

<b>Question Paper Name :</b>	B ARCH ETE 23rd Feb 2021 Shift 2
<b>Subject Name :</b>	B ARCH ETE
<b>Creation Date :</b>	2021-02-22 14:02:16
<b>Duration :</b>	180
<b>Number of Questions :</b>	82
<b>Total Marks :</b>	400
<b>Display Marks:</b>	Yes

## B ARCH ETE

<b>Group Number :</b>	1
<b>Group Id :</b>	708191154
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	180
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	400
<b>Is this Group for Examiner? :</b>	No

## Mathematics Section A

<b>Section Id :</b>	708191512
<b>Section Number :</b>	1
<b>Section type :</b>	Online

**Mandatory or Optional :** Mandatory  
**Number of Questions :** 20  
**Number of Questions to be attempted :** 20  
**Section Marks :** 80  
**Mark As Answered Required? :** Yes  
**Sub-Section Number :** 1  
**Sub-Section Id :** 708191792  
**Question Shuffling Allowed :** Yes

**Question Number : 1 Question Id : 70819114348 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 :**

70819147691.  $\frac{121}{3}$

70819147692.  $\frac{122}{3}$

70819147693.  $\frac{125}{3}$

70819147694.  $\frac{128}{3}$

**Question Number : 1 Question Id : 70819114348 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

సమాకలని  $\int_{-4}^4 |9-x^2| dx$  విలువ :

Options :

70819147691.  $\frac{121}{3}$

70819147692.  $\frac{122}{3}$

70819147693.  $\frac{125}{3}$

70819147694.  $\frac{128}{3}$

Question Number : 2 Question Id : 70819114349 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 :

70819147695.  $\frac{31}{13}$

70819147696.  $\frac{108}{13}$

70819147697.  $\frac{27}{2}$

70819147698.  $\frac{54}{7}$

Question Number : 2 Question Id : 70819114349 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఒక గుణశ్రేణి లోని అనంత పదాల మొత్తము 3 మరియు దాని పదాల వర్గాల మొత్తము  $\frac{9}{2}$ . శ్రేణిలోని పదాల ఘనాల మొత్తము :

Options :

70819147695.  $\frac{31}{13}$

70819147696.  $\frac{108}{13}$

70819147697.  $\frac{27}{2}$

70819147698.  $\frac{54}{7}$

Question Number : 3 Question Id : 70819114350 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 :

70819147699.  $P \Leftrightarrow P \vee q$

70819147700.  $(P \wedge q) \Leftrightarrow P$

70819147701.  $(P \wedge (\sim P \vee q)) \vee (\sim q)$

70819147702.  $(p \vee \sim p) \wedge (q \vee (\sim q))$

**Question Number : 3 Question Id : 70819114350 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No**

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

క్రింది ఏ బూలియన్ సమాసము నిత్యసత్యం ?

**Options :**

70819147699.  $P \Leftrightarrow P \vee q$

70819147700.  $(P \wedge q) \Leftrightarrow P$

70819147701.  $(P \wedge (\sim P \vee q)) \vee (\sim q)$

70819147702.  $(P \vee \sim P) \wedge (q \vee (\sim q))$

**Question Number : 4 Question Id : 70819114351 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 :**

70819147703. a, b and c are in Arithmetic Progression

70819147704. a, b and c are in Geometric Progression

70819147705. a, 2b and c are in Arithmetic Progression

70819147706. a, b and c satisfy  $2b^2 = ac$

**Question Number : 4 Question Id : 70819114351 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

$|a| < 1, |b| < 1, |c| < 1$  మరియు  $x = \sum_{n=0}^{\infty} a^n, y = \sum_{n=0}^{\infty} b^n, z = \sum_{n=0}^{\infty} c^n$  అనుకొందాం.  $\frac{1}{x}, \frac{1}{y}, \frac{1}{z}$  లు అంక

శ్రేణిలో వుంటే :

**Options :**

70819147703. a, b, c లు అంకశ్రేణిలో వుంటాయి

70819147704. a, b, c లు గుణశ్రేణిలో వుంటాయి

70819147705. a, 2b, c లు అంకశ్రేణిలో వుంటాయి

70819147706. a, b, c లు  $2b^2 = ac$  ని తృప్తి పరుస్తాయి

**Question Number : 5 Question Id : 70819114352 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 :**

70819147707.  $15e + 5$

70819147708.  $15e - 5$

70819147709.  $16e - 5$

70819147710.  $16e - 7$

**Question Number : 5 Question Id : 70819114352 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

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

**Options :**

70819147707.  $15e + 5$

70819147708.  $15e - 5$

70819147709.  $16e - 5$

70819147710.  $16e - 7$

**Question Number : 6 Question Id : 70819114353 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 :**

70819147711.  $5$

70819147712.  $3$

70819147713.  $7$

70819147714.  $1$

Question Number : 6 Question Id : 70819114353 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$10^{50} + (3 \times (4)^{52}) + \lambda$  అనునది 9 చే భాగించబడేటట్లుగా వుండే  $\lambda$  యొక్క కనిష్ట ధనపూర్ణ సంఖ్య :

Options :

70819147711. 5

70819147712. 3

70819147713. 7

70819147714. 1

Question Number : 7 Question Id : 70819114354 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 :

70819147715. 455

70819147716. 421

70819147717. 435

70819147718. 441

Question Number : 7 Question Id : 70819114354 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

మూడు సమాంతర మరియు సతలీయ రేఖలపై 4, 5 మరియు 6 బిందువులు వున్నాయి. నాలుగు లేదా అంతకంటే ఎక్కువ బిందువులుండే సమితి చక్రీయము కాకపోతే మరియు విభిన్న రేఖలపై వుండే మూడు బిందువుల సమితి సరేఖీయాలు కాకపోతే ఖచ్చితంగా మూడు బిందువుల గుండా పోయే వృత్తాల సంఖ్య :

Options :

70819147715. 455

70819147716. 421

70819147717. 435

70819147718. 441

Question Number : 8 Question Id : 70819114355 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 :

70819147719.  $a = 1, b = 0$

70819147720.  $a = 0, b = 1$

70819147721.  $a = 0, b = -1$

70819147722.  $a = -1, b = 1$

Question Number : 8 Question Id : 70819114355 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

బిందువు  $(2, -1)$  వద్ద  $y = \frac{ax - b}{(x - 1)(x - 4)}$  అంత్యవిలువను కల్గియుంటే  $a, b$  ల విలువలు :

Options :

70819147719.  $a = 1, b = 0$

70819147720.  $a = 0, b = 1$

70819147721.  $a = 0, b = -1$

70819147722.  $a = -1, b = 1$

Question Number : 9 Question Id : 70819114356 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 :

70819147723.  $\frac{9}{13}$

70819147724.  $\frac{15}{4}$

70819147725.  $\frac{13}{9}$

70819147726.  $\frac{1}{13}$

Question Number : 9 Question Id : 70819114356 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$\vec{r} \cdot (2\hat{i} + \hat{j} - 2\hat{k}) + 5 = 0$  మరియు  $\vec{r} \cdot (6\hat{i} + 3\hat{j} - 6\hat{k}) + 2 = 0$  తలల మధ్య దూరము :

Options :

70819147723.  $\frac{9}{13}$

70819147724.  $\frac{15}{4}$

70819147725.  $\frac{13}{9}$

70819147726.  $\frac{1}{13}$

Question Number : 10 Question Id : 70819114357 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 :

70819147727.  $\frac{7}{20}$

70819147728.  $\frac{1}{20}$

70819147729.  $\frac{19}{20}$

70819147730.  $\frac{12}{20}$

**Question Number : 10 Question Id : 70819114357 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

ఇద్దరు విద్యార్థులు X మరియు Y లచే గణితంలో ఒక సమస్యను సాధించే సంభావ్యతలు వరుసగా  $\frac{1}{4}$  మరియు

$\frac{1}{5}$ . ఈ సమస్యను ఇద్దరు విద్యార్థులు సాధించుటకు స్వతంత్రముగా ప్రయత్నిస్తే ఇద్దరిలో ఖచ్చితంగా ఒకరు సమస్యను సాధించే సంభావ్యత :

**Options :**

70819147727.  $\frac{7}{20}$

70819147728.  $\frac{1}{20}$

70819147729.  $\frac{19}{20}$

70819147730.  $\frac{12}{20}$

**Question Number : 11 Question Id : 70819114358 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 :

70819147731.  $\cos \frac{\pi}{2} + i \sin \frac{\pi}{2}$

70819147732.  $\cos \frac{\pi}{2} - i \sin \frac{\pi}{2}$

70819147733.  $\cos \frac{\pi}{4} + i \sin \frac{\pi}{4}$

70819147734.  $\cos \frac{\pi}{4} - i \sin \frac{\pi}{4}$

Question Number : 11 Question Id : 70819114358 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

సంకీర్ణ సంఖ్య  $\frac{1+i}{1-i}$  యొక్క ధ్రువ రూపము :

Options :

70819147731.  $\cos \frac{\pi}{2} + i \sin \frac{\pi}{2}$

70819147732.  $\cos \frac{\pi}{2} - i \sin \frac{\pi}{2}$

70819147733.  $\cos \frac{\pi}{4} + i \sin \frac{\pi}{4}$

70819147734.  $\cos \frac{\pi}{4} - i \sin \frac{\pi}{4}$

Question Number : 12 Question Id : 70819114359 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 :

70819147735. <sup>2</sup>

70819147736. <sup>3</sup>

70819147737. <sup>4</sup>

70819147738. <sup>1</sup>

Question Number : 12 Question Id : 70819114359 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

బిందువులు (1, 0) మరియు (3, 0) ల గుండా పోయే రేఖను 2 : 1 నిష్పత్తిలో విభజిస్తూ ఈ రేఖకు లంబంగా వుండే రేఖా సమీకరణం  $ax = 7$  అయితే a విలువ :

Options :

70819147735. <sup>2</sup>

70819147736. <sup>3</sup>

70819147737. <sup>4</sup>

70819147738. <sup>1</sup>

Question Number : 13 Question Id : 70819114360 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 :**

