  $(1, \infty)$ , is :

**Options :**

70819137345. 1

70819137346. -1

70819137347. 0

70819137348. 2

**Question Number : 17 Question Id : 70819111512 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

$\tan^{-1}\left(\frac{2x}{1-x^2}\right)$  ને સાપેક્ષ  $\sin^{-1}\left(\frac{2x}{1+x^2}\right)$  માં વિકલિત \_\_\_\_\_ છે.

**Options :**

70819137345. 1

70819137346. -1

70819137347. 0

70819137348. 2

**Question Number : 18 Question Id : 70819111513 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Let  $\vec{a}$ ,  $\vec{b}$  and  $\vec{c}$  be three vectors such that  $|\vec{a}| = |\vec{b}| = \frac{|\vec{c}|}{2} = 1$ . If  $\vec{a} \times (\vec{a} \times \vec{c}) + \vec{b} = \vec{0}$ , then

the acute angle between  $\vec{a}$  and  $\vec{c}$  is :

**Options :**

70819137349.  $\frac{\pi}{6}$

70819137350.  $\frac{\pi}{4}$

70819137351.  $\frac{\pi}{3}$

70819137352.  $\frac{5\pi}{12}$

**Question Number : 18 Question Id : 70819111513 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

ધારો કે  $\vec{a}$ ,  $\vec{b}$  અને  $\vec{c}$  એ ત્રણ એવા સદિશો છે, કે જેથી  $|\vec{a}| = |\vec{b}| = \frac{|\vec{c}|}{2} = 1$ . જો  $\vec{a} \times (\vec{a} \times \vec{c}) + \vec{b} = \vec{0}$  હોય તો,

$\vec{a}$  અને  $\vec{c}$  વચ્ચેનો લઘુકોણ \_\_\_\_\_ છે.

**Options :**

70819137349.  $\frac{\pi}{6}$

70819137350.  $\frac{\pi}{4}$

70819137351.  $\frac{\pi}{3}$

70819137352.  $\frac{5\pi}{12}$

**Question Number : 19 Question Id : 70819111514 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Solution of the differential equation  $(1 + y^2)dx = (\tan^{-1}y - x)dy$  is :  
(where c is an arbitrary constant)

**Options :**

70819137353.  $x = 1 - \tan^{-1}y + ce^{-\tan^{-1}y}$

70819137354.  $y = \tan^{-1}y - 1 + ce^{-\tan^{-1}x}$

70819137355.  $x = \tan^{-1}y - 1 + ce^{-\tan^{-1}y}$

70819137356.  $x = -\tan^{-1}y - 1 - ce^{\tan^{-1}x}$

Question Number : 19 Question Id : 70819111514 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

વિકલ સમીકરણ  $(1+y^2)dx = (\tan^{-1}y - x)dy$  નો ઉકેલ \_\_\_\_\_ છે.

(જ્યાં  $c$  સ્વૈર અચળાંક છે)

Options :

70819137353.  $x = 1 - \tan^{-1}y + ce^{-\tan^{-1}y}$

70819137354.  $y = \tan^{-1}y - 1 + ce^{-\tan^{-1}x}$

70819137355.  $x = \tan^{-1}y - 1 + ce^{-\tan^{-1}y}$

70819137356.  $x = -\tan^{-1}y - 1 - ce^{\tan^{-1}x}$

Question Number : 20 Question Id : 70819111515 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

The values of  $x$ , for which the vectors  $\vec{a} = (x^2 - 16)\hat{i} + 4\hat{j} - (x^2 - 25)\hat{k}$  make acute angles with the (positive directions of) coordinate axes lie in :

Options :

70819137357.  $[-5, -4] \cup [4, 5]$

70819137358.  $[-5, 4] \cup (-4, 5]$

70819137359.  $(-5, -4) \cup (4, 5)$

70819137360.  $(-5, 4) \cup (-4, 5)$

Question Number : 20 Question Id : 70819111515 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

સદિશ  $\vec{a} = (x^2 - 16)\hat{i} + 4\hat{j} - (x^2 - 25)\hat{k}$  એ યામાક્ષોની (ધન દિશા) સાથે લઘુકોણ બનાવે તેવી  $x$  ની કિંમતો \_\_\_\_\_ માં આવેલ છે.

Options :

70819137357.  $[-5, -4] \cup [4, 5]$

70819137358.  $[-5, 4] \cup (-4, 5]$

70819137359.  $(-5, -4) \cup (4, 5)$

70819137360.  $(-5, 4) \cup (-4, 5)$

## Mathematics Section B

Section Id :	708191390
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	5
Section Marks :	20
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	708191670
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 70819111516 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

$$\int_0^{\pi} \sqrt{\frac{1 + \cos 2x}{2}} dx \text{ is } \underline{\hspace{2cm}}.$$

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

5 to 5.001

Question Number : 21 Question Id : 70819111516 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

$$\int_0^{\pi} \sqrt{\frac{1 + \cos 2x}{2}} dx = \underline{\hspace{2cm}}.$$

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

5 to 5.001

Question Number : 22 Question Id : 70819111517 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

The minimum value of  $9\tan^2\theta + 4\cot^2\theta$  is                     .

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes



**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 22 **Question Id :** 70819111517 **Question Type :** SA

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

$9\tan^2\theta + 4\cot^2\theta$  નું ન્યૂનતમ મૂલ્ય \_\_\_\_\_ છે.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 23 **Question Id :** 70819111518 **Question Type :** SA

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

The length of the perpendicular from the point (1, 2, 3) to the line  $\frac{-x+6}{-3} = \frac{y-7}{2} = \frac{z-7}{-2}$  is \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 23 **Question Id :** 70819111518 **Question Type :** SA

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

બિંદુ (1, 2, 3) થી રેખા  $\frac{-x+6}{-3} = \frac{y-7}{2} = \frac{z-7}{-2}$  નાં લંબની લંબાઈ \_\_\_\_\_ છે.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number : 24 Question Id : 70819111519 Question Type : SA**

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

If  $\log_3 2, \log_3(2^x - 5)$  and  $\log_3\left(2^x - \frac{7}{2}\right)$  are in Arithmetic Progression, then the value of  $x$  is \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number : 24 Question Id : 70819111519 Question Type : SA**

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

જો  $\log_3 2, \log_3(2^x - 5)$  અને  $\log_3\left(2^x - \frac{7}{2}\right)$  સમાંતર શ્રેણીમાં હોય, તો  $x$  નું મૂલ્ય \_\_\_\_\_ છે.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 25 **Question Id :** 70819111520 **Question Type :** SA

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

If  $x^2+x+1=0$ , then  $\left\{ \left(x - \frac{1}{x}\right)^2 + \left(x^2 - \frac{1}{x^2}\right)^2 + \left(x^3 - \frac{1}{x^3}\right)^2 \right\}$  is \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 25 **Question Id :** 70819111520 **Question Type :** SA

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

જો  $x^2+x+1=0$  હોય, તો  $\left\{ \left(x - \frac{1}{x}\right)^2 + \left(x^2 - \frac{1}{x^2}\right)^2 + \left(x^3 - \frac{1}{x^3}\right)^2 \right\}$  = \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number : 26 Question Id : 70819111521 Question Type : SA**

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

$x^2 + y^2 - 4x - 2y - 11 = 0$  is a circle to which tangents are drawn from the point (4, 5) which form a quadrilateral with a pair of radii. The area of this quadrilateral in square units is \_\_\_\_\_.

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Range**

**Text Areas : PlainText**

**Possible Answers :**

5 to 5.001

**Question Number : 26 Question Id : 70819111521 Question Type : SA**

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

વર્તુળ  $x^2 + y^2 - 4x - 2y - 11 = 0$  ને બિંદુ (4, 5) માંથી દોરેલ સ્પર્શકો, ત્રિજ્યાઓની જોડ સાથે એક ચતુષ્કોણ બનાવે છે. આ ચતુષ્કોણનું ક્ષેત્રફળ ચો. એકમમાં \_\_\_\_\_ છે.

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Range**

**Text Areas : PlainText**

**Possible Answers :**

5 to 5.001

**Question Number : 27 Question Id : 70819111522 Question Type : SA**

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

If the sum of mean and variance of a binomial distribution is 15 and the sum of their squares is 117, then the number of independent trials is equal to \_\_\_\_\_.

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 27 **Question Id :** 70819111522 **Question Type :** SA

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

જો એક દ્વિપદી વિતરણનાં મધ્યક અને વિચરણનો સરવાળો 15 અને તેમના વર્ગોનો સરવાળો 117 હોય, તો નિરપેક્ષ પ્રયત્નોની સંખ્યા \_\_\_\_\_ છે.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 28 **Question Id :** 70819111523 **Question Type :** SA

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

Let the equation of the plane passing through the points  $(1, 2, 6)$ ,  $(2, 5, 7)$  and perpendicular to the plane  $4x - y + z = 15$  be  $ax + by + cz + d = 0$ . If  $a, b, c, d \in \mathbb{Z}$  with  $\gcd(|a|, |b|, |c|) = 1$ , then  $|a + b + c + d|$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

Question Number : 28 Question Id : 70819111523 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

ધારો કે બિંદુઓ  $(1, 2, 6)$ ,  $(2, 5, 7)$ માંથી પસાર થતાં અને સમતલ  $4x - y + z = 15$  ને લંબ હોય તેવા સમતલનું સમીકરણ  $ax + by + cz + d = 0$  છે. જો  $a, b, c, d \in \mathbb{Z}$  અને ગુ.સા.અ.  $(|a|, |b|, |c|) = 1$  હોય, તો  $|a + b + c + d| = \underline{\hspace{2cm}}$ .

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

5 to 5.001

Question Number : 29 Question Id : 70819111524 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

The number of real solutions in the interval  $\left[-\frac{3\pi}{2}, \frac{7\pi}{2}\right]$  of the equation  $4\sin^2x - 8\sin x + 3 = 0$  is         .

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

5 to 5.001

Question Number : 29 Question Id : 70819111524 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

સમીકરણ  $4\sin^2x - 8\sin x + 3 = 0$  નાં,  $\left[-\frac{3\pi}{2}, \frac{7\pi}{2}\right]$  અંતરાલમાં વાસ્તવિક ઉકેલોની સંખ્યા          છે.

Response Type : Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 30 **Question Id :** 70819111525 **Question Type :** SA

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

Let  $A_1, A_2, A_3, \dots$  be an increasing geometric progression. If  $\frac{1}{A_4} + \frac{1}{A_8} = \frac{10}{63}$  and  $A_5A_7 = 441$ , then  $3(A_2 + A_4)$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

5 to 5.001

**Question Number :** 30 **Question Id :** 70819111525 **Question Type :** SA

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

ધારો કે  $A_1, A_2, A_3, \dots$  એ એક વધતી સમગુણોત્તર શ્રેણી છે. જો  $\frac{1}{A_4} + \frac{1}{A_8} = \frac{10}{63}$  અને  $A_5A_7 = 441$  હોય, તો  $3(A_2 + A_4) =$  \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

## Aptitude Test

<b>Section Id :</b>	708191391
<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>Mark As Answered Required? :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	708191671
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 31 Question Id : 70819111526 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which among the following is the full form of the 'UNESCO' ?

**Options :**

70819137371. United Nations Educational, Scientific & Cultural Organization.

70819137372. United Nations Educational Security Cultural Organization.

70819137373. United Nations Entrance Site Calling Organization.

70819137374. United Nations Educational, Sustainable & Cultural Organization.



**Question Number : 31 Question Id : 70819111526 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'UNESCO' નું પૂર્ણ સ્વરૂપ નીચેનામાંથી કયું છે ?

**Options :**

70819137371. United Nations Educational, Scientific & Cultural Organization.

70819137372. United Nations Educational Security Cultural Organization.

70819137373. United Nations Entrance Site Calling Organization.

70819137374. United Nations Educational, Sustainable & Cultural Organization.

**Question Number : 32 Question Id : 70819111527 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

(I) Hall of Nation

(a)



(II) Falling Water, Pennsylvania

(b)



(III) Petronas Tower

(c)



(IV) Secretariat

(d)



**Options :**

70819137375. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

70819137376. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819137377. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

70819137378. (I)-(b), (II)-(a), (III)-(c), (IV)-(d)

Question Number : 32 Question Id : 70819111527 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ચાદી-II ને ચાદી-I સાથે ગોઠવો.

ચાદી - I

ચાદી - II

(I) હોલ ઓફ નેશન

(a)



(II) ફોલિંગ વોટર, પેન્સિલ્વેનીયા

(b)



(III) પેટ્રોનસ ટોવર

(c)



(IV) સેક્રેટરિએટ (Secretariat)

(d)



Options :

70819137375. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

70819137376. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819137377. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

70819137378. (I)-(b), (II)-(a), (III)-(c), (IV)-(d)

**Question Number : 33 Question Id : 70819111528 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
(I) Kamru	(a) Victoria Memorial Hall
(II) Delhi	(b) Badrinath Temple
(III) Fatehpur Sikri	(c) Khirki Masjid
(IV) Kolkata	(d) Buland Darwaja

**Options :**

70819137379. (I)-(b), (II)-(c), (III)-(d), (IV)-(a)

70819137380. (I)-(b), (II)-(d), (III)-(c), (IV)-(a)

70819137381. (I)-(c), (II)-(a), (III)-(b), (IV)-(d)

70819137382. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

**Question Number : 33 Question Id : 70819111528 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

यादी-II ने यादी-I साथे गोठवो.

यादी-I	यादी-II
(I) कामरु (Kamnu)	(a) विक्टोरिया मेमोरियल हॉल
(II) दिल्ली	(b) अद्विनाथ मंदिर
(III) इतेपुर सिंकी	(c) खिरकी मस्जिद (Khirki Masjid)
(IV) कोलकाता	(d) बुलंद दरवाजा

**Options :**

70819137379. (I)-(b), (II)-(c), (III)-(d), (IV)-(a)

70819137380. (I)-(b), (II)-(d), (III)-(c), (IV)-(a)

70819137381. (I)-(c), (II)-(a), (III)-(b), (IV)-(d)

70819137382. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

**Question Number : 34 Question Id : 70819111529 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

(I) Agra fort

(a)



(II) Atala Masjid

(b)



(III) Nalanda University

(c)



(IV) Jagannatha Temple

(d)



**Options :**

70819137383. (I)-(b), (II)-(c), (III)-(a), (IV)-(d)

70819137384. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

70819137385. (I)-(c), (II)-(a), (III)-(d), (IV)-(b)

70819137386. (I)-(b), (II)-(a), (III)-(c), (IV)-(d)

Question Number : 34 Question Id : 70819111529 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ચાદી-II ને ચાદી-I સાથે ગોઠવો.