70819147739.  $x^2 + y^2 - 2x + 4y + 3 = 0$

70819147740.  $x^2 + y^2 - 4x - 2y + 4 = 0$

70819147741.  $2(x^2 + y^2) - x + y + 1 = 0$

70819147742.  $x^2 + y^2 - 2x - 4y + 3 = 0$

**Question Number : 13 Question Id : 70819114360 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

సరళరేఖ  $x + y = 2$  దృష్ట్యా, వృత్తము  $x^2 + y^2 - 2x = 0$  యొక్క దర్పణ ప్రతిబింబమయ్యే వృత్త సమీకరణం :

**Options :**

70819147739.  $x^2 + y^2 - 2x + 4y + 3 = 0$

70819147740.  $x^2 + y^2 - 4x - 2y + 4 = 0$

70819147741.  $2(x^2 + y^2) - x + y + 1 = 0$

70819147742.  $x^2 + y^2 - 2x - 4y + 3 = 0$

**Question Number : 14 Question Id : 70819114361 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 :**

70819147743.  $y+3=0$  and  $x-1=0$

70819147744.  $x-3=0$  and  $y+1=0$

70819147745.  $x+3=0$  and  $x-1=0$

70819147746.  $y+3=0$  and  $y-1=0$

**Question Number : 14 Question Id : 70819114361 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

అతి పరావలయం  $\frac{(x+1)^2}{2^2} + \frac{(y-1)^2}{3^2} = 1$  మరియు వృత్తము  $(x+1)^2 + (y-1)^2 = 4$  లకు ఉమ్మడి స్పర్శ

రేఖల సమీకరణాలు :

**Options :**

70819147743.  $y+3=0$  మరియు  $x-1=0$

70819147744.  $x-3=0$  మరియు  $y+1=0$

70819147745.  $x+3=0$  మరియు  $x-1=0$

70819147746.  $y+3=0$  మరియు  $y-1=0$

**Question Number : 15 Question Id : 70819114362 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 :

70819147747.  $\begin{bmatrix} 1 & ka \\ 0 & 1 \end{bmatrix}$

70819147748.  $\begin{bmatrix} 1 & k^2a \\ 0 & 1 \end{bmatrix}$

70819147749.  $\begin{bmatrix} k & ka \\ 0 & k \end{bmatrix}$

70819147750.  $\begin{bmatrix} 1 & ka \\ 0 & 0 \end{bmatrix}$

Question Number : 15 Question Id : 70819114362 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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

Options :

70819147747.  $\begin{bmatrix} 1 & ka \\ 0 & 1 \end{bmatrix}$

70819147748.  $\begin{bmatrix} 1 & k^2a \\ 0 & 1 \end{bmatrix}$

70819147749.  $\begin{bmatrix} k & ka \\ 0 & k \end{bmatrix}$

70819147750.  $\begin{bmatrix} 1 & ka \\ 0 & 0 \end{bmatrix}$

**Question Number : 16 Question Id : 70819114363 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 :**

70819147751.  $s=5, t=13$

70819147752.  $s \neq 5$

70819147753.  $s=5, t \neq 13$

70819147754.  $t \neq 13$

**Question Number : 16 Question Id : 70819114363 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

సమీకరణాల వ్యవస్థ

$$x_1 + x_2 + x_3 = 5$$

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

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

సాధన లేనిచో s మరియు t విలువలు :

**Options :**

70819147751.  $s=5, t=13$

70819147752.  $s \neq 5$

70819147753.  $s=5, t \neq 13$

70819147754.  $t \neq 13$

**Question Number : 17 Question Id : 70819114364 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 :**

70819147755. 1

70819147756. -1

70819147757. 0

70819147758. 2

**Question Number : 17 Question Id : 70819114364 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No**

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

అంతరం  $(1, \infty)$  లో  $\sin^{-1}\left(\frac{2x}{1+x^2}\right)$  దృష్ట్యా  $\tan^{-1}\left(\frac{2x}{1-x^2}\right)$  యొక్క అవకలజము :

**Options :**

70819147755. 1

70819147756. <sup>-1</sup>

70819147757. <sup>0</sup>

70819147758. <sup>2</sup>

Question Number : 18 Question Id : 70819114365 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 :

70819147759.  $\frac{\pi}{6}$

70819147760.  $\frac{\pi}{4}$

70819147761.  $\frac{\pi}{3}$

70819147762.  $\frac{5\pi}{12}$

Question Number : 18 Question Id : 70819114365 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

$|\vec{a}| = |\vec{b}| = \frac{|\vec{c}|}{2} = 1$  అయ్యేటట్లుగా వుండే మూడు సదిశలు  $\vec{a}, \vec{b}$  మరియు  $\vec{c}$  అనుకొందాం.

$\vec{a} \times (\vec{a} \times \vec{c}) + \vec{b} = \vec{0}$  అయితే  $\vec{a}$  మరియు  $\vec{c}$  ల మధ్య లఘుకోణము :

**Options :**

70819147759.  $\frac{\pi}{6}$

70819147760.  $\frac{\pi}{4}$

70819147761.  $\frac{\pi}{3}$

70819147762.  $\frac{5\pi}{12}$

**Question Number : 19 Question Id : 70819114366 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 :**

70819147763.  $x = 1 - \tan^{-1}y + ce^{-\tan^{-1}y}$

70819147764.  $y = \tan^{-1}y - 1 + ce^{-\tan^{-1}x}$

70819147765.  $x = \tan^{-1}y - 1 + ce^{-\tan^{-1}y}$

70819147766.  $x = -\tan^{-1}y - 1 - ce^{\tan^{-1}x}$

Question Number : 19 Question Id : 70819114366 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

అవకలన సమీకరణము  $(1 + y^2)dx = (\tan^{-1}y - x)dy$  యొక్క సాధన :

(ఇచ్చట  $c$  ఒక యాదృచ్ఛిక స్థిరాంకము)

Options :

70819147763.  $x = 1 - \tan^{-1}y + ce^{-\tan^{-1}y}$

70819147764.  $y = \tan^{-1}y - 1 + ce^{-\tan^{-1}x}$

70819147765.  $x = \tan^{-1}y - 1 + ce^{-\tan^{-1}y}$

70819147766.  $x = -\tan^{-1}y - 1 - ce^{\tan^{-1}x}$

Question Number : 20 Question Id : 70819114367 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 :

70819147767.  $[-5, -4] \cup [4, 5]$

70819147768.  $[-5, 4) \cup (-4, 5]$

70819147769.  $(-5, -4) \cup (4, 5)$

70819147770.  $(-5, 4) \cup (-4, 5)$

Question Number : 20 Question Id : 70819114367 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

నిరూపక అక్షాలతో ధన దిశలో లఘు కోణం చేసే సదిశలు  $\vec{a} = (x^2 - 16)\hat{i} + 4\hat{j} - (x^2 - 25)\hat{k}$  అయ్యేటట్లుగా

ఉండుటకు గల  $x$  అంతరము :

Options :

70819147767.  $[-5, -4] \cup [4, 5]$

70819147768.  $[-5, 4) \cup (-4, 5]$

70819147769.  $(-5, -4) \cup (4, 5)$

70819147770.  $(-5, 4) \cup (-4, 5)$

## Mathematics Section B

Section Id :	708191513
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 :	708191793
Question Shuffling Allowed :	Yes

Question Number : 21 Question Id : 70819114368 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 : 70819114368 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 : 70819114369 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 :** 70819114369 **Question Type :** SA

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

9tan<sup>2</sup>θ + 4cot<sup>2</sup>θ యొక్క కనిష్ట విలువ \_\_\_\_\_.

**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 :** 70819114370 **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 :** 70819114370 **Question Type :** SA

Correct Marks : 4 Wrong Marks : 0

బిందువు (1, 2, 3) నుండి సరళరేఖ  $\frac{-x+6}{-3} = \frac{y-7}{2} = \frac{z-7}{-2}$  కు గల లంబదూరము \_\_\_\_\_.

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 : 70819114371 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 : 70819114371 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

$\log_3 2, \log_3 (2^x - 5)$  మరియు  $\log_3 \left(2^x - \frac{7}{2}\right)$  లు అంకశ్రేణిలో వుంటే  $x$  విలువ \_\_\_\_\_.

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 : 70819114372 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 : 70819114372 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

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

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 : 70819114373 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 : 70819114373 Question Type : SA**

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

బిందువు (4, 5) నుండి వృత్తము  $x^2 + y^2 - 4x - 2y - 11 = 0$  నకు గీయబడిన స్పర్శరేఖలు మరియు వృత్తము యొక్క జంట వ్యాసార్థములు ఒక చతురస్రాన్ని ఏర్పరచును. ఇట్టి చతురస్రము యొక్క వైశాల్యము చదరపు యూనిట్లలో \_\_\_\_\_.

**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 : 70819114374 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 :** 70819114374 **Question Type :** SA

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

ఒక ద్విపద విభాజనము యొక్క మధ్యమము మరియు విస్తృతమొత్తము 15 మరియు వాటి వర్గాల మొత్తము 117 అయితే స్వతంత్ర యత్నాల సంఖ్య సమానము \_\_\_\_\_.

**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 :** 70819114375 **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 :** 70819114375 **Question Type :** SA

Correct Marks : 4 Wrong Marks : 0

బిందువులు (1, 2, 6) మరియు (2, 5, 7) ల గుండా పోతూ  $4x - y + z = 15$  తలానికి లంబంగా వుండే తలం  $ax + by + cz + d = 0$  అనుకోండి. గసాభా  $(|a|, |b|, |c|) = 1$  అయ్యేటట్లుగా  $a, b, c, d \in \mathbb{Z}$  వుంటే  $|a + b + c + d| = \underline{\hspace{2cm}}$ .

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 : 70819114376 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  $4\sin^2 x - 8\sin x + 3 = 0$  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 : 70819114376 Question Type : SA

Correct Marks : 4 Wrong Marks : 0

అంతరము  $\left[-\frac{3\pi}{2}, \frac{7\pi}{2}\right]$  లో సమీకరణము  $4\sin^2 x - 8\sin x + 3 = 0$  యొక్క వాస్తవ సాధనల సంఖ్య           .

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 :** 70819114377 **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  $A_5 A_7 = 441$ , 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 :** 70819114377 **Question Type :** SA

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

$A_1, A_2, A_3, \dots$  ఒక ఆరోహణ గుణిత్రేణి అనుకొందాం.  $\frac{1}{A_4} + \frac{1}{A_8} = \frac{10}{63}$  మరియు  $A_5 A_7 = 441$ , అయితే  $3(A_2 + A_4) =$  \_\_\_\_\_.

**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>	708191514
<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>	708191794
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 31 Question Id : 70819114378 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 :**

70819147781. United Nations Educational, Scientific & Cultural Organization.

70819147782. United Nations Educational Security Cultural Organization.

70819147783. United Nations Entrance Site Calling Organization.

70819147784. United Nations Educational, Sustainable & Cultural Organization.

Question Number : 31 Question Id : 70819114378 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'UNESCO' ని వివరంగా వ్రాయుము ?

Options :

70819147781. యునైటెడ్ నేషన్స్ ఎడ్యుకేషనల్, సైన్టీఫిక్ ఎండ్ కల్చురల్ ఆర్గనైజేషన్

70819147782. యునైటెడ్ నేషన్స్ ఎడ్యుకేషనల్ సెక్యూరిటీ కల్చురల్ ఆర్గనైజేషన్

70819147783. యునైటెడ్ నేషన్స్ ఎస్ట్రెన్స్ సైట్ కాలింగ్ ఆర్గనైజేషన్

70819147784. యునైటెడ్ నేషన్స్ ఎడ్యుకేషనల్, సన్టేనబుల్ ఎండ్ కల్చురల్ ఆర్గనైజేషన్

Question Number : 32 Question Id : 70819114379 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1



List - I

List - II

(I) Hall of Nation

(a)



(II) Falling Water, Pennsylvania

(b)



(III) Petronas Tower

(c)



(IV) Secretariat

(d)



**Options :**

70819147785. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

70819147786. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819147787. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

Question Number : 32 Question Id : 70819114379 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

సరైన సమాధానాలను జోడించండి.

List - I

List - II

(I) హాల్ ఆఫ్ నేషన్

(a)



(II) జలపాతము, పెన్సిల్వేనియా

(b)



(III) పెట్రోనాస్ స్తంభం

(c)



(IV) సెక్రటేరియట్

(d)



Options :

70819147785. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

70819147786. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819147787. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

70819147788. (I)-(b), (II)-(a), (III)-(c), (IV)-(d)

**Question Number : 33 Question Id : 70819114380 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 :**

70819147789. (I)-(b), (II)-(c), (III)-(d), (IV)-(a)

70819147790. (I)-(b), (II)-(d), (III)-(c), (IV)-(a)

70819147791. (I)-(c), (II)-(a), (III)-(b), (IV)-(d)

70819147792. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

**Question Number : 33 Question Id : 70819114380 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

సరైన సమాధానాలను జోడించండి.

**List - I**

**List - II**

- |                      |                               |
|----------------------|-------------------------------|
| (I) కమ్ము            | (a) విక్టోరియా మెమోరియల్ హాల్ |
| (II) ఢిల్లీ          | (b) భద్రినాథ్ గుడి            |
| (III) ఫతేపూర్ సిక్రీ | (c) ఖిర్కీ మసీదు              |
| (IV) కోల్ కత్త       | (d) బులండ్ దర్వాజా            |

**Options :**

70819147789. (I)-(b), (II)-(c), (III)-(d), (IV)-(a)

70819147790. (I)-(b), (II)-(d), (III)-(c), (IV)-(a)

70819147791. (I)-(c), (II)-(a), (III)-(b), (IV)-(d)

70819147792. (I)-(b), (II)-(a), (III)-(d), (IV)-(c)

**Question Number : 34 Question Id : 70819114381 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

List - I

List - II

(I) Agra fort

(a)



(II) Atala Masjid

(b)



(III) Nalanda University

(c)



(IV) Jagannatha Temple

(d)



Options :

70819147793. (I)-(b), (II)-(c), (III)-(a), (IV)-(d)

70819147794. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

70819147795. (I)-(c), (II)-(a), (III)-(d), (IV)-(b)

70819147796. (I)-(b), (II)-(a), (III)-(c), (IV)-(d)

Question Number : 34 Question Id : 70819114381 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

సరియైన సమాధానాలతో జాబితా-I ను జాబితా-II తో జతపరుచుము.

జాబితా-I

జాబితా-II

(I) ఆగ్రా కోట

(a)



(II) అటాలా మసీదు

(b)



(III) నలంద విశ్వవిద్యాలయము

(c)



(IV) జగన్నాథ గుడి

(d)



Options :

70819147793. (I)-(b), (II)-(c), (III)-(a), (IV)-(d)

70819147794. (I)-(a), (II)-(b), (III)-(c), (IV)-(d)

70819147795. (I)-(c), (II)-(a), (III)-(d), (IV)-(b)

70819147796. (I)-(b), (II)-(a), (III)-(c), (IV)-(d)

**Question Number : 35 Question Id : 70819114382 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 :**

70819147797. (I)-(c), (II)-(d), (III)-(b), (IV)-(a)

70819147798. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819147799. (I)-(d), (II)-(b), (III)-(c), (IV)-(a)

70819147800. (I)-(b), (II)-(d), (III)-(a), (IV)-(c)

**Question Number : 35 Question Id : 70819114382 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

సరియైన సమాధానాలతో జాబితా-I ను జాబితా-II తో జతపరుచుము.

జాబితా-I

జాబితా-II

- |                   |              |
|-------------------|--------------|
| (I) యద్వింద్ర తోట | (a) మనాలి    |
| (II) విష్ణు గుడి  | (b) అమృత్సర్ |
| (III) హిడింబ గుడి | (c) పింజోర్  |
| (IV) హరి మందిరము  | (d) బునియార్ |

**Options :**

70819147797. (I)-(c), (II)-(d), (III)-(b), (IV)-(a)

70819147798. (I)-(c), (II)-(d), (III)-(a), (IV)-(b)

70819147799. (I)-(d), (II)-(b), (III)-(c), (IV)-(a)

70819147800. (I)-(b), (II)-(d), (III)-(a), (IV)-(c)

**Question Number : 36 Question Id : 70819114383 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 :**

70819147801. (I)-(a), (II)-(d), (III)-(b), (IV)-(c)

70819147802. (I)-(d), (II)-(c), (III)-(a), (IV)-(b)

70819147803. (I)-(d), (II)-(c), (III)-(b), (IV)-(a)

70819147804. (I)-(a), (II)-(b), (III)-(d), (IV)-(c)

Question Number : 36 Question Id : 70819114383 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

సరైన సమాధానాలతో జాబితా-I ను జాబితా-II తో జతపరుచుము.

జాబితా-I	జాబితా-II
(I) మెట్రోన్ గడ్ కోట	(a) హైదరాబాద్
(II) సిరి కోట	(b) కోల్ కత్తా
(III) గోల్కొండ కోట	(c) ఢిల్లీ
(IV) విలియమ్ కోట	(d) జోద్ పూర్

క్రింది ఐచ్ఛికాలలో సరియైన దానిని ఎనుకోండి.

Options :

70819147801. (I)-(a), (II)-(d), (III)-(b), (IV)-(c)

70819147802. (I)-(d), (II)-(c), (III)-(a), (IV)-(b)

70819147803. (I)-(d), (II)-(c), (III)-(b), (IV)-(a)

70819147804. (I)-(a), (II)-(b), (III)-(d), (IV)-(c)

Question Number : 37 Question Id : 70819114384 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 :

70819147805. B.V. Doshi

70819147806. Arundhati Roy

70819147807. Revati Kamat

70819147808. Bimal Patel

**Question Number : 37 Question Id : 70819114384 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'గాడ్ ఆఫ్ స్మార్ట్ థింగ్స్' అనే పుస్తకం ఏ భారత ఆర్కిటెక్ట్ చే రచించబడినది ?

**Options :**

70819147805. బి.వి. డోషి

70819147806. అరుంధతి రాయ్

70819147807. రేవతి కామత్

70819147808. బిమల్ పటేల్

**Question Number : 38 Question Id : 70819114385 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 :**

70819147809. Gujarat

70819147810. West Bengal

70819147811. Tamil Nadu

70819147812. Rajasthan

**Question Number : 38 Question Id : 70819114385 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'జరోఖా' అనే కిటికీ ఎక్కడ ఎక్కువగా కనిపిస్తుంది ?

**Options :**

70819147809. గుజరాత్

70819147810. పశ్చిమ బెంగాల్

70819147811. తమిళనాడు

70819147812. రాజస్థాన్

**Question Number : 39 Question Id : 70819114386 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 :**

70819147813. North-West side

70819147814. South-East side

70819147815. North side

70819147816. South-West side

Question Number : 39 Question Id : 70819114386 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

వర్షాకాలంలో వచ్చే రుతుపవనాలు భారత ఉపఖండానికి ఎటువైపునుండి వస్తాయి ?

Options :

70819147813. వాయవ్యం

70819147814. ఆగ్నేయం

70819147815. ఉత్తర దిశ

70819147816. నైరుతి

Question Number : 40 Question Id : 70819114387 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 :

70819147817. Bharat Bhavan in Bhopal

70819147818. LIC Building in Delhi

70819147819. Charminar in Hyderabad

70819147820. Victoria Memorial in Kolkata

Question Number : 40 Question Id : 70819114387 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

భారతదేశంలోని క్రింది భవనాల్లో ఏది ఇతర దేశపు ఆర్కిటెక్చర్ నమూనా కలిగి ఉంది ?