ચાદી - I

ચાદી - II

(I) આગ્રા કિલ્લો

(a)



(II) અટાલા મસ્જિદ

(b)



(III) નાલંદા વિશ્વવિદ્યાલય

(c)



(IV) જગન્નાથ મંદિર

(d)



Options :

70819137383. (I)-(b), (II)-(c), (III)-(a), (IV)-(d)

70819137384. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

70819137385. (I)-(c), (II)-(a), (III)-(d), (IV)-(b)

70819137386. (I)-(b), (II)-(a), (III)-(c), (IV)-(d)

**Question Number : 35 Question Id : 70819111530 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
(I) Yadvindra Garden	(a) Manali
(II) Vishnu Temple	(b) Amritsar
(III) Hidimba Temple	(c) Pinjore
(IV) Hari Mandir	(d) Buniyar

**Options :**

70819137387. (I)-(c), (II)-(d), (III)-(b), (IV)-(a)

70819137388. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819137389. (I)-(d), (II)-(b), (III)-(c), (IV)-(a)

70819137390. (I)-(b), (II)-(d), (III)-(a), (IV)-(c)

**Question Number : 35 Question Id : 70819111530 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

ચાદી - II ને ચાદી - I સાથે ગોઠવો.

ચાદી - I	ચાદી - II
(I) Yadvindra Garden	(a) Manali
(II) Vishnu Temple	(b) Amritsar
(III) Hidimba Temple	(c) Pinjore
(IV) Hari Mandir	(d) Buniyar



**Options :**

70819137387. (I)-(c), (II)-(d), (III)-(b), (IV)-(a)

70819137388. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819137389. (I)-(d), (II)-(b), (III)-(c), (IV)-(a)

70819137390. (I)-(b), (II)-(d), (III)-(a), (IV)-(c)

**Question Number : 36 Question Id : 7081911531 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
(I) Mehrangarh Fort	(a) Hyderabad
(II) Siri Fort	(b) Kolkata
(III) Golconda Fort	(c) Delhi
(IV) Fort William	(d) Jodhpur

Choose the correct answer from options given below :

**Options :**

70819137391. (I)-(a), (II)-(d), (III)-(b), (IV)-(c)

70819137392. (I)-(d), (II)-(c), (III)-(a), (IV)-(b)

70819137393. (I)-(d), (II)-(c), (III)-(b), (IV)-(a)

70819137394. (I)-(a), (II)-(b), (III)-(d), (IV)-(c)

**Question Number : 36 Question Id : 7081911531 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

ચાદી - II ને ચાદી - I સાથે ગોઠવો.

ચાદી - I

ચાદી - II

- |                     |               |
|---------------------|---------------|
| (I) Mehrangarh Fort | (a) Hyderabad |
| (II) Siri Fort      | (b) Kolkata   |
| (III) Golconda Fort | (c) Delhi     |
| (IV) Fort William   | (d) Jodhpur   |

નીચેનાં વિકલ્પોમાંથી સાચો જવાબ પસંદ કરો.

**Options :**

70819137391. (I)-(a), (II)-(d), (III)-(b), (IV)-(c)

70819137392. (I)-(d), (II)-(c), (III)-(a), (IV)-(b)

70819137393. (I)-(d), (II)-(c), (III)-(b), (IV)-(a)

70819137394. (I)-(a), (II)-(b), (III)-(d), (IV)-(c)

**Question Number : 37 Question Id : 70819111532 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Book 'God of small things' is written by which Indian Architect ?

**Options :**

70819137395. B.V. Doshi

70819137396. Arundhati Roy

70819137397. Revati Kamat

70819137398. Bimal Patel

Question Number : 37 Question Id : 70819111532 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

નીચેનામાંથી કયા ભારતીય વાસ્તુકારે પુસ્તક 'God of small things' લખ્યું છે ?

Options :

70819137395. બી.વી. દોશી

70819137396. અરુંધતી રોય (Arundhati Roy)

70819137397. રેવતી કામત

70819137398. બિમલ પટેલ

Question Number : 38 Question Id : 70819111533 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'Jharokha' is a type of window mostly found in :

Options :

70819137399. Gujarat

70819137400. West Bengal

70819137401. Tamil Nadu

70819137402. Rajasthan

Question Number : 38 Question Id : 70819111533 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

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

'ઝરોખા' એ બારીનો એક પ્રકાર છે જે મુખ્યત્વે નીચેનામાં કયાં જોવા મળે છે ?

**Options :**

70819137399. ગુજરાત

70819137400. પશ્ચિમ બંગાલ

70819137401. તામિલનાડુ

70819137402. રાજસ્થાન

**Question Number : 39 Question Id : 70819111534 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

The monsoon wind enters in Indian sub-continent from which direction ?

**Options :**

70819137403. North-West side

70819137404. South-East side

70819137405. North side

70819137406. South-West side

**Question Number : 39 Question Id : 70819111534 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

ભારતીય ઉપખંડમાં ચોમાસું પવનો કઈ દિશામાંથી પ્રવેશે છે ?

**Options :**

70819137403. वायव्य बाहुथी

70819137404. अग्नि बाहुथी

70819137405. उत्तर तरङ्गथी

70819137406. नैऋत्य बाहुथी

**Question Number : 40 Question Id : 70819111535 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Which of the following building represents the colonial Architectural pattern in India ?

**Options :**

70819137407. Bharat Bhavan in Bhopal

70819137408. LIC Building in Delhi

70819137409. Charminar in Hyderabad

70819137410. Victoria Memorial in Kolkata

**Question Number : 40 Question Id : 70819111535 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

નીચેનામાંથી ભારતનું કયું મકાન વસાહતી-સ્થાપત્ય-ભાત (Colonial Architectural pattern) ને રજૂ કરે છે.

**Options :**

70819137407. ભોપાલનું ભારત ભવન

70819137408. દિલ્હીનું LIC મકાન

70819137409. હૈદરાબાદનાં ચાર મિનાર

70819137410. કલકત્તાનું વિક્ટોરીયા મેમોરિયલ

**Question Number : 41 Question Id : 70819111536 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

What is the size of A2 Drawing sheet ?

**Options :**

70819137411.  $420 \times 590$  (mm  $\times$  mm)

70819137412.  $420 \times 594$  (mm  $\times$  mm)

70819137413.  $297 \times 420$  (mm  $\times$  mm)

70819137414.  $420 \times 592$  (mm  $\times$  mm)

**Question Number : 41 Question Id : 70819111536 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

A2 ચિત્ર-તકતિ (Drawing sheet) નું કદ કયું હોય છે ?

**Options :**

70819137411.  $420 \times 590$  (mm  $\times$  mm)

70819137412. 420 × 594 (mm × mm)

70819137413. 297 × 420 (mm × mm)

70819137414. 420 × 592 (mm × mm)

**Question Number : 42 Question Id : 70819111537 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Victory Tower belongs to which of the following fort :

**Options :**

70819137415. Chittor fort

70819137416. Jaigarh fort

70819137417. Bhangarh fort

70819137418. Amer fort

**Question Number : 42 Question Id : 70819111537 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

વિજય સ્તંભ નીચેનામાંથી કયા ગઢમાં આવેલ છે ?

**Options :**

70819137415. ચિત્તોડ ગઢ

70819137416. જયગઢ કિલ્લો



70819137417. ભાંગલદ કલ્લો

70819137418. અભેર ગલ

**Question Number : 43 Question Id : 70819111538 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

Which amongst the following Architect has designed the famous Temple "Akshardham" ?

**Options :**

70819137419. Sanjay Puri

70819137420. Vikram Lall

70819137421. Ashok Lall

70819137422. C. Sompura

**Question Number : 43 Question Id : 70819111538 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

પ્રખ્યાત મંદિર "અક્ષરધામ" નીચેનામાંથી કયા વાસ્તુકારે ડિઝાઈન કર્યું છે ?

**Options :**

70819137419. સંજય પુરી

70819137420. વિક્રમ લાલ

70819137421. અશોક લાલ



70819137422. સી. સોમપુરા

**Question Number : 44 Question Id : 70819111539 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'Volume Zero' Documentary is on which Architect ?

**Options :**

70819137423. Charles Correa

70819137424. Richard Mier

70819137425. Jasbir Sachdev

70819137426. Ranjit Sabliki

**Question Number : 44 Question Id : 70819111539 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'Volume Zero' દસ્તાવેજ કયા વાસ્તુકાર પર છે ?

**Options :**

70819137423. ચાર્લ્સ કોરીયા

70819137424. રીચાર્ડ મેર (Richard Mier)

70819137425. જસબીર સચદેવ

70819137426. રણજીત સબલીકી (Ranjit Sabliki)

**Question Number : 45 Question Id : 70819111540 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

'Agenda 21' is declaration related with :

**Options :**

70819137427. Climate change

70819137428. Global warming

70819137429. Sustainable development

70819137430. Smart city

**Question Number : 45 Question Id : 70819111540 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

'એજંડા 21' એ શાને સંબંધીત ઘોષણા છે ?

**Options :**

70819137427. હવામાન બદલાવ

70819137428. વૈશ્વિક વધતા તાપમાનની ઘટના

70819137429. સર્વગ્રાહી વિકાસ

70819137430. સ્માર્ટ શહેર

**Question Number : 46 Question Id : 70819111541 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Gold mines are situated in which state of India ?

**Options :**

70819137431. Karnataka

70819137432. Orissa

70819137433. Maharashtra

70819137434. Uttar Pradesh

**Question Number : 46 Question Id : 70819111541 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

ભારતનાં કયા રાજ્યમાં સોનાની ખાણ આવેલી છે ?

**Options :**

70819137431. કર્ણાટક

70819137432. ઓરિસ્સા

70819137433. મહારાષ્ટ્ર

70819137434. ઉત્તરપ્રદેશ

**Question Number : 47 Question Id : 70819111542 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

In the Southern Hemisphere shadowless light is from which direction ?

**Options :**

70819137435. North

70819137436. South

70819137437. East

70819137438. West

**Question Number : 47 Question Id : 70819111542 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

दक्षिण गोलार्धमां पडछायारहित प्रकाश कठं दिशाभांथी आवे ?

**Options :**

70819137435. उत्तर

70819137436. दक्षिण

70819137437. पूर्व

70819137438. पश्चिम

**Question Number : 48 Question Id : 70819111543 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

The first Indian Architect who has won Pritzker Prize in 2018 is :

**Options :**

70819137439. B.V. Doshi

70819137440. Laurie Baker

70819137441. Raj Rewal

70819137442. Achyut Kanvinde

**Question Number : 48 Question Id : 70819111543 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

2018 માં પ્રિટ્ઝ્કર પુરસ્કાર મેળવનાર પ્રથમ ભારતીય વાસ્તુકાર કોણ હતાં ?

**Options :**

70819137439. બી.વી. દોશી

70819137440. લોરી બેકર

70819137441. રાજ રેવાલ

70819137442. અચ્યુત કરવીન્દે

**Question Number : 49 Question Id : 70819111544 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

Word "Bungalow" has originated from :

**Options :**

70819137443. Bengalurm

70819137444. Banaras

70819137445. Bengal

70819137446. Bari

**Question Number : 49 Question Id : 70819111544 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

“Bungalow” શબ્દ નીચેનામાંથી કોની ઉપરથી ઉદ્ભવ્યો છે ?

**Options :**

70819137443. Bengalurm

70819137444. Banaras

70819137445. Bengal

70819137446. Bari

**Question Number : 50 Question Id : 70819111545 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

The IIM - Ahmedabad is designed by which of the following Architect ?

**Options :**

70819137447. Laurie Baker

70819137448. Louis Kahn

70819137449. Lutyen

70819137450. Le Corbusier

Question Number : 50 Question Id : 70819111545 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

IIM - અમદાવાદની ડિઝાઇન નીચેનામાંથી કયા વાસ્તુકારે કરેલ છે ?

Options :

70819137447. લોરી બેકર

70819137448. લૂઈ કાહ્ન

70819137449. લ્યુટીયન

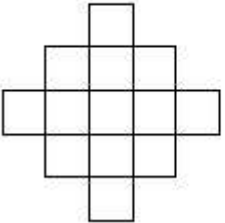
70819137450. લી કોર્બુસીયર

Question Number : 51 Question Id : 70819111546 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

In the given figure, how many squares are present ?



Options :

70819137451. 14

70819137452. 13

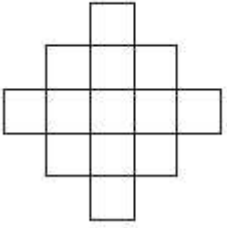
70819137453. 15

70819137454. 18

**Question Number : 51 Question Id : 70819111546 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

આપેલ આકૃતિમાં કેટલા ચોરસ આવેલા છે ?



**Options :**

70819137451. 14

70819137452. 13

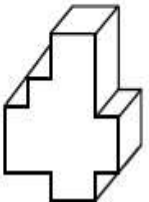
70819137453. 15

70819137454. 18

**Question Number : 52 Question Id : 70819111547 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

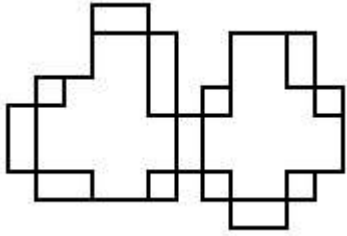
**Correct Marks : 4 Wrong Marks : 1**

A drawing is provided with all the folds to construct the following three Dimensional object.  
Select the correct one.