Options :

70819147817. భోపాల్లోని భారత్ భవన్

70819147818. ఢిల్లీలోని ఎల్.ఐ.సి. భవనం

70819147819. హైదరాబాద్లోని చార్మినార్

70819147820. కోల్కతాలోని విక్టోరియా మెమోరియల్

Question Number : 41 Question Id : 70819114388 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 :

70819147821.  $420 \times 590$  (mm  $\times$  mm)

70819147822.  $420 \times 594$  (mm  $\times$  mm)

70819147823.  $297 \times 420$  (mm  $\times$  mm)

70819147824.  $420 \times 592$  (mm  $\times$  mm)

Question Number : 41 Question Id : 70819114388 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

A2 ద్రాయింగ్ షీట్ యొక్క కొలతలు :

Options :

70819147821.  $420 \times 590$  (మి.మీ.  $\times$  మి.మీ.)

70819147822.  $420 \times 594$  (మి.మీ.  $\times$  మి.మీ.)

70819147823.  $297 \times 420$  (మి.మీ.  $\times$  మి.మీ.)

70819147824.  $420 \times 592$  (మి.మీ.  $\times$  మి.మీ.)

Question Number : 42 Question Id : 70819114389 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 :

70819147825. Chittor fort

70819147826. Jaigarh fort

70819147827. Bhangarh fort

70819147828. Amer fort

Question Number : 42 Question Id : 70819114389 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

“విక్టరీ టవర్” ఏ కోటకు సంబంధించింది :

Options :

70819147825. చిత్తూరు కోట

70819147826. జైగఢ్ కోట

70819147827. భన్గఢ్ కోట

70819147828. అమిర్ కోట

Question Number : 43 Question Id : 70819114390 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 :

70819147829. Sanjay Puri

70819147830. Vikram Lall

70819147831. Ashok Lall

70819147832. C. Sompura

Question Number : 43 Question Id : 70819114390 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ప్రముఖ దేవాలయం "అక్షరధామ్" ను రూపుదిద్దిన ఆర్కిటెక్ట్ ఎవరు ?

Options :

70819147829. సంజయ్ పూరి

70819147830. విక్రమ్ లాల్

70819147831. అశోక్ లాల్

70819147832. సి.సోంపుర

**Question Number : 44 Question Id : 70819114391 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'Volume Zero' Documentary is on which Architect ?

**Options :**

70819147833. Charles Correa

70819147834. Richard Mier

70819147835. Jasbir Sachdev

70819147836. Ranjit Sabliki

**Question Number : 44 Question Id : 70819114391 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

'వాల్యూమ్ జీరో' అనే ఆత్మకథా చిత్రం ఏ ఆర్కిటెక్ట్ గురించి ?

**Options :**

70819147833. చార్లెస్ కొరియా

70819147834. రిచార్డ్ మియర్

70819147835. జస్టిర్ సచ్ దేవ్

70819147836. రంజిత్ సబ్లికి

Question Number : 45 Question Id : 70819114392 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

'Agenda 21' is declaration related with :

Options :

70819147837. Climate change

70819147838. Global warming

70819147839. Sustainable development

70819147840. Smart city

Question Number : 45 Question Id : 70819114392 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

“ఎజెండా 21” అనే ప్రకటన దేనికి సంబంధించినది ?

Options :

70819147837. వాతావరణ మార్పు

70819147838. భూతాపం

70819147839.

70819147840. స్కార్ట్ సిటీ

Question Number : 46 Question Id : 70819114393 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 :

70819147841. Karnataka

70819147842. Orissa

70819147843. Maharashtra

70819147844. Uttar Pradesh

Question Number : 46 Question Id : 70819114393 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

బంగారు గనులు ఇండియాలోని ఏ రాష్ట్రంలో ఉన్నాయి ?

Options :

70819147841. కర్ణాటక

70819147842. ఒడిశా

70819147843. మహారాష్ట్ర

Question Number : 47 Question Id : 70819114394 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 :

70819147845. North

70819147846. South

70819147847. East

70819147848. West

Question Number : 47 Question Id : 70819114394 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

దక్షిణ అర్ధగోళంలో నీడలేని వెలుతురు ఎటువైపు నుంచి వస్తుంది ?

Options :

70819147845. ఉత్తర దిశ

70819147846. దక్షిణ దిశ

70819147847. తూర్పు దిశ

70819147848. పడమర దిశ

Question Number : 48 Question Id : 70819114395 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 :

70819147849. B.V. Doshi

70819147850. Laurie Baker

70819147851. Raj Rewal

70819147852. Achyut Kanvinde

Question Number : 48 Question Id : 70819114395 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

2018 వ సంవత్సరంలో ప్రిడ్జ్ కర్ బహుమతిని గెలుచుకున్న మొదట భారతీయ ఆర్కిటెక్ట్ ఎవరు ?

Options :

70819147849. బి.వి.దోషి

70819147850. లారీ బేకర్

70819147851. రాజ్ రెవాల

70819147852. అచ్యుత్ కన్విందే

Question Number : 49 Question Id : 70819114396 Question Type : MCQ Option Shuffling : Yes

**Is Question Mandatory : No**

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

Word "Bungalow" has originated from :

**Options :**

70819147853. Bengalurm

70819147854. Banaras

70819147855. Bengal

70819147856. Bari

**Question Number : 49 Question Id : 70819114396 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

"బంగళా" అనే పదము దేనినుంచి వుట్టింది :

**Options :**

70819147853. బెంగలూర్మ్

70819147854. బనారస్

70819147855. బెంగాల్

70819147856. బరి

**Question Number : 50 Question Id : 70819114397 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 :**

70819147857. Laurie Baker

70819147858. Louis Kahn

70819147859. Lutyen

70819147860. Le Corbusier

**Question Number : 50 Question Id : 70819114397 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

IIM - అహ్మదాబాద్ భవనాన్ని రూపుదిద్దిన ఆర్కిటెక్ట్ ఎవరు ?

**Options :**

70819147857. లారీ బేకర్

70819147858. లాయి ఖాన్

70819147859. ల్యు టేన్

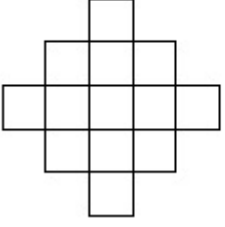
70819147860. లీ-కార్బుజియర్

**Question Number : 51 Question Id : 70819114398 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 :**

70819147861. 14

70819147862. 13

70819147863. 15

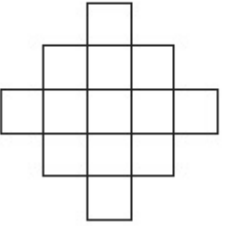
70819147864. 18

**Question Number : 51 Question Id : 70819114398 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

క్రింద ఇచ్చిన చిత్రంలో ఎన్ని చదరాలు ఉన్నాయి ?



**Options :**

70819147861. 14

70819147862. 13

70819147863. 15

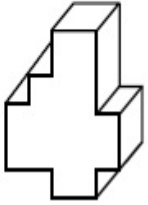
70819147864. 18

Question Number : 52 Question Id : 70819114399 Question Type : MCQ Option Shuffling : Yes

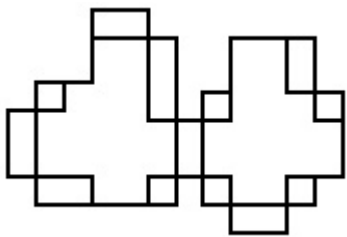
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

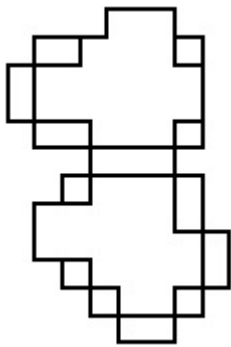
A drawing is provided with all the folds to construct the following three Dimensional object.  
Select the correct one.



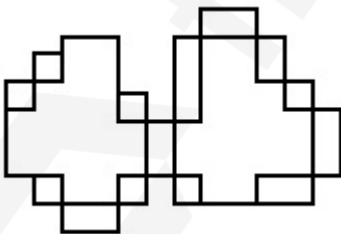
Options :



70819147865.

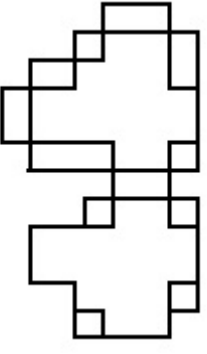


70819147866.



70819147867.

70819147868.

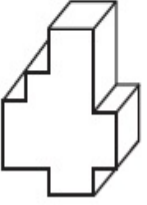


Question Number : 52 Question Id : 70819114399 Question Type : MCQ Option Shuffling : Yes

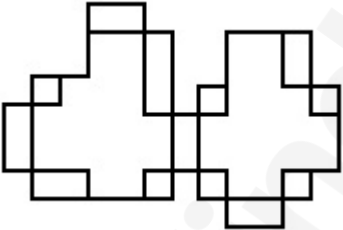
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

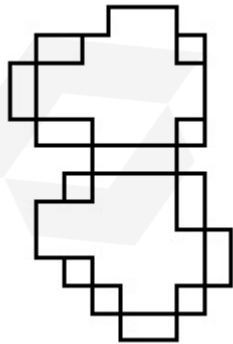
క్రింది 3-డి బొమ్మన నిర్మించడానికి అవసరమైన అన్ని మడతలకు సంబంధించి చిత్రాలు క్రిందినీయబడినవి.  
వాటిలో సరియైన దాన్ని ఎన్నుకోండి.



Options :

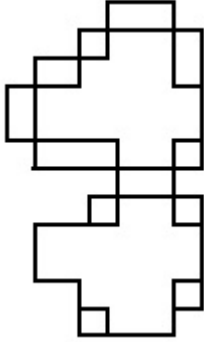
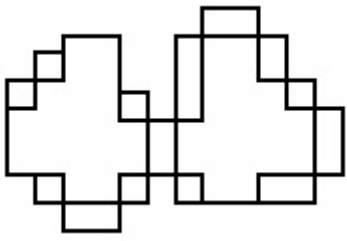


70819147865.



70819147866.

70819147867.



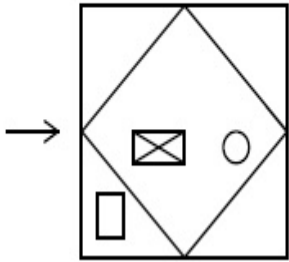
70819147868.

**Question Number : 53 Question Id : 70819114400 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 view looking in the direction of arrow, amongst the answer figures.

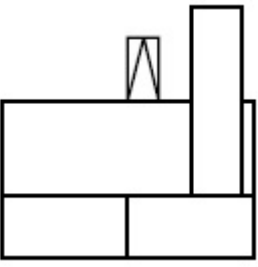


**Options :**

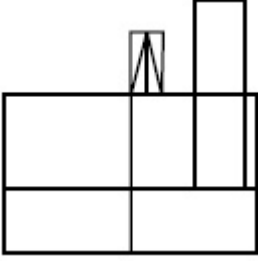


70819147869.

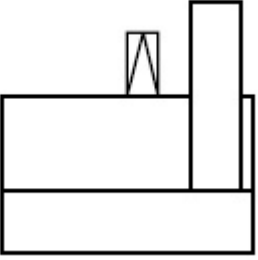
70819147870.



70819147871.



70819147872.

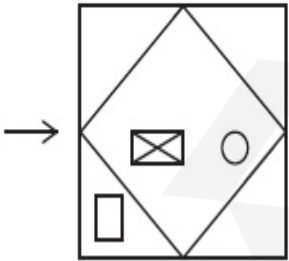


**Question Number : 53 Question Id : 70819114400 Question Type : MCQ Option Shuffling : Yes**

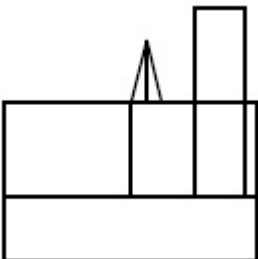
**Is Question Mandatory : No**

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

క్రింద సమస్యలో ఇచ్చిన బొమ్మ ఒక వస్తువును పై నుండి చూసినపుడు కనిపించే భాగాన్ని చూపుతుంది. బాణపు గుర్తు సూచించిన దిశలో సరిగ్గా చూసినపుడు కనిపించేదాన్ని సమాధానపు బొమ్మల్లో గుర్తించుము.

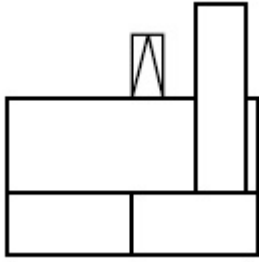


**Options :**

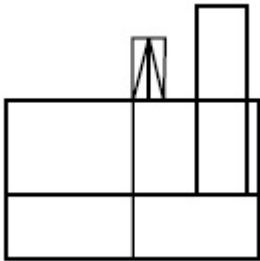


70819147869.

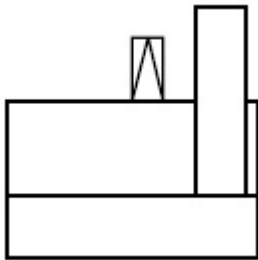
70819147870.



70819147871.



70819147872.

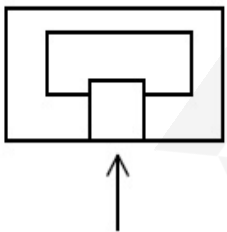


**Question Number : 54 Question Id : 70819114401 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

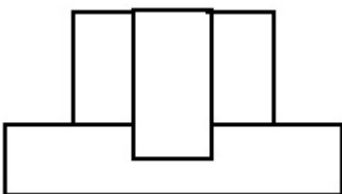
**Correct Marks : 4 Wrong Marks : 1**

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

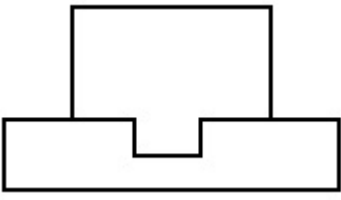


**Options :**

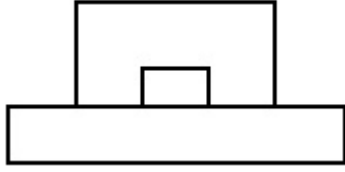
70819147873.



70819147874.



70819147875.



70819147876.

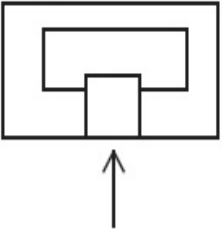


Question Number : 54 Question Id : 70819114401 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

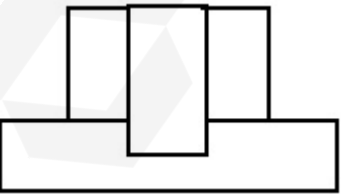
Correct Marks : 4 Wrong Marks : 1

క్రింది సమస్యలో ఇచ్చిన టొమ్మ ఒక వస్తువును పై నుంచి చూసినపుడు కనిపించే భాగాన్ని చూపుతుంది. బాణపు గుర్తు చూపిన దిశలో కనిపించే దాన్ని క్రింది జవాబు పటాల్లో గుర్తించండి.

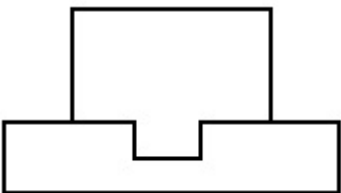


Options :

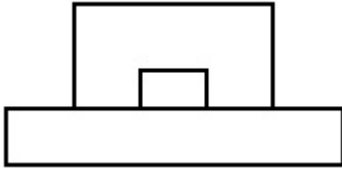
70819147873.



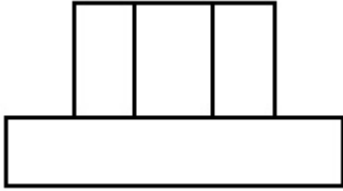
70819147874.



70819147875.



70819147876.

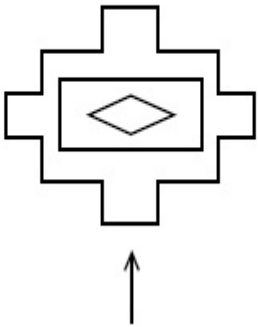


**Question Number : 55 Question Id : 70819114402 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

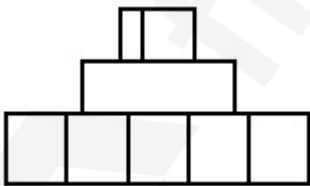
**Correct Marks : 4 Wrong Marks : 1**

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

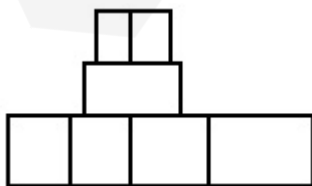


**Options :**

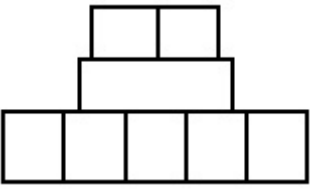
70819147877.



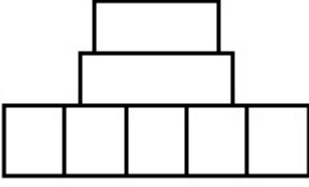
70819147878.



70819147879.



70819147880.

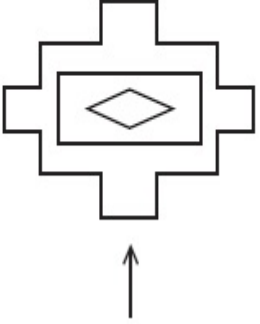


**Question Number : 55 Question Id : 70819114402 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

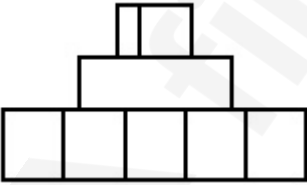
**Correct Marks : 4 Wrong Marks : 1**

క్రింది సమస్యలో ఇచ్చిన టొమ్మ ఒక వస్తువును పై నుంచి చూసినపుడు కనిపించే భాగాన్ని చూపుతుంది. బాణపు గుర్తు చూపిన దిశలో కనిపించే దాన్ని క్రింది జవాబు పటాల్లో గుర్తించండి.

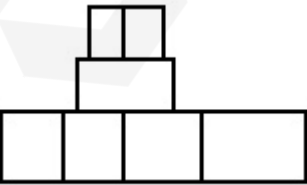


**Options :**

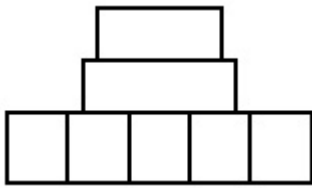
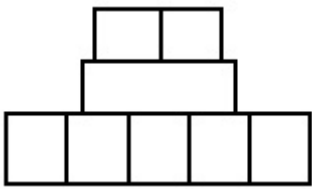
70819147877.



70819147878.



70819147879.



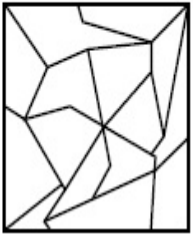
70819147880.

**Question Number : 56 Question Id : 70819114403 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 :**

70819147881.



70819147882.



70819147883.



70819147884.

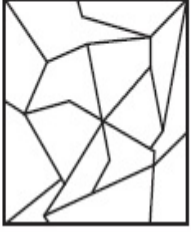


Question Number : 56 Question Id : 70819114403 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఈ క్రింద ఉన్న బొమ్మలో ఒక ఆకారం అదే కొలత మరియు అదే దిక్కున దాగి ఉంది. జవాబులలో నుంచి దానిని గుర్తించండి.



Options :

70819147881.



70819147882.



70819147883.



70819147884.

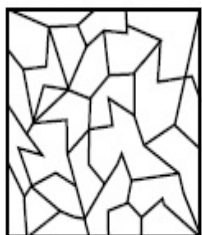


Question Number : 57 Question Id : 70819114404 Question Type : MCQ Option Shuffling : Yes

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 :

70819147885.