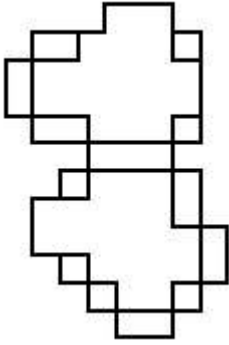




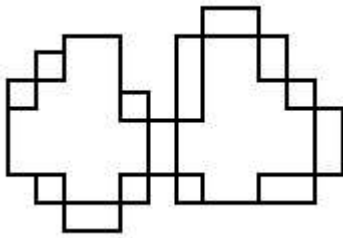
**Options :**



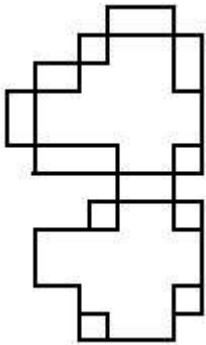
70819137455.



70819137456.



70819137457.



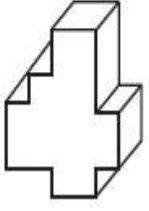
70819137458.

**Question Number : 52 Question Id : 70819111547 Question Type : MCQ Option Shuffling : Yes**

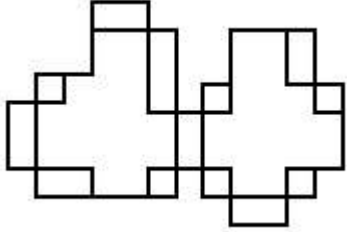
**Is Question Mandatory : No**

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

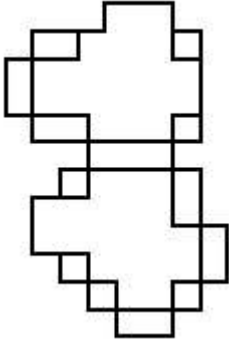
જવાબ આકૃતિમાંથી એ સાચી આકૃતિ શોધો જેની બધી ગડીઓને વાળીને આપેલ ત્રિ-પરિમાણી પદાર્થનું નિર્માણ કરી શકાય.



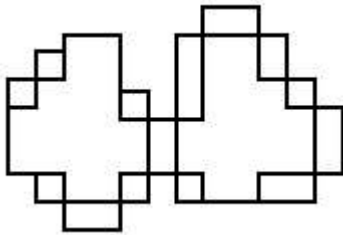
Options :



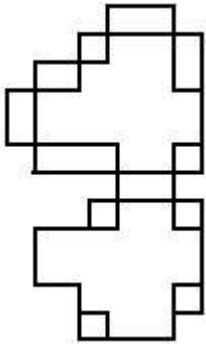
70819137455.



70819137456.



70819137457.

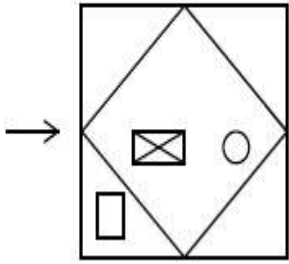


70819137458.

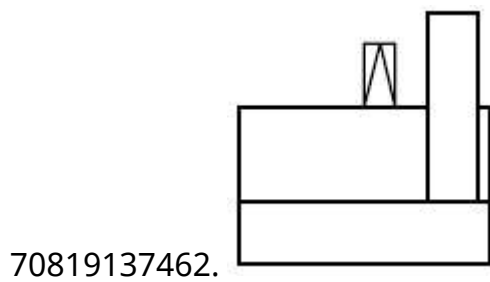
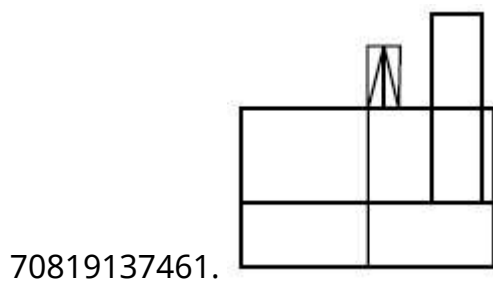
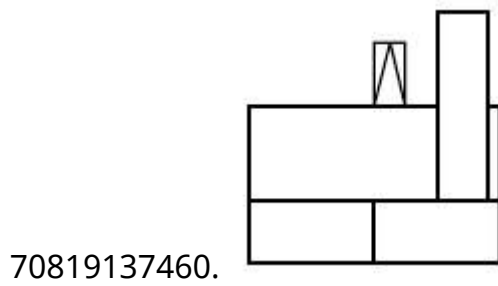
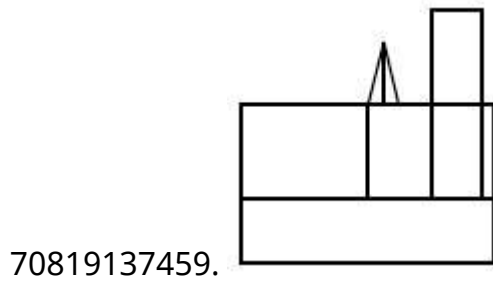
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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



Options :

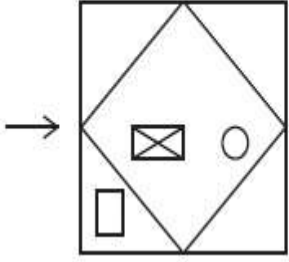


Question Number : 53 Question Id : 70819111548 Question Type : MCQ Option Shuffling : Yes

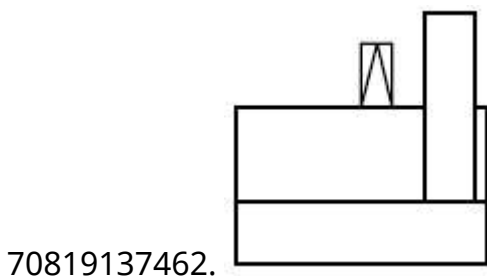
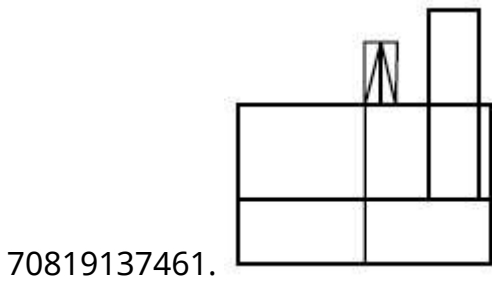
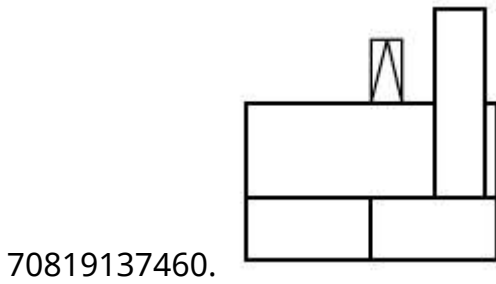
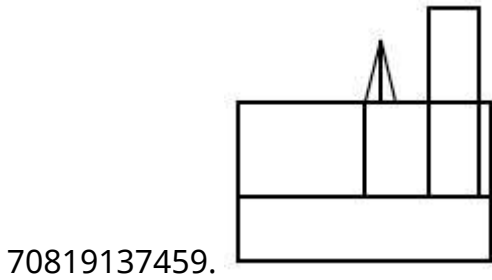
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

પ્રશ્ન આકૃતિ એક પદાર્થનું ઉપરી દૃશ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

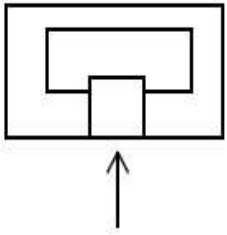


Question Number : 54 Question Id : 70819111549 Question Type : MCQ Option Shuffling : Yes

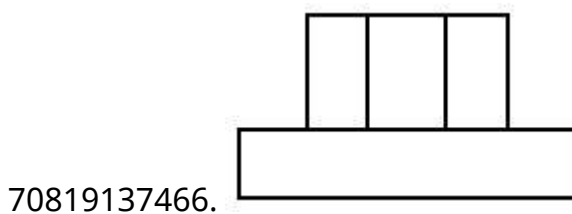
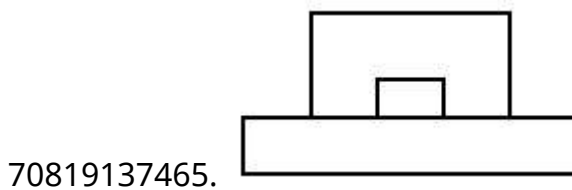
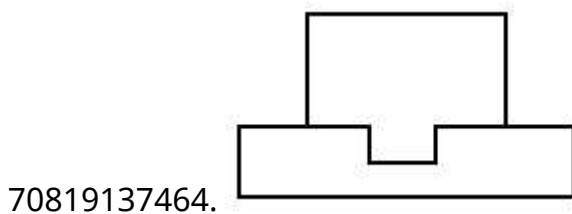
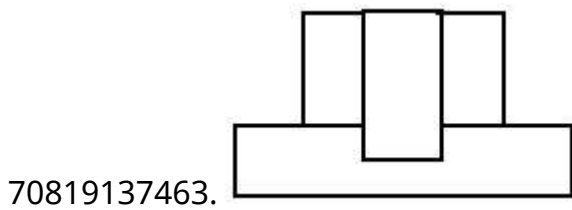
Is Question Mandatory : No

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 :

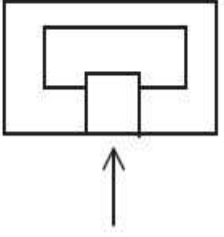


Question Number : 54 Question Id : 70819111549 Question Type : MCQ Option Shuffling : Yes

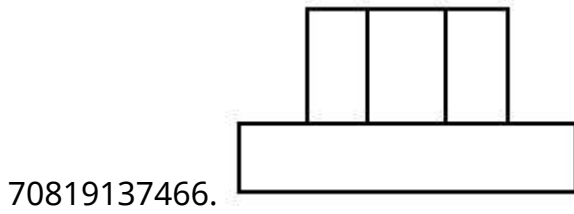
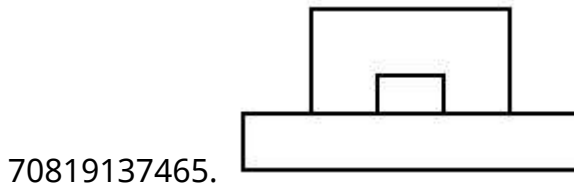
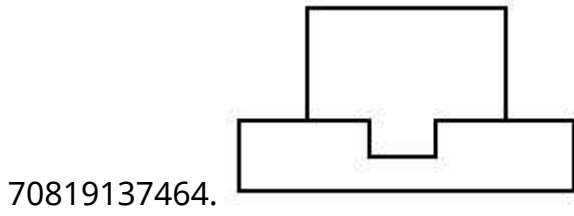
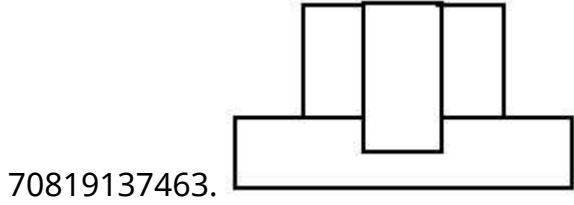
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

પ્રશ્ન આકૃતિ એક પદાર્થનું ઉપરી દૃશ્ય બતાવે છે. તીરની દિશામાં બેતાં મળતું સાચું ઉન્નત દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

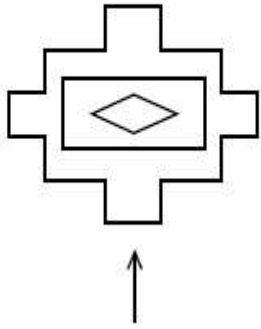


Question Number : 55 Question Id : 70819111550 Question Type : MCQ Option Shuffling : Yes

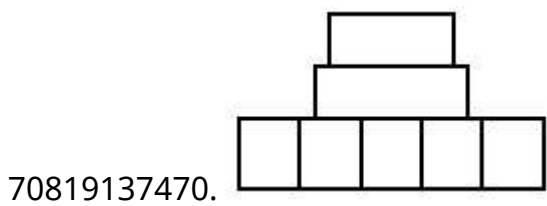
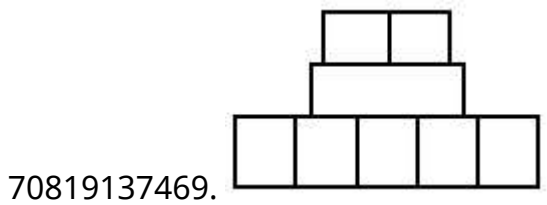
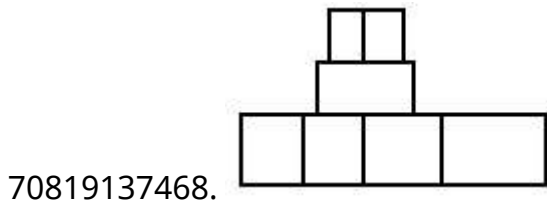
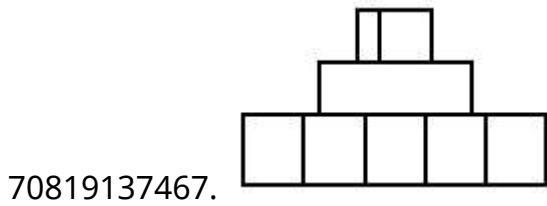
Is Question Mandatory : No

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 :

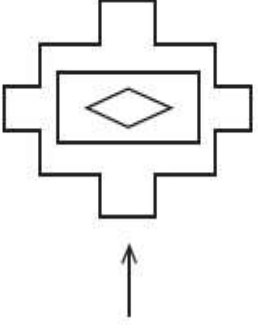


Question Number : 55 Question Id : 70819111550 Question Type : MCQ Option Shuffling : Yes