70819147886.



70819147887.



70819147888.

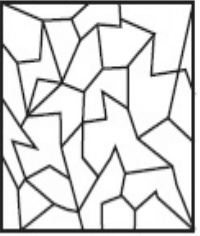


**Question Number : 57 Question Id : 70819114404 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

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

ఈ క్రింద ఉన్న బొమ్మలో ఒక ఆకారం అదే కొలత మరియు అదే దిక్కున దాగి ఉంది. జవాబులలో నుంచి దానిని గుర్తించండి.



**Options :**

70819147885.



70819147886.



70819147887.



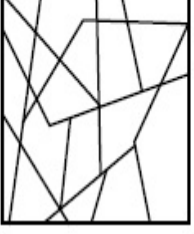
70819147888.




Question Number : 58 Question Id : 70819114405 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 :

70819147889. 

70819147890. 

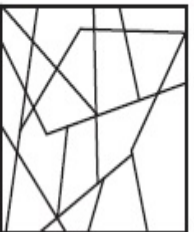
70819147891. 

70819147892. 

Question Number : 58 Question Id : 70819114405 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఈ క్రింద ఉన్న బొమ్మలో ఒక ఆకారం అదే కొలత మరియు అదే దిక్కున దాగి ఉంది. జవాబులలో నుంచి దానిని గుర్తించండి.



Options :

70819147889.



70819147890.



70819147891.



70819147892.

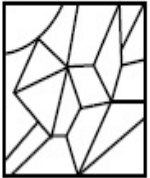


Question Number : 59 Question Id : 70819114406 Question Type : MCQ Option Shuffling : Yes

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 :

70819147893.



70819147894.



70819147895.



70819147896.

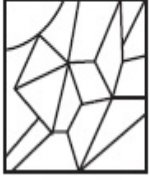


Question Number : 59 Question Id : 70819114406 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఈ క్రింద ఉన్న బొమ్మలో ఒక ఆకారం అదే కొలత మరియు అదే దిక్కున దాగి ఉంది. జవాబులలో నుంచి దానిని గుర్తించండి.



Options :

70819147893.

70819147894.

70819147895.

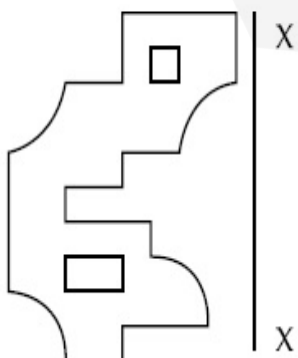
70819147896.

Question Number : 60 Question Id : 70819114407 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

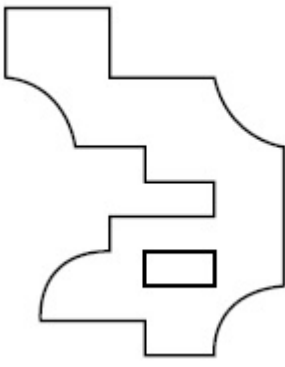
Correct Marks : 4 Wrong Marks : 1

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

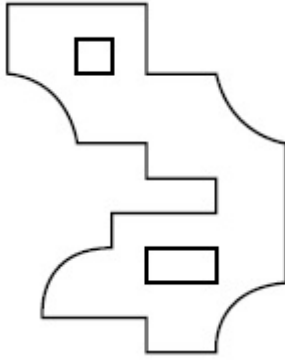


Options :

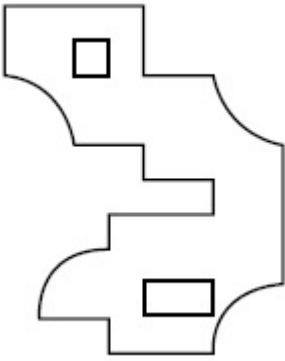
70819147897.



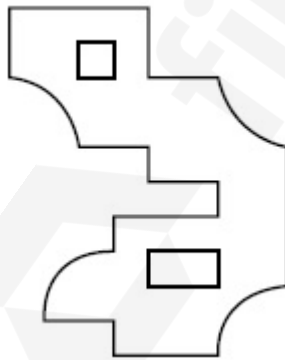
70819147898.



70819147899.



70819147900.

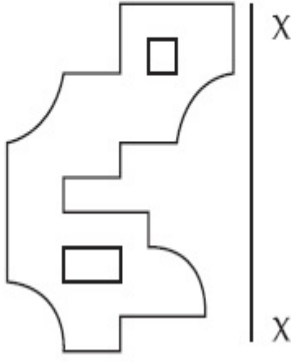


Question Number : 60 Question Id : 70819114407 Question Type : MCQ Option Shuffling : Yes

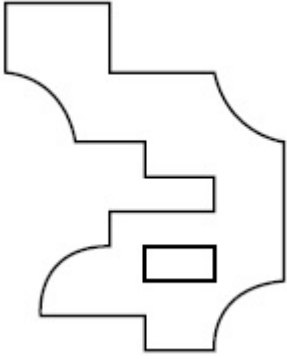
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

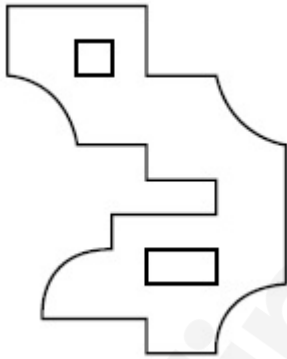
ఈ క్రింద ఉన్న బొమ్మను X-X ఆధారముగా అద్దంలో చూచినప్పుడు కనిపించే దర్పణ ప్రతిబింబాన్ని జవాబులలో గుర్తించండి.



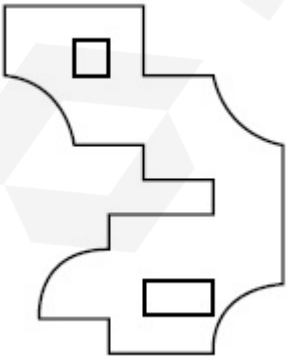
Options :



70819147897.

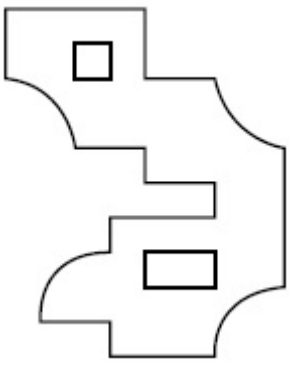


70819147898.



70819147899.

70819147900.

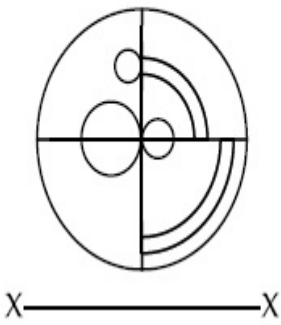


Question Number : 61 Question Id : 70819114408 Question Type : MCQ Option Shuffling : Yes

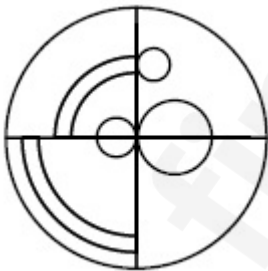
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

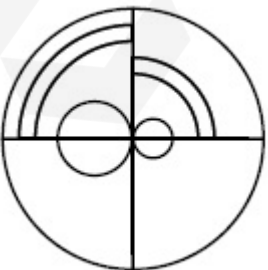
Which one of the answer figures is the correct mirror image of the problem figure with respect to X-X ?



Options :

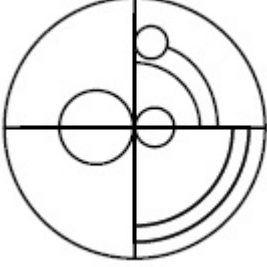
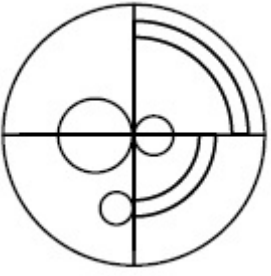


70819147901.



70819147902.

70819147903.



70819147904.

Question Number : 61 Question Id : 70819114408 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

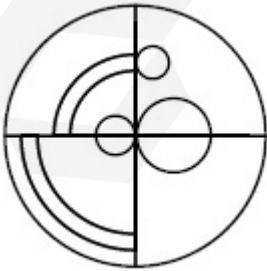
Correct Marks : 4 Wrong Marks : 1

ఈ క్రింద ఇచ్చిన బొమ్మను X-X ఆధారముగా అద్దంలో చూచినప్పుడు కనిపించే దర్పణ ప్రతిబింబాన్ని జవాబులలో గుర్తించండి.



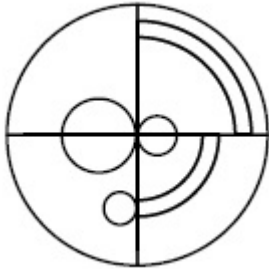
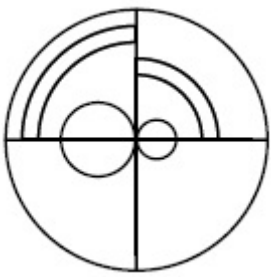
X ————— X

Options :

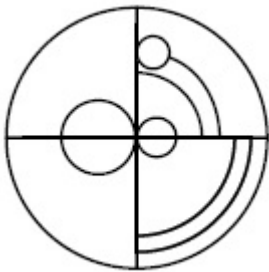


70819147901.

70819147902.



70819147903.



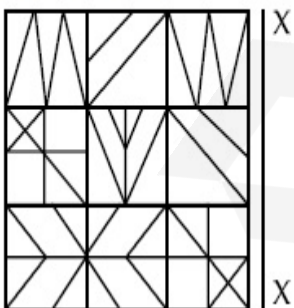
70819147904.

**Question Number : 62 Question Id : 70819114409 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

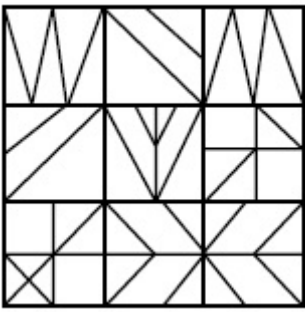
**Correct Marks : 4 Wrong Marks : 1**

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

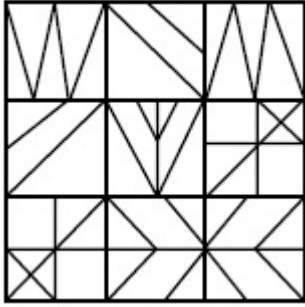


**Options :**

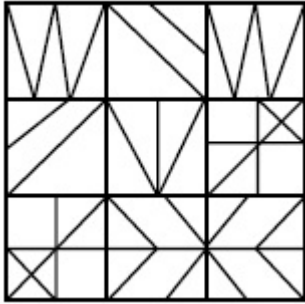
70819147905.



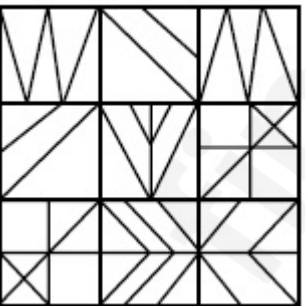
70819147906.



70819147907.



70819147908.

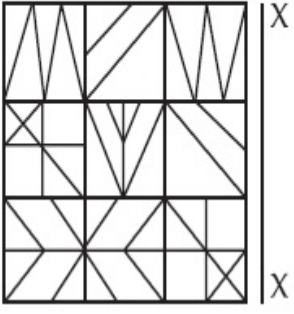


Question Number : 62 Question Id : 70819114409 Question Type : MCQ Option Shuffling : Yes

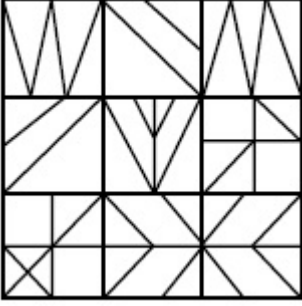
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

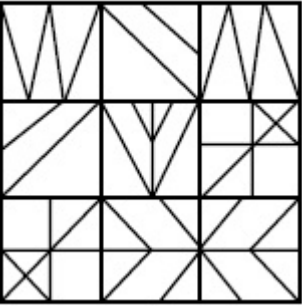
ఈ క్రింద ఇచ్చిన బొమ్మను X-X ఆధారముగా అడ్డంలో చూచినప్పుడు కనిపించే దర్పణ ప్రతిబింబం గుర్తించండి.



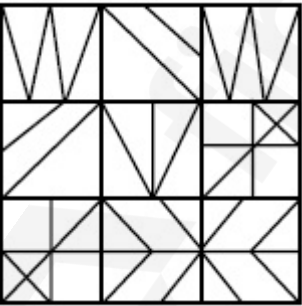
Options :



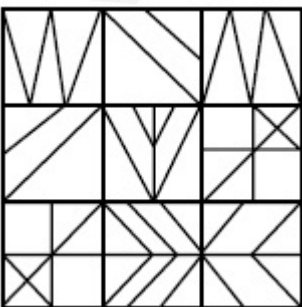
70819147905.



70819147906.



70819147907.



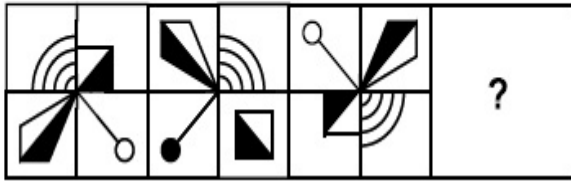
70819147908.

Question Number : 63 Question Id : 70819114410 Question Type : MCQ Option Shuffling : Yes

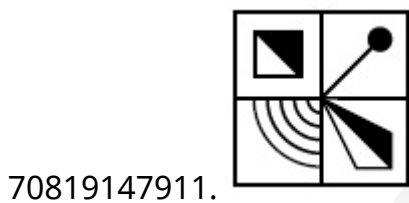
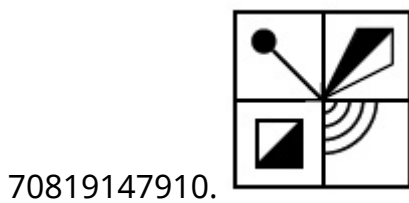
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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



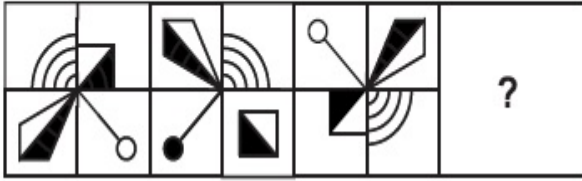
Options :



Question Number : 63 Question Id : 70819114410 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

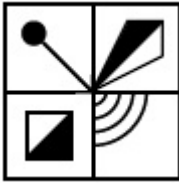


Options :

70819147909.



70819147910.



70819147911.



70819147912.

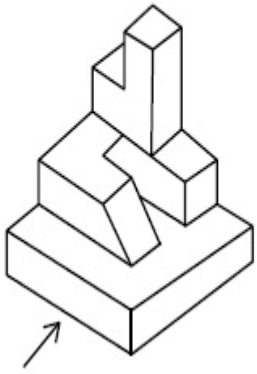


Question Number : 64 Question Id : 70819114411 Question Type : MCQ Option Shuffling : Yes

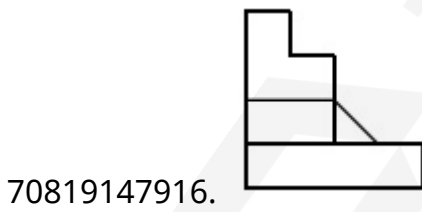
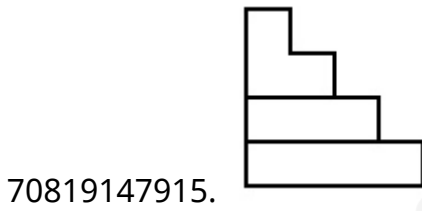
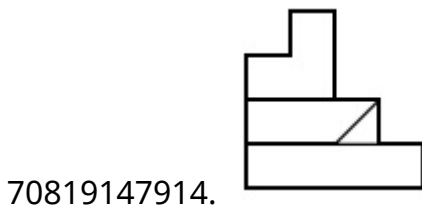
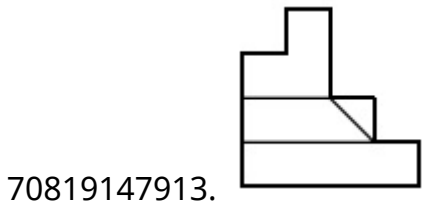
Is Question Mandatory : No

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 :

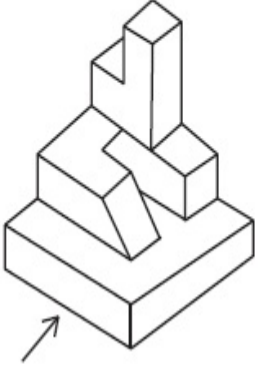


Question Number : 64 Question Id : 70819114411 Question Type : MCQ Option Shuffling : Yes

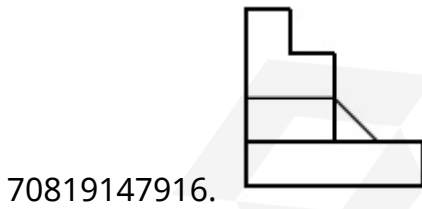
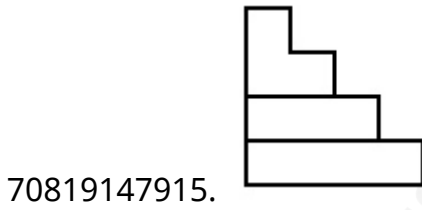
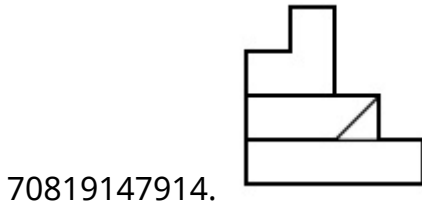
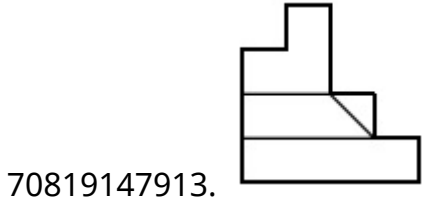
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.



Options :



Question Number : 65 Question Id : 70819114412 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

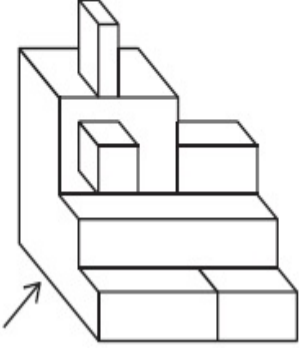
Correct Marks : 4 Wrong Marks : 1



Question Number : 65 Question Id : 70819114412 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

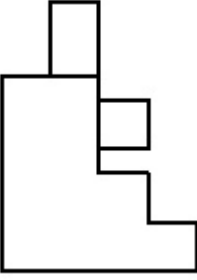
Correct Marks : 4 Wrong Marks : 1

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

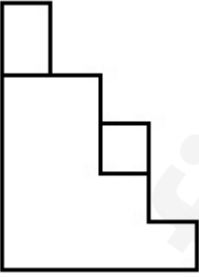


Options :

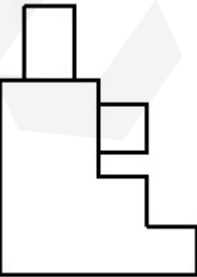
70819147917.



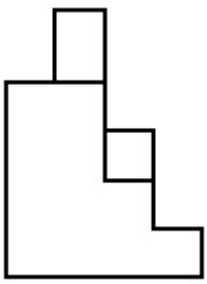
70819147918.



70819147919.



70819147920.