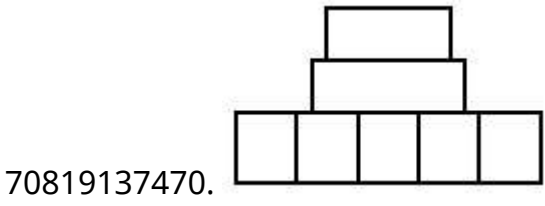
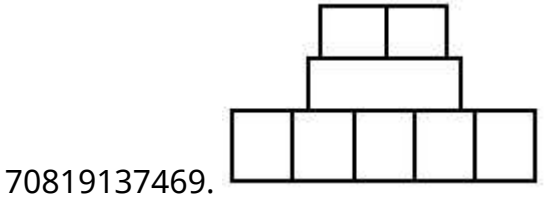
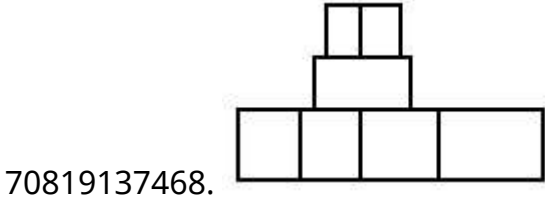
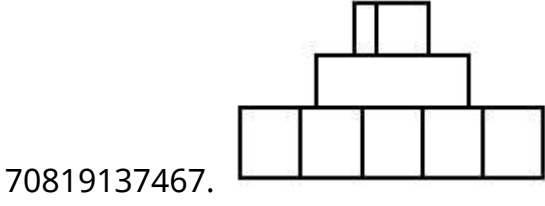
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

પ્રશ્ન આકૃતિ એક વસ્તુનું ઉપરી દૃશ્ય બતાવે છે. ત્રીસની દિશામાં જોતાં મળતું સાચું ઉન્નત દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :



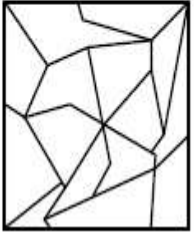
Question Number : 56 Question Id : 70819111551 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

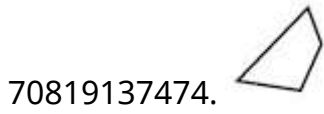
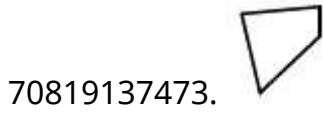
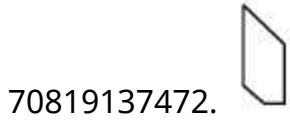
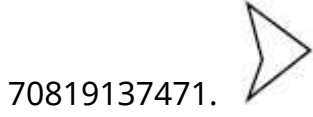
Correct Marks : 4 Wrong Marks : 1



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



**Options :**

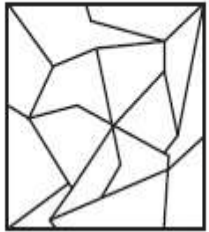


**Question Number : 56 Question Id : 70819111551 Question Type : MCQ Option Shuffling : Yes**

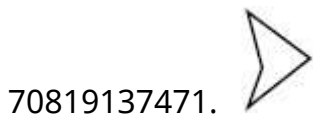
**Is Question Mandatory : No**

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

જવાબ આકૃતિઓમાંથી એક આકૃતિ એજ કદ અને દિશા સાથે પ્રશ્ન આકૃતિમાં છૂપાયેલી છે. સાચો જવાબ શોધો.



**Options :**



70819137472.



70819137473.



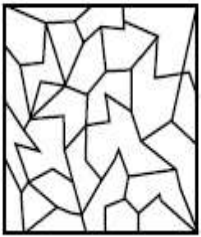
70819137474.



**Question Number : 57 Question Id : 70819111552 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

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



**Options :**

70819137475.



70819137476.



70819137477.



70819137478.

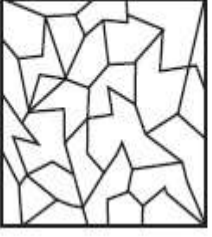


Question Number : 57 Question Id : 70819111552 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

જવાબ આકૃતિઓમાંની એક આકૃતિ એજ કદ અને દિશા સાથે પ્રશ્ન આકૃતિમાં છૂપાયેલી છે. સાચો જવાબ શોધો.



Options :

70819137475.



70819137476.



70819137477.



70819137478.

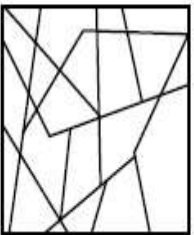


Question Number : 58 Question Id : 70819111553 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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



Options :

70819137479.



70819137480.



70819137481.



70819137482.

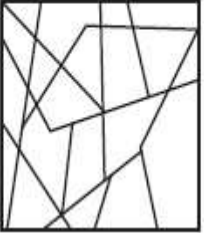


**Question Number : 58 Question Id : 70819111553 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

જવાબ આકૃતિઓમાંની એક આકૃતિ એજ કદ અને દિશા સાથે પ્રશ્ન આકૃતિમાં છૂપાયેલી છે. સાચો જવાબ શોધો.



**Options :**

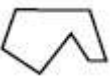
70819137479.



70819137480.



70819137481.



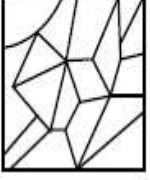
70819137482.



Question Number : 59 Question Id : 70819111554 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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



Options :

70819137483.

70819137484.

70819137485.

70819137486.

Question Number : 59 Question Id : 70819111554 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

જવાબ આકૃતિઓમાંની એક આકૃતિ એજ કદ અને દિશા સાથે પ્રશ્ન આકૃતિમાં છૂપાયેલી છે. સાચો જવાબ શોધો.



Options :

70819137483.

70819137484.



70819137485.



70819137486.

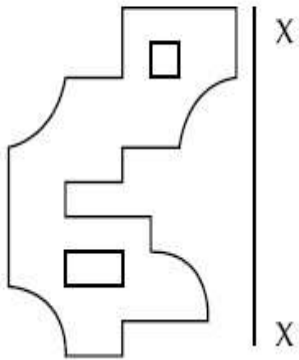


**Question Number : 60 Question Id : 70819111555 Question Type : MCQ Option Shuffling : Yes**

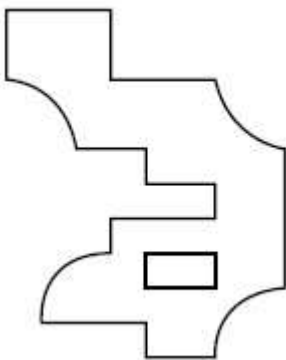
**Is Question Mandatory : No**

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

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

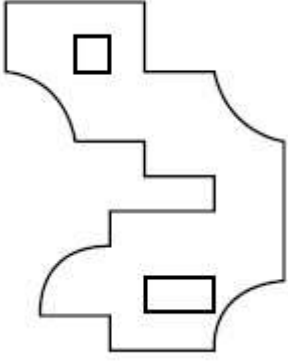
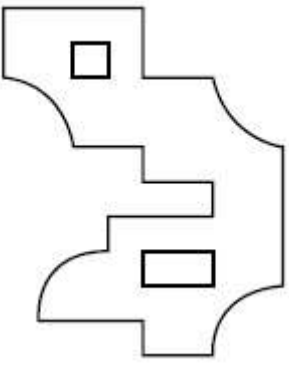


**Options :**

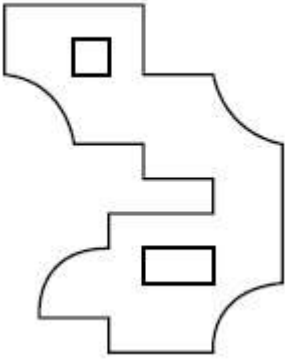


70819137487.

70819137488.



70819137489.

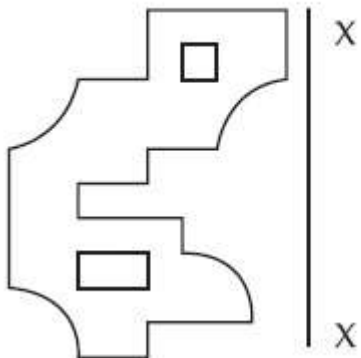


70819137490.

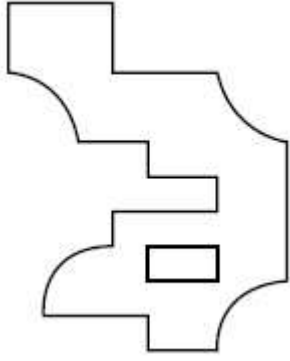
**Question Number : 60 Question Id : 70819111555 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

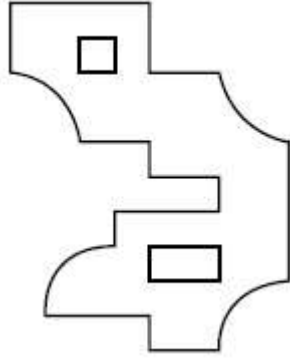
પ્રશ્ન આકૃતિનું X-X ને સાપેક્ષ સાચું આરસી-પ્રતિબિંબ જવાબ આકૃતિઓમાંથી નક્કી કરો.



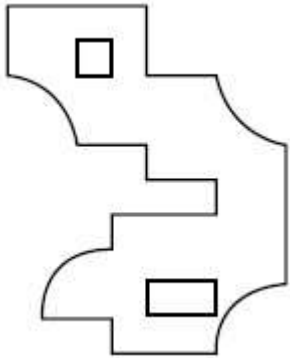
**Options :**



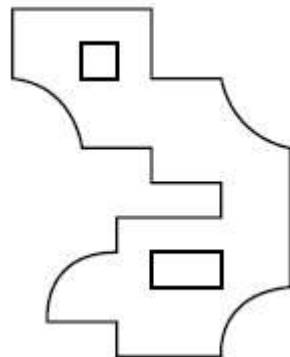
70819137487.



70819137488.



70819137489.

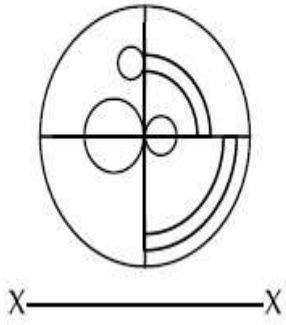


70819137490.

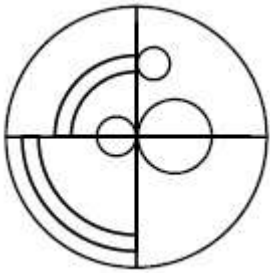


**Correct Marks : 4 Wrong Marks : 1**

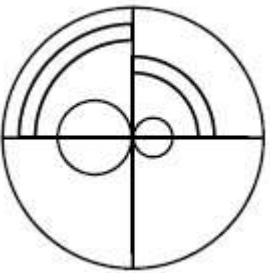
Which one of the answer figures is the correct mirror image of the problem figure with respect to X-X ?



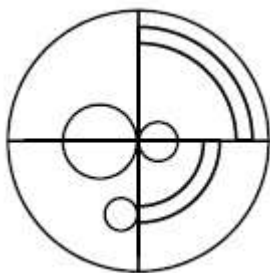
**Options :**



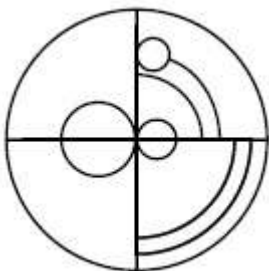
70819137491.



70819137492.



70819137493.



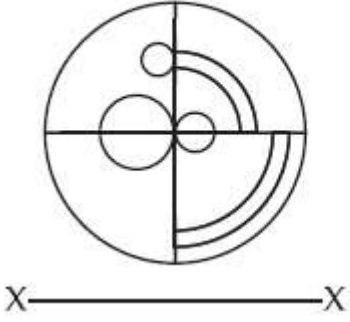
70819137494.

Question Number : 61 Question Id : 70819111556 Question Type : MCQ Option Shuffling : Yes

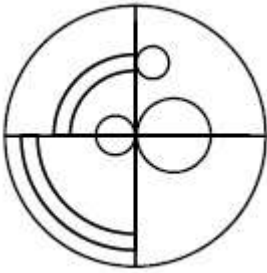
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

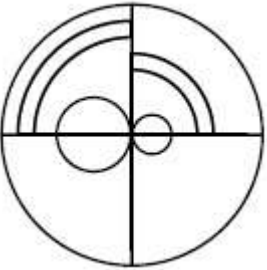
પ્રશ્ન આકૃતિનું X-X ને સાપેક્ષ સાચું આરસી-પ્રતિબિંબ જવાબ આકૃતિઓમાંથી નક્કી કરો.



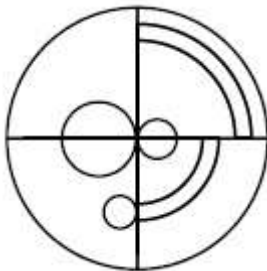
Options :



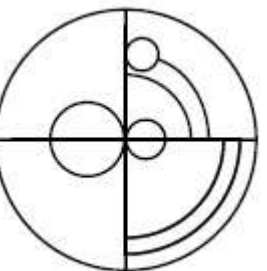
70819137491.



70819137492.



70819137493.

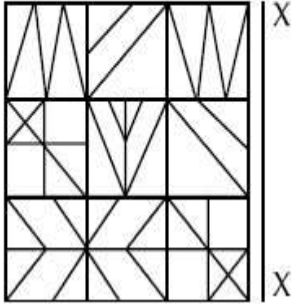


70819137494.

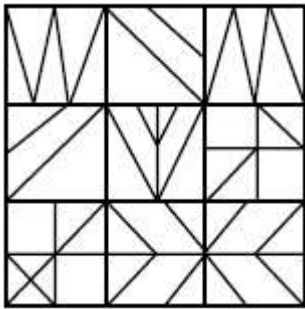
Question Number : 62 Question Id : 70819111557 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

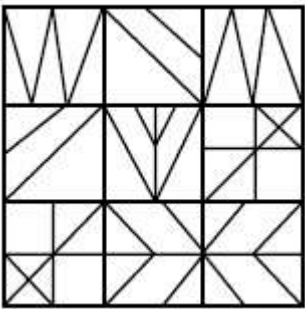
Which one of the answer figures is the correct mirror image of the problem figure with respect to X-X ?



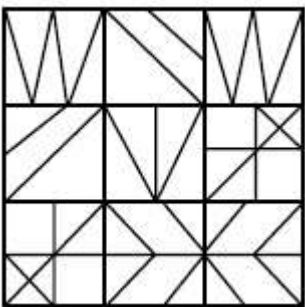
Options :



70819137495.

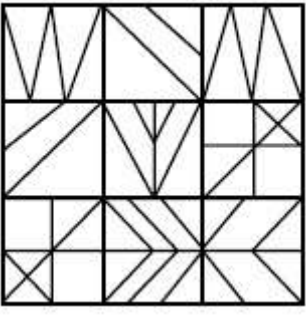


70819137496.



70819137497.

70819137498.

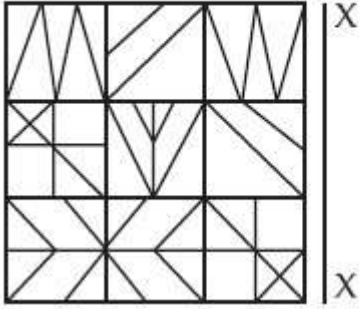


Question Number : 62 Question Id : 70819111557 Question Type : MCQ Option Shuffling : Yes

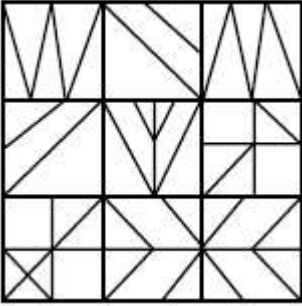
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

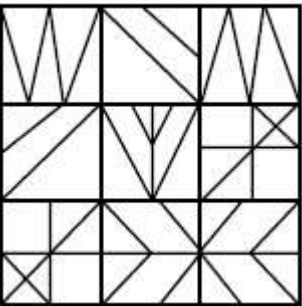
પ્રશ્ન આકૃતિનું X-X ને સાપેક્ષ સાચું આરસી-પ્રતિબિંબ જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

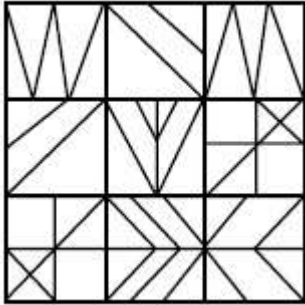
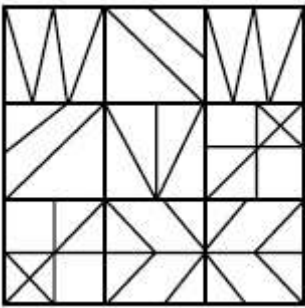


70819137495.



70819137496.

70819137497.



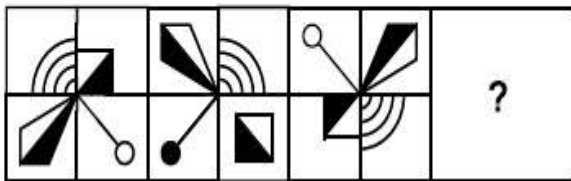
70819137498.

**Question Number : 63 Question Id : 70819111558 Question Type : MCQ Option Shuffling : Yes**

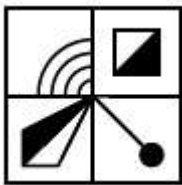
**Is Question Mandatory : No**

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

Which one of the answer figures complete the sequence of the problem figure ? Select the correct one.



**Options :**



70819137499.



70819137500.

70819137501.



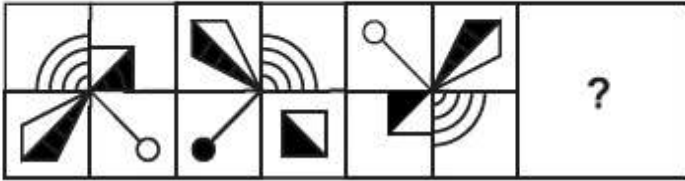
70819137502.

Question Number : 63 Question Id : 70819111558 Question Type : MCQ Option Shuffling : Yes

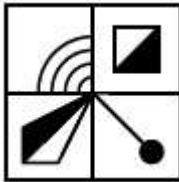
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

જવાબ આકૃતિઓમાંની કઈ આકૃતિ પ્રશ્ન આકૃતિઓની શ્રેણીને પૂર્ણ કરે છે ? એક સાચું પસંદ કરો.



Options :



70819137499.



70819137500.



70819137501.

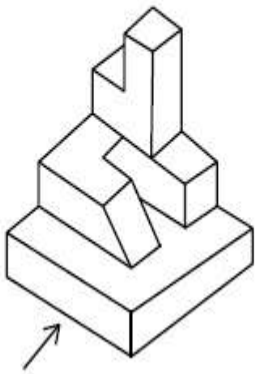
70819137502.



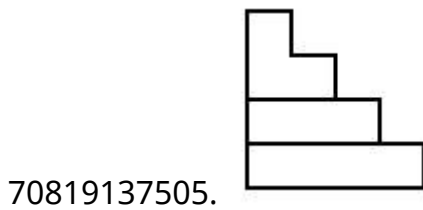
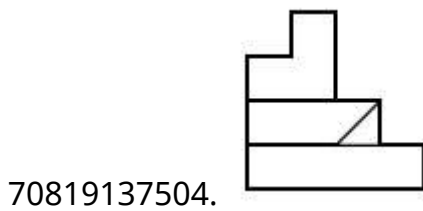
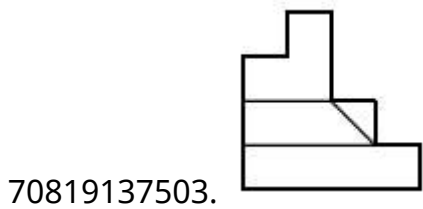
**Question Number : 64 Question Id : 70819111559 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

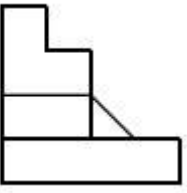
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, amongst the answer figures.



**Options :**



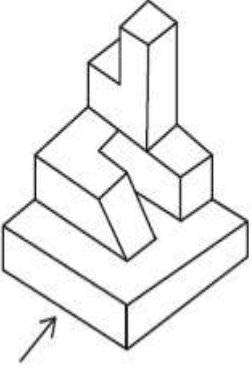
70819137506.



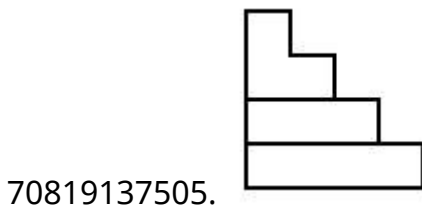
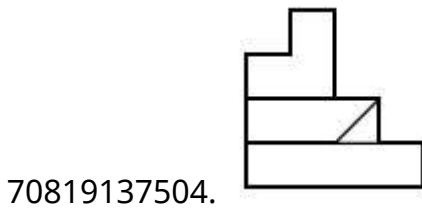
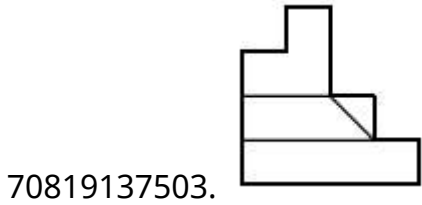
Question Number : 64 Question Id : 70819111559 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. ત્રિ-પરિમાણી આકૃતિમાં બેતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.

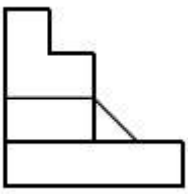


Options :



70819137506.

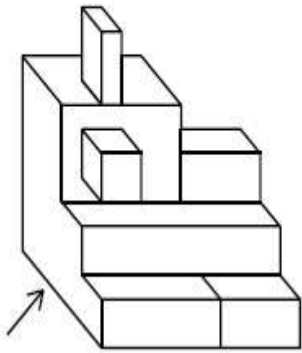




**Question Number : 65 Question Id : 70819111560 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

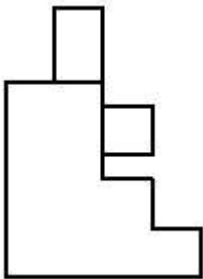
**Correct Marks : 4 Wrong Marks : 1**

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

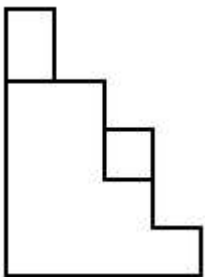


**Options :**

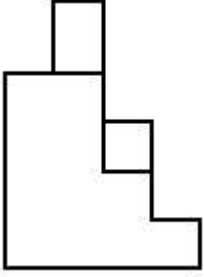
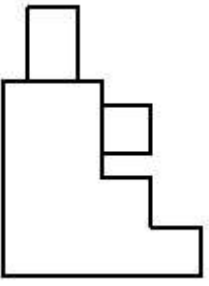
70819137507.



70819137508.



70819137509.



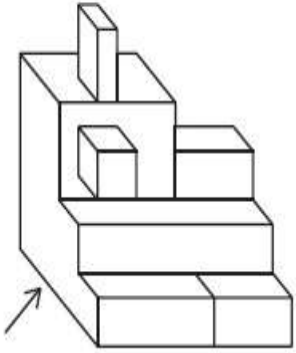
70819137510.

**Question Number : 65 Question Id : 70819111560 Question Type : MCQ Option Shuffling : Yes**

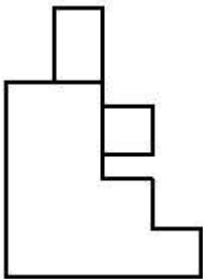
**Is Question Mandatory : No**

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

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.

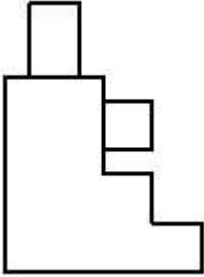
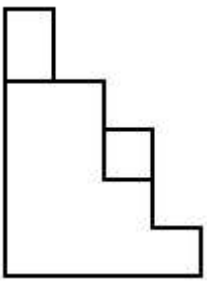


**Options :**

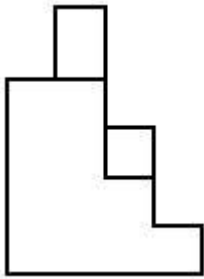


70819137507.

70819137508.



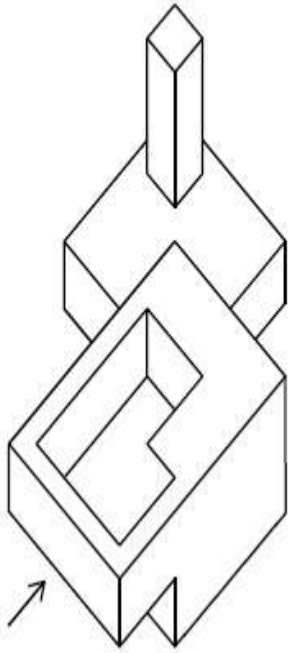
70819137509.



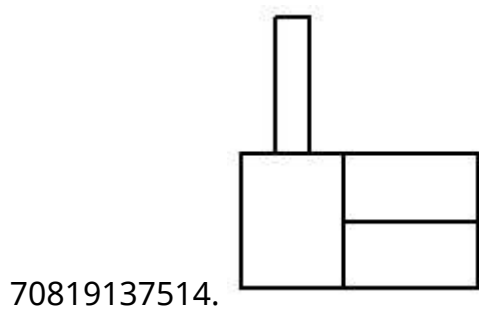
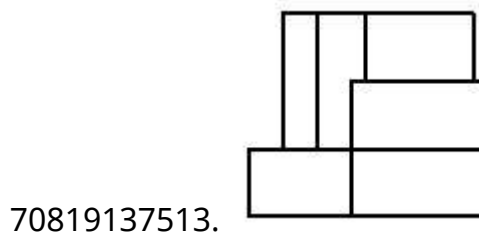
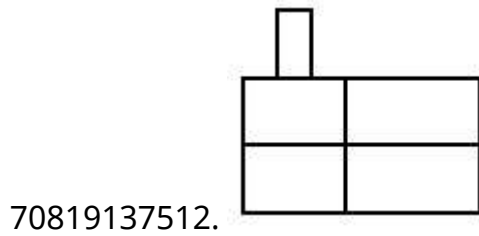
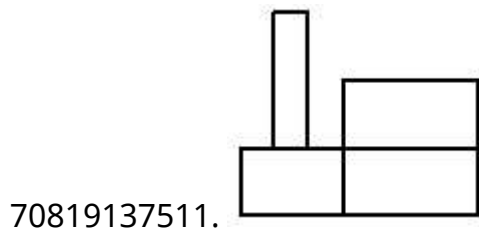
70819137510.

**Question Number : 66 Question Id : 70819111561 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.



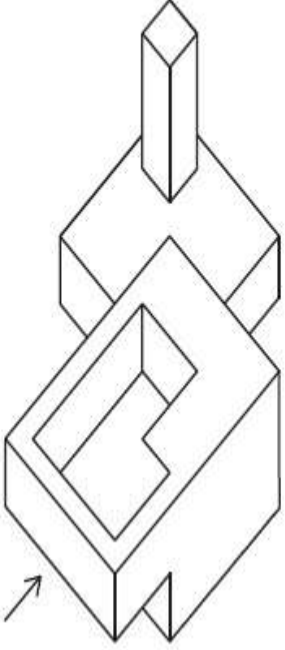
**Options :**



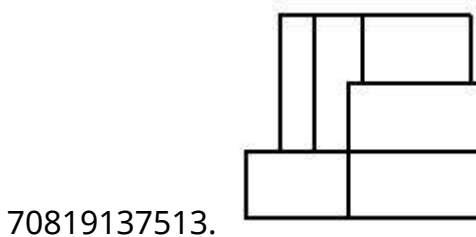
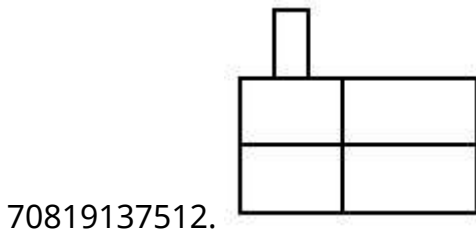
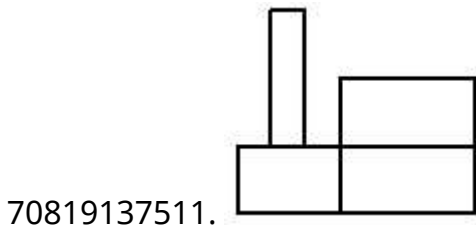
Question Number : 66 Question Id : 70819111561 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

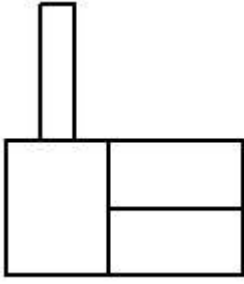
ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દર્શ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દર્શ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :



70819137514.

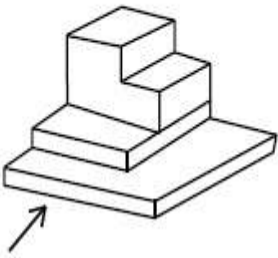


**Question Number : 67 Question Id : 70819111562 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

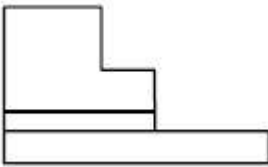
**Correct Marks : 4 Wrong Marks : 1**

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

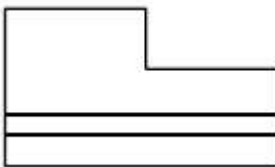


**Options :**

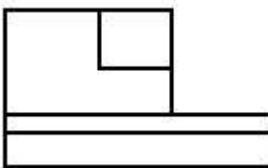
70819137515.



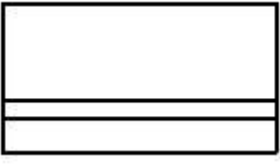
70819137516.



70819137517.



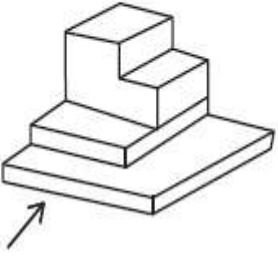
70819137518.



Question Number : 67 Question Id : 70819111562 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

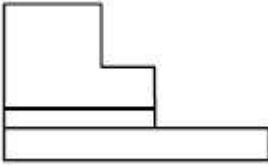
Correct Marks : 4 Wrong Marks : 1

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં બેતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.

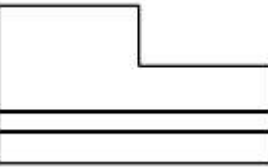


Options :

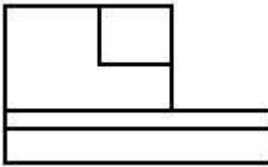
70819137515.



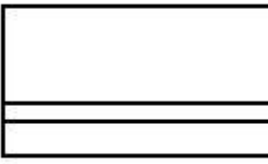
70819137516.



70819137517.



70819137518.

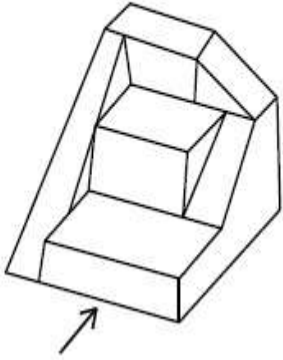


Question Number : 68 Question Id : 70819111563 Question Type : MCQ Option Shuffling : Yes

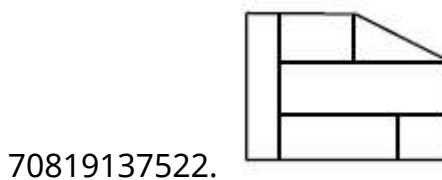
Is Question Mandatory : No

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 :



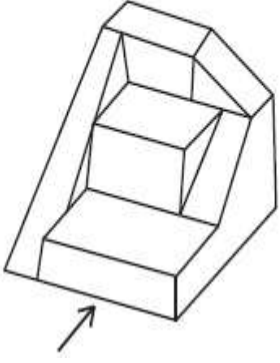
Question Number : 68 Question Id : 70819111563 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

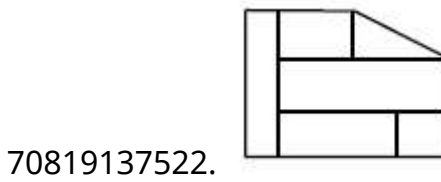


**Correct Marks : 4 Wrong Marks : 1**

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



**Options :**

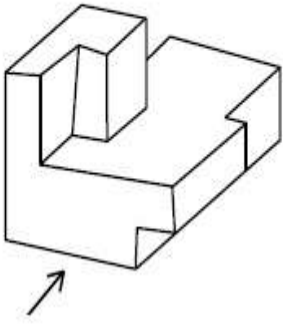


**Question Number : 69 Question Id : 70819111564 Question Type : MCQ Option Shuffling : Yes**

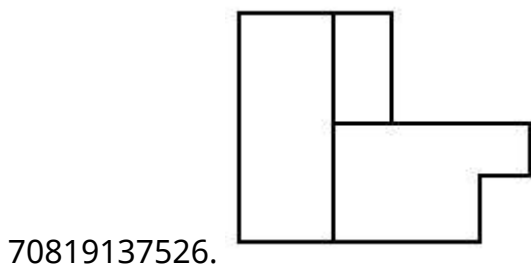
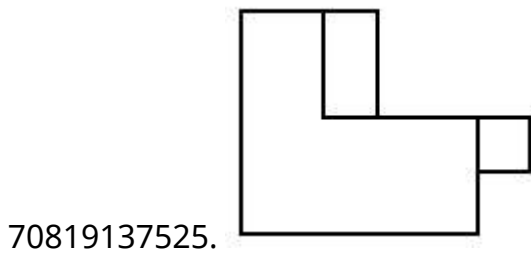
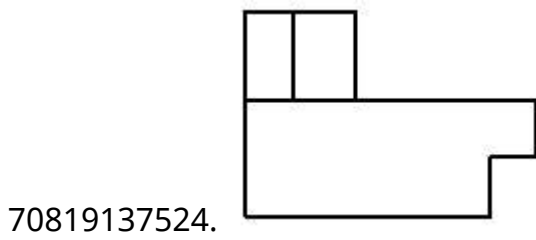
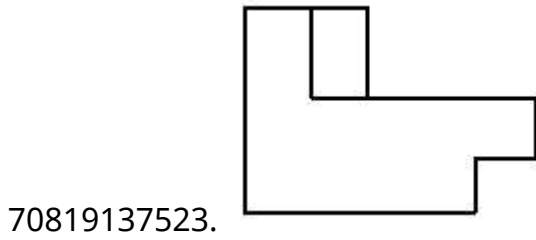
**Is Question Mandatory : No**

**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 :**

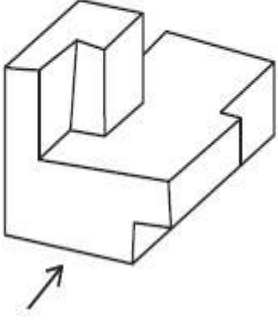


**Question Number : 69 Question Id : 7081911564 Question Type : MCQ Option Shuffling : Yes**

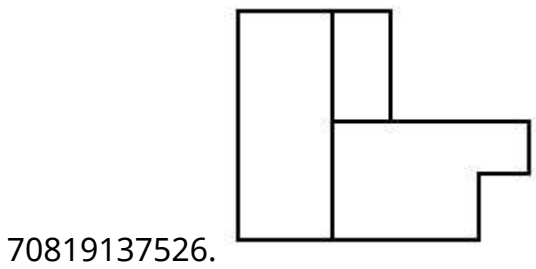
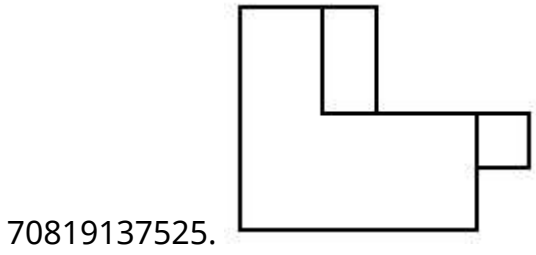
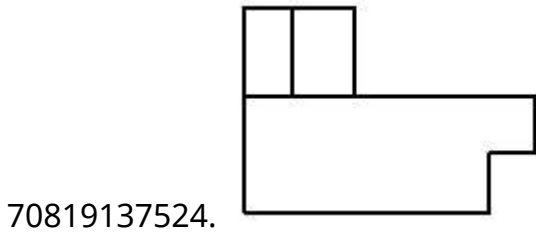
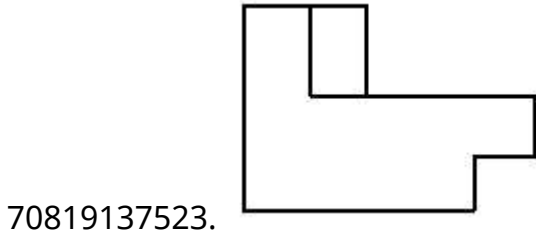
**Is Question Mandatory : No**

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

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



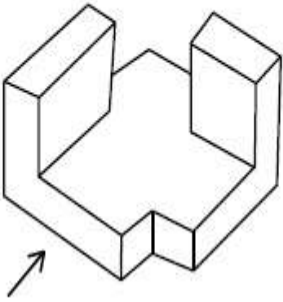
Options :



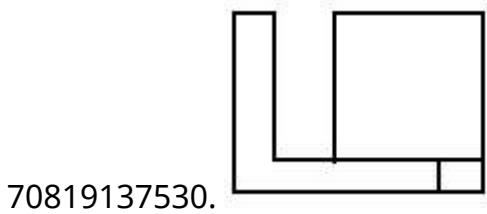
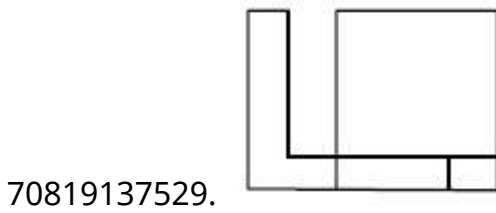
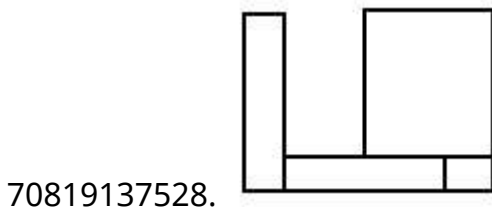
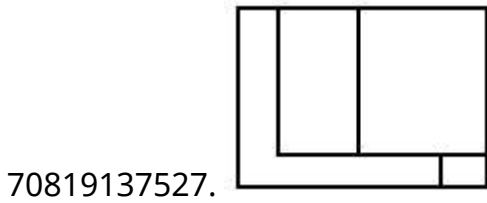
Question Number : 70 Question Id : 7081911565 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

**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 :**

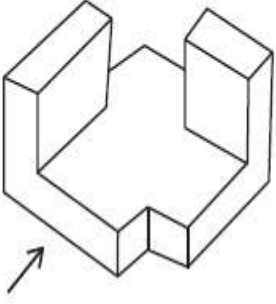


**Question Number : 70 Question Id : 70819111565 Question Type : MCQ Option Shuffling : Yes**

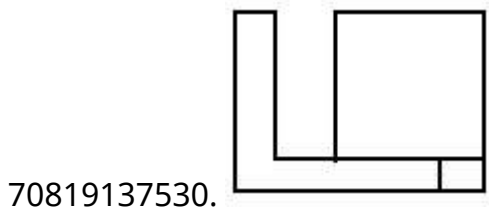
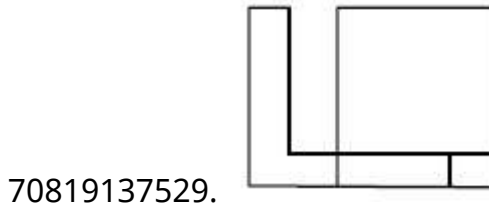
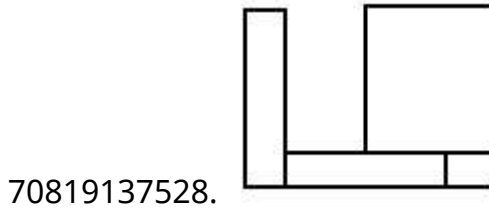
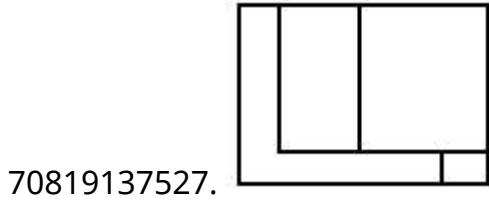
**Is Question Mandatory : No**

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

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દર્શ્ય બતાવે છે. તીરની દિશામાં બેતાં મળતું સાચું દર્શ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

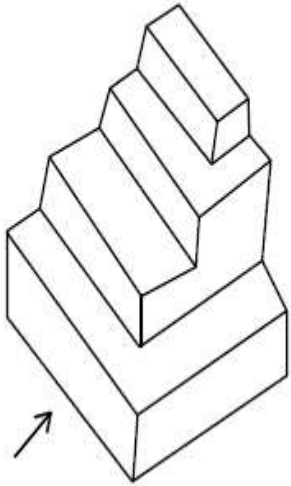


Question Number : 71 Question Id : 70819111566 Question Type : MCQ Option Shuffling : Yes

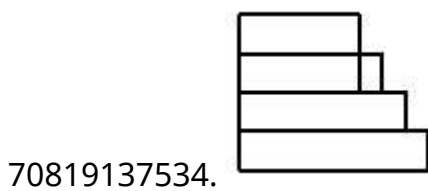
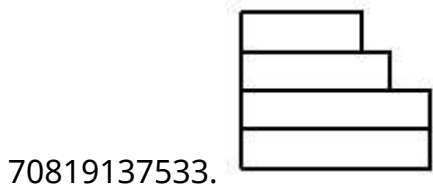
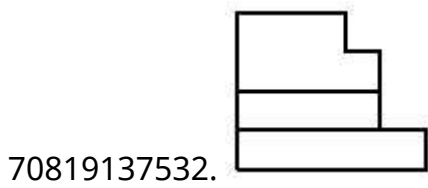
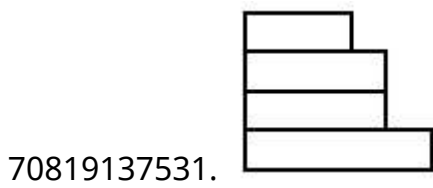
Is Question Mandatory : No

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 :**

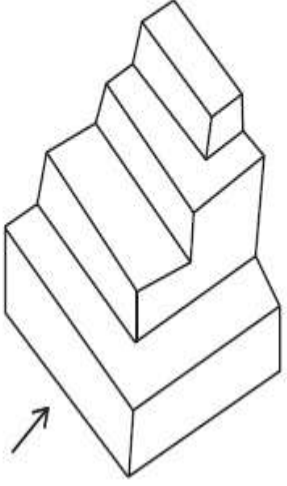


**Question Number : 71 Question Id : 70819111566 Question Type : MCQ Option Shuffling : Yes**

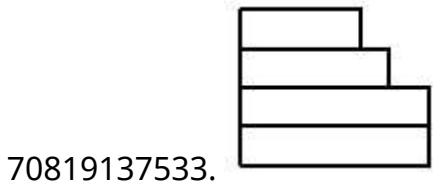
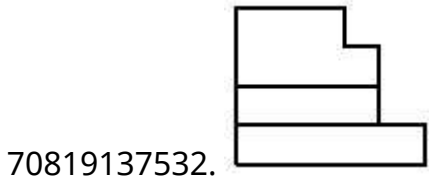
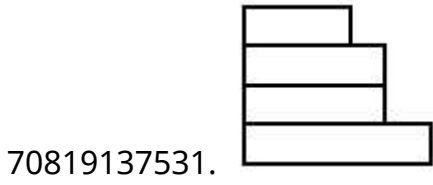
**Is Question Mandatory : No**

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

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દર્શ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દર્શ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

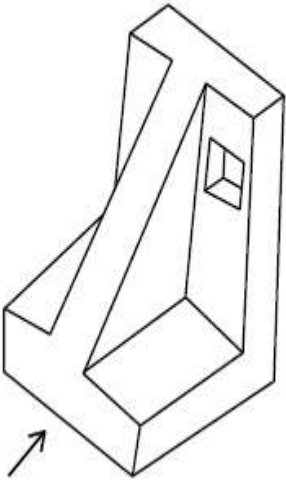


Question Number : 72 Question Id : 70819111567 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

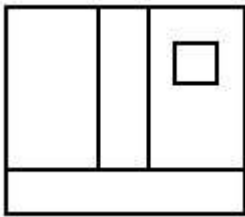
Correct Marks : 4 Wrong Marks : 1

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

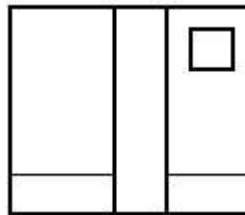


Options :

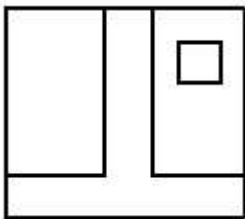
70819137535.



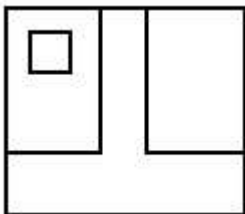
70819137536.



70819137537.



70819137538.

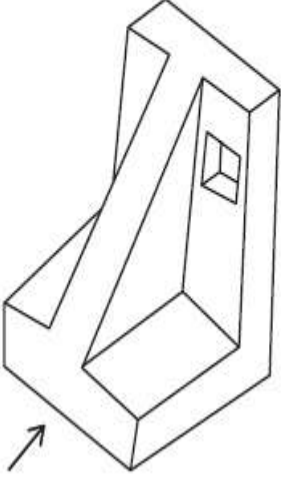




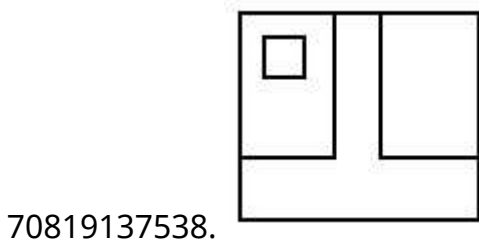
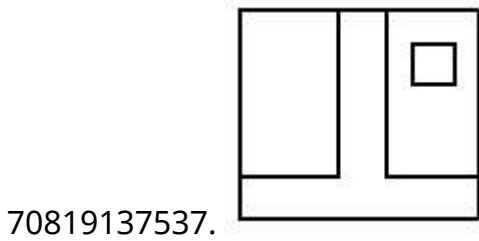
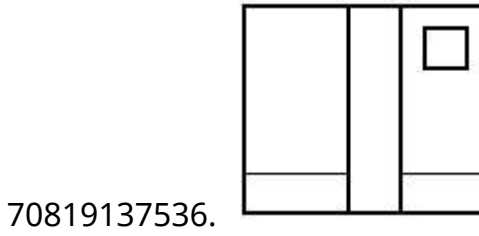
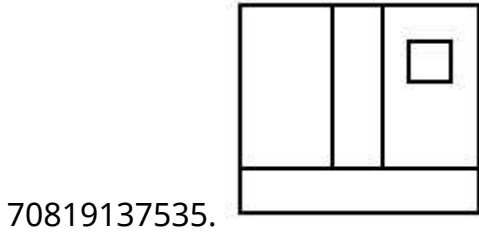
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં બેતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

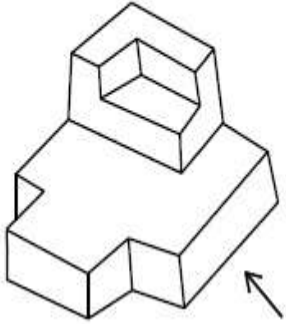


Question Number : 73 Question Id : 70819111568 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

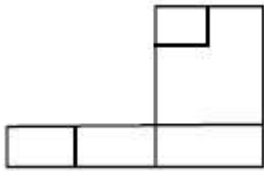
Correct Marks : 4 Wrong Marks : 1

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

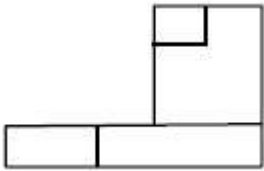


Options :

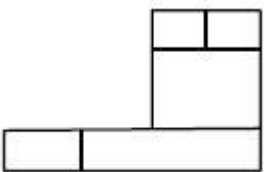
70819137539.



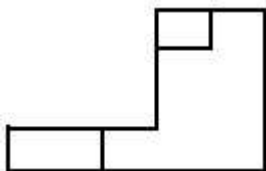
70819137540.



70819137541.



70819137542.

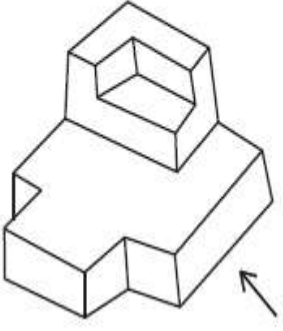


Question Number : 73 Question Id : 70819111568 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

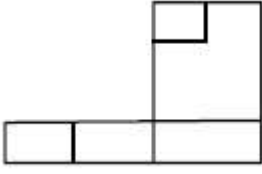
Correct Marks : 4 Wrong Marks : 1

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દર્શ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દર્શ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.

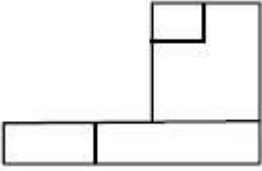


Options :

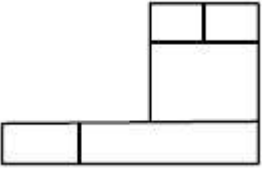
70819137539.



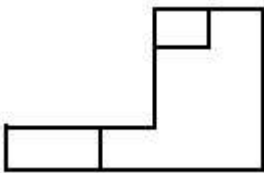
70819137540.



70819137541.



70819137542.

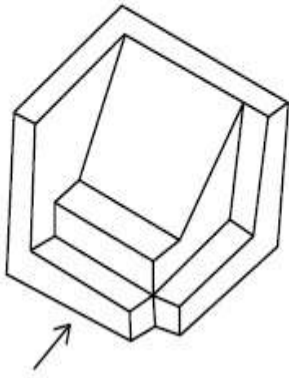


Question Number : 74 Question Id : 70819111569 Question Type : MCQ Option Shuffling : Yes

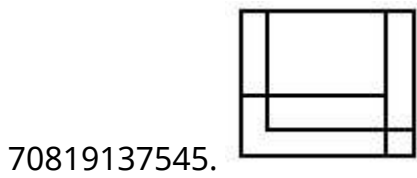
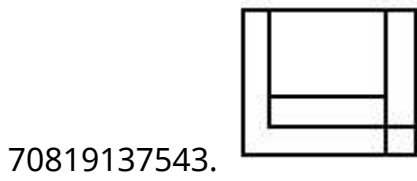
Is Question Mandatory : No

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 :**

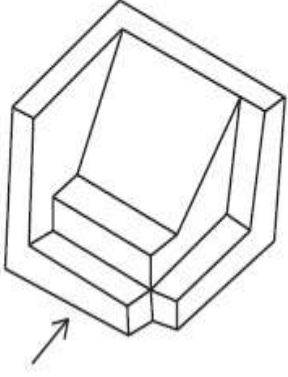


**Question Number : 74 Question Id : 70819111569 Question Type : MCQ Option Shuffling : Yes**

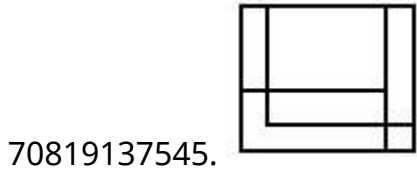
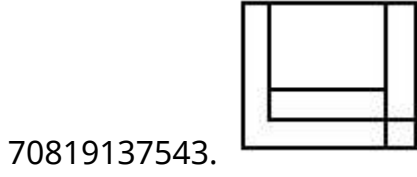
**Is Question Mandatory : No**

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

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં જોતાં મળતું સાચું દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

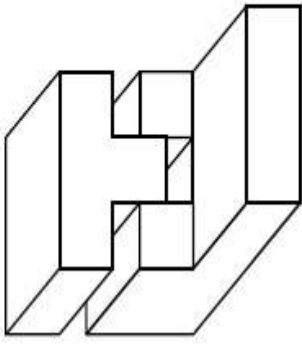


Question Number : 75 Question Id : 70819111570 Question Type : MCQ Option Shuffling : Yes

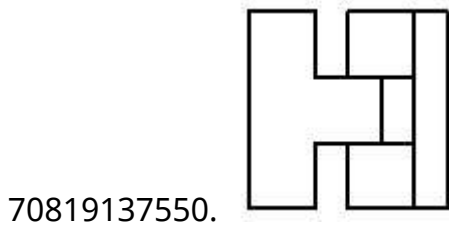
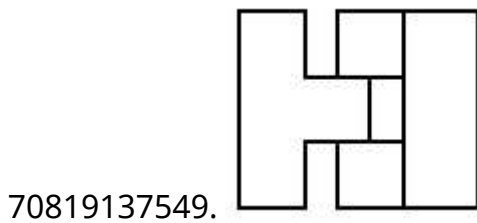
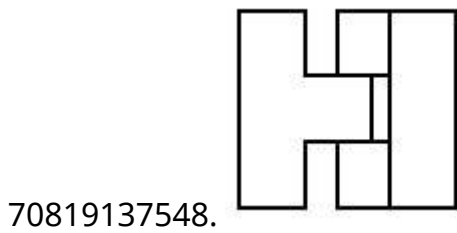
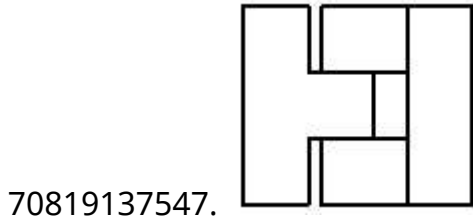
Is Question Mandatory : No

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 :

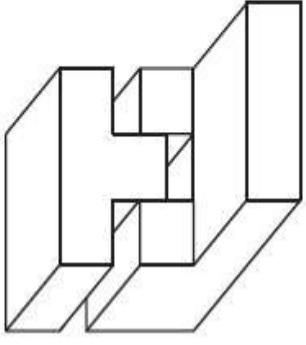


Question Number : 75 Question Id : 70819111570 Question Type : MCQ Option Shuffling : Yes

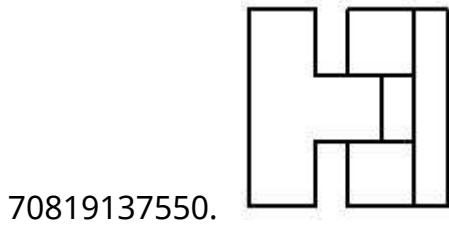
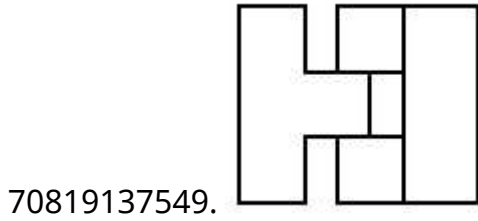
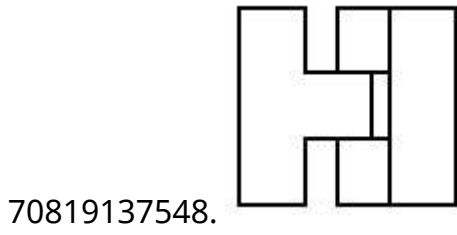
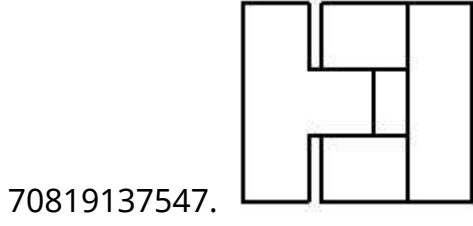
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. તીરની દિશામાં બેતાં મળતું સાચું ઉપરી દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

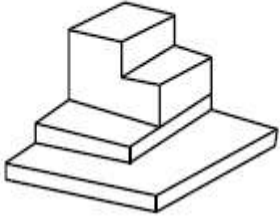


Question Number : 76 Question Id : 70819111571 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

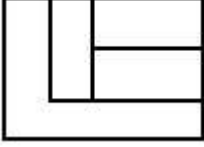
Correct Marks : 4 Wrong Marks : 1

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

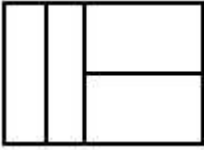


Options :

70819137551.



70819137552.



70819137553.



70819137554.

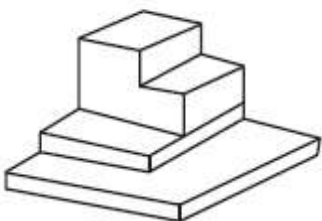


Question Number : 76 Question Id : 70819111571 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

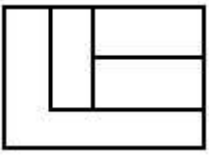
ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દૃશ્ય બતાવે છે. જવાબ-આકૃતિઓમાંથી સાચું ઉપરી દૃશ્ય નક્કી કરો.



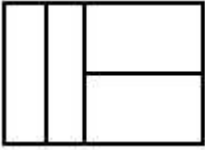
Options :

70819137551.





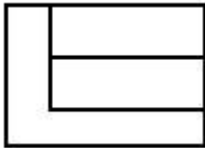
70819137552.



70819137553.



70819137554.

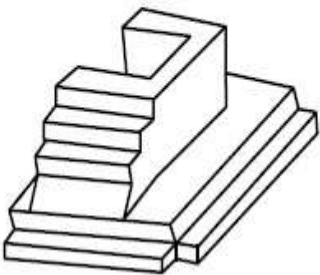


**Question Number : 77 Question Id : 70819111572 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

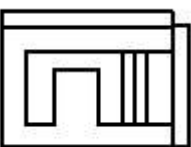
**Correct Marks : 4 Wrong Marks : 1**

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

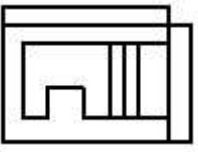


**Options :**

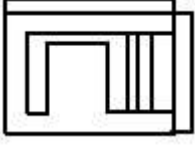
70819137555.



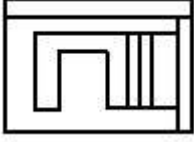
70819137556.



70819137557.



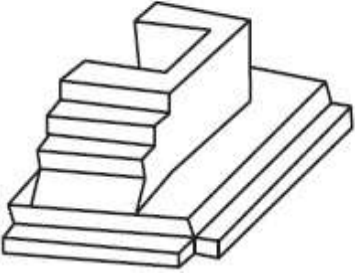
70819137558.



**Question Number : 77 Question Id : 70819111572 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

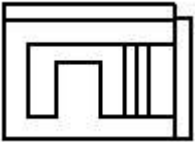
**Correct Marks : 4 Wrong Marks : 1**

ત્રિ-પરિમાણી આકૃતિ એક પદાર્થનું દર્શ્ય બતાવે છે. જવાબ-આકૃતિઓમાંથી સાચું ઉપરી દર્શ્ય નક્કી કરો.

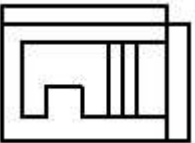


**Options :**

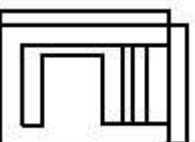
70819137555.



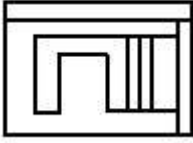
70819137556.



70819137557.



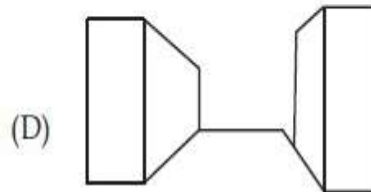
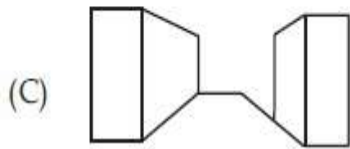
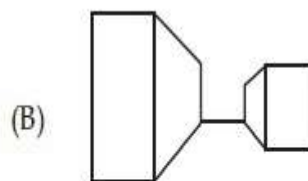
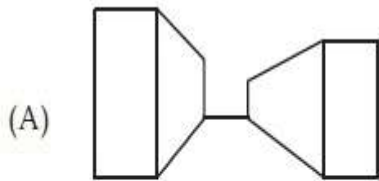
70819137558.



**Question Number : 78 Question Id : 70819111573 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

Identify the building compositions of having less visual tension amongst the following figures.



**Options :**

70819137559. (A) and (B)

70819137560. (B) and (C)

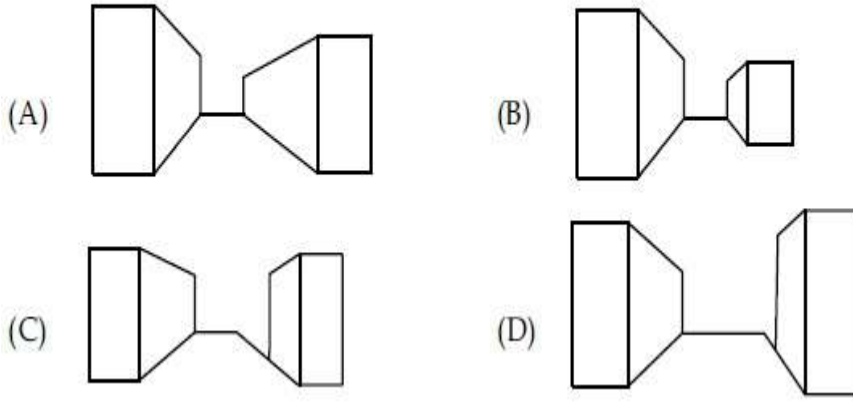
70819137561. (C) and (D)

70819137562. (D) and (A)

**Question Number : 78 Question Id : 70819111573 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

ઓછો દશ્ય તણાવ (visual tension) હોય તેવા મકાન સંયોજન (building compositions) જ્યાં આકૃતિમાંથી નક્કી કરો.



**Options :**

70819137559. (A) and (B)

70819137560. (B) and (C)

70819137561. (C) and (D)

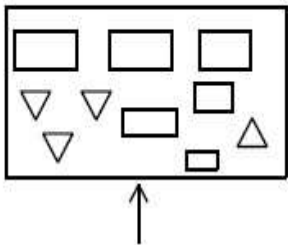
70819137562. (D) and (A)

**Question Number : 79 Question Id : 70819111574 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

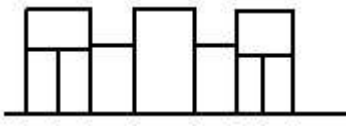
The problem figure shows the top view of an object. Identify the correct elevation amongst the answer figures looking in the direction of arrow.



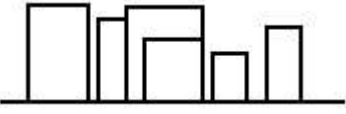
**Options :**



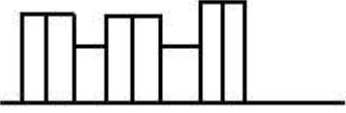
70819137564.



70819137565.



70819137566.

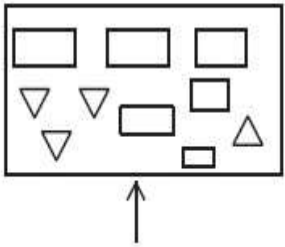


**Question Number : 79 Question Id : 70819111574 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

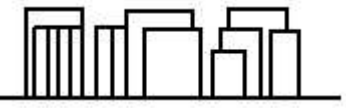
**Correct Marks : 4 Wrong Marks : 1**

પ્રશ્ન આકૃતિ એક પદાર્થનું ઉપરી દૃશ્ય બતાવે છે. ત્રીસની દિશામાં બેતાં મળતું સાચું ઉન્નત દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.

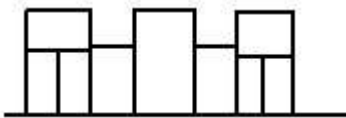


**Options :**

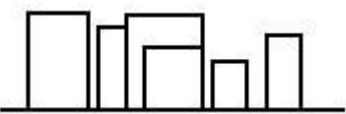
70819137563.



70819137564.



70819137565.



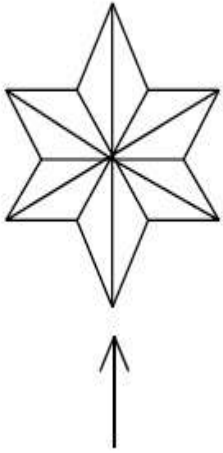
70819137566.



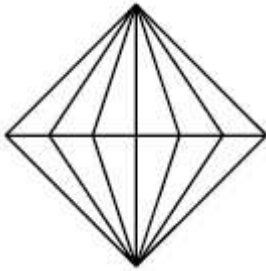
**Question Number : 80 Question Id : 70819111575 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

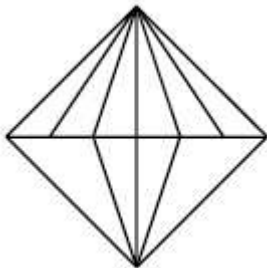
The problem figure shows the top view of an object. Identify the correct elevation amongst the answer figures looking in the direction of arrow.



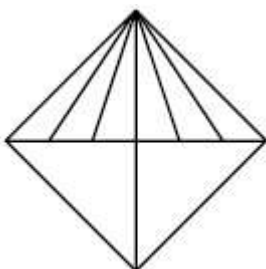
**Options :**



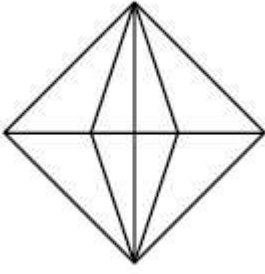
70819137567.



70819137568.



70819137569.



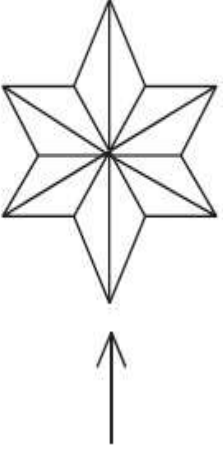
70819137570.

Question Number : 80 Question Id : 70819111575 Question Type : MCQ Option Shuffling : Yes

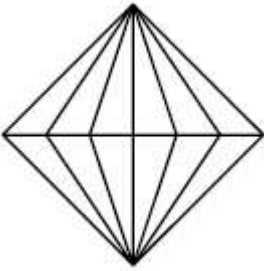
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

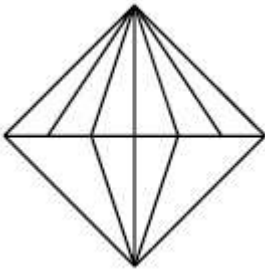
પ્રશ્ન આકૃતિ એક પદાર્થનું ઉપરી દૃશ્ય બતાવે છે. તીરની દિશામાં બેતાં મળતું સાચું ઉન્નત દૃશ્ય જવાબ આકૃતિઓમાંથી નક્કી કરો.



Options :

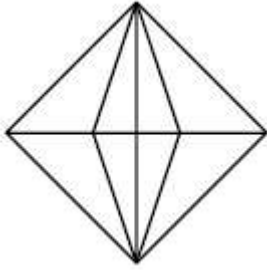
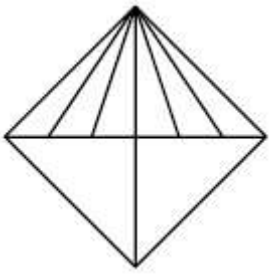


70819137567.



70819137568.

70819137569.



70819137570.

## Drawing

<b>Section Id :</b>	708191392
<b>Section Number :</b>	4
<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
<b>Section Marks :</b>	100
<b>Mark As Answered Required? :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	708191672
<b>Question Shuffling Allowed :</b>	No

**Question Number : 81 Question Id : 70819111576 Question Type : SUBJECTIVE**

**Correct Marks : 50**



Draw a proportionate sketch of given reference image by using any black and white rendering techniques of your own choice.

OR

Decode image and prepare balanced composition in a frame of your choice by using any black and white rendering techniques.



**Question Number : 81 Question Id : 70819111576 Question Type : SUBJECTIVE**

**Correct Marks : 50**

આપેલ સંદર્ભ ચિત્રનું સમતુલિત, પ્રમાણસરનું રેખાચિત્ર બનાવો. તે માટે તમારી ઈચ્છાની શ્વેત/શ્યામ રેન્ડરિંગ/(rendering) રીતોનો ઉપયોગ કરો.

અથવા

આપેલ ચિત્રને છુટ્ટું કરી નાંખો / તોડી નાંખો / ડીકોડ કરો / Decode કરો અને સમતુલિત સંયોજન બનાવો. તે માટે તમારી ઈચ્છાની શ્વેત/શ્યામ રેન્ડરિંગ /rendering રીતોનો ઉપયોગ કરો.



**Question Number : 82 Question Id : 70819111577 Question Type : SUBJECTIVE**

**Correct Marks : 50**

Draw a scene of a Kite festival by using colors.

OR

Draw a Harmonic three dimensional composition with the following two types of objects.

(i) CUBOID A : SIZE 2 cm×2 cm×2 cm, 5 Nos.

(ii) CUBOID B : SIZE 5 cm×2 cm×2 cm, 4 Nos.

Use 'Cool Colorscheme' for composition.

**Question Number : 82 Question Id : 70819111577 Question Type : SUBJECTIVE**

**Correct Marks : 50**

વિવિધ રંગો વડે પતંગોત્સવનું ચિત્ર દોરો.

અથવા

નીચે પ્રકારની બે વસ્તુઓ વાપરીને તાલબદ્ધ 3-D સંયોજન બનાવો.

(i) ઘન અ : સાઈઝ 2 સે.મી.  $\times$  2 સે.મી.  $\times$  2 સે.મી. કુલ સંખ્યા 5

(ii) ઘન બ : સાઈઝ 5 સે.મી.  $\times$  2 સે.મી.  $\times$  2 સે.મી. કુલ સંખ્યા 4

રચના (Composition) માટે “ઢંડી રંગયોજના” નો ઉપયોગ કરો.