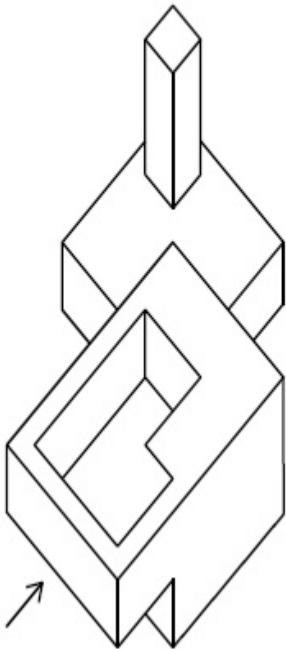


Question Number : 66 Question Id : 70819114413 Question Type : MCQ Option Shuffling : Yes

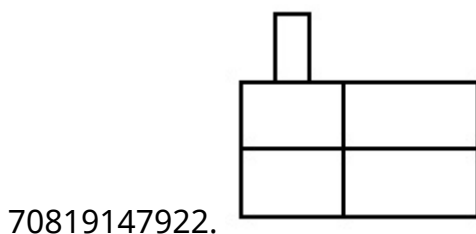
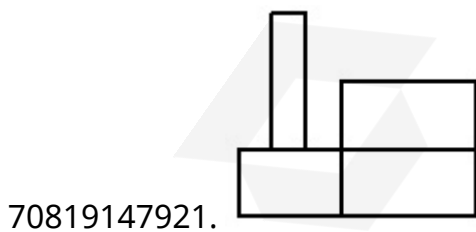
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

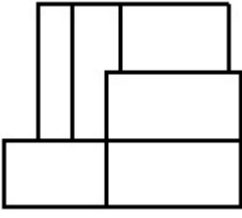
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, amongst the answer figures.



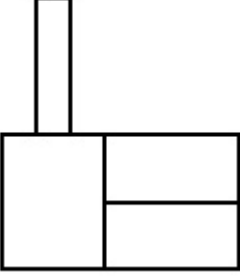
Options :



70819147923.



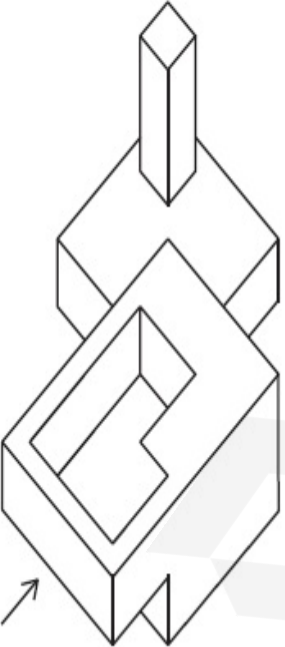
70819147924.



Question Number : 66 Question Id : 70819114413 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

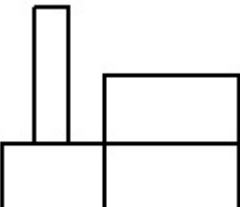
Correct Marks : 4 Wrong Marks : 1

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

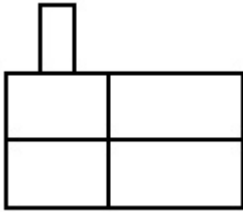


Options :

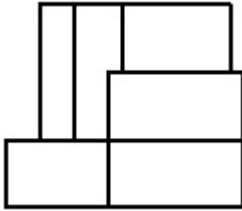
70819147921.



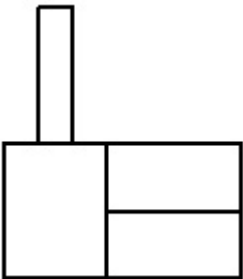
70819147922.



70819147923.



70819147924.

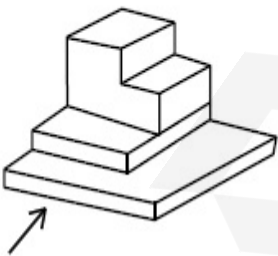


**Question Number : 67 Question Id : 70819114414 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

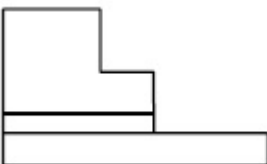
**Correct Marks : 4 Wrong Marks : 1**

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

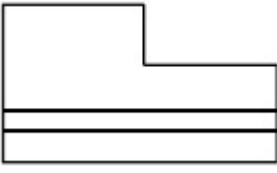


**Options :**

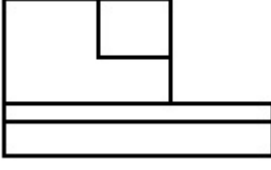
70819147925.



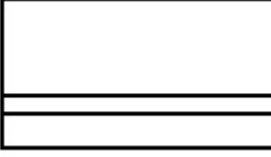
70819147926.



70819147927.



70819147928.

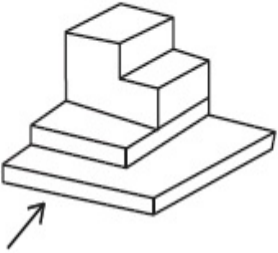


**Question Number : 67 Question Id : 70819114414 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

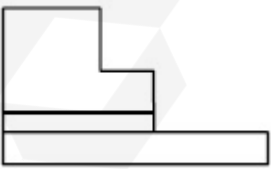
**Correct Marks : 4 Wrong Marks : 1**

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

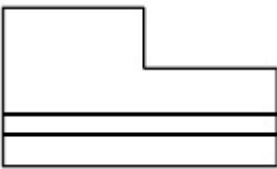


**Options :**

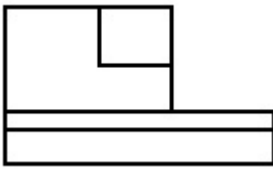
70819147925.



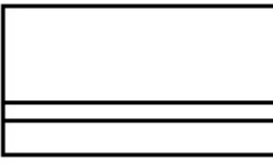
70819147926.



70819147927.



70819147928.

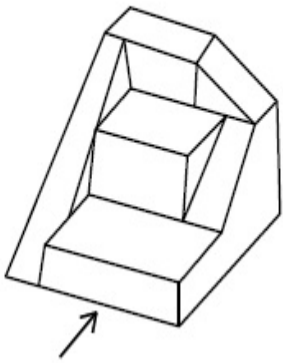


**Question Number : 68 Question Id : 70819114415 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

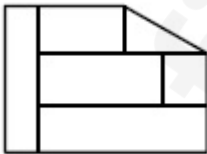
**Correct Marks : 4 Wrong Marks : 1**

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

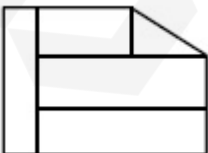


**Options :**

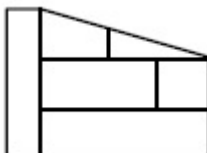
70819147929.



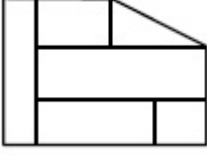
70819147930.



70819147931.



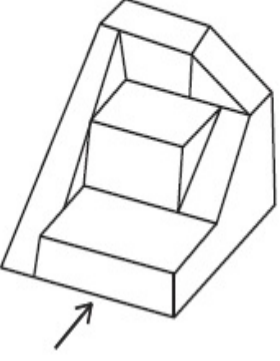
70819147932.



**Question Number : 68 Question Id : 70819114415 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

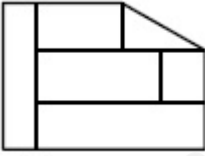
**Correct Marks : 4 Wrong Marks : 1**

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

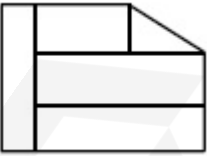


**Options :**

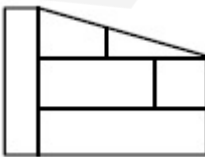
70819147929.



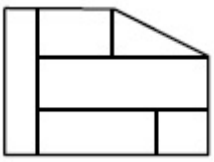
70819147930.



70819147931.



70819147932.

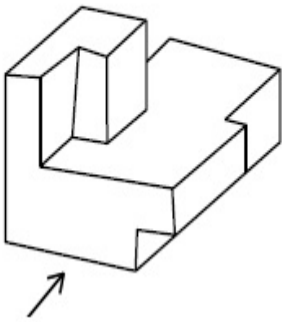


Question Number : 69 Question Id : 70819114416 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

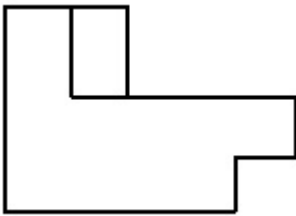
Correct Marks : 4 Wrong Marks : 1

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

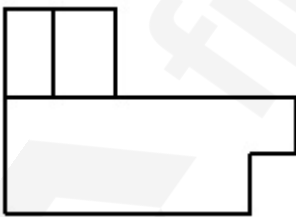


Options :

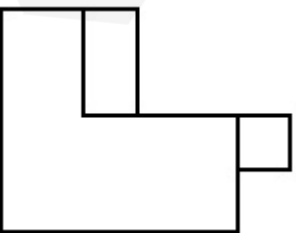
70819147933.



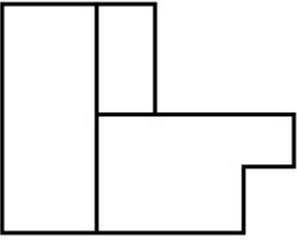
70819147934.



70819147935.



70819147936.

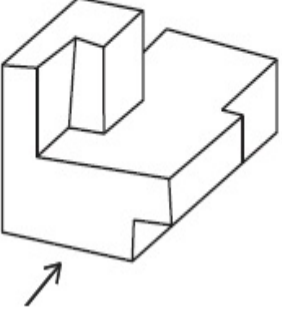


**Question Number : 69 Question Id : 70819114416 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

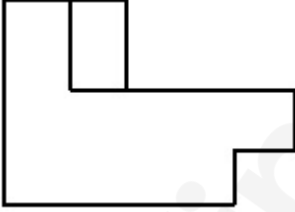
**Correct Marks : 4 Wrong Marks : 1**

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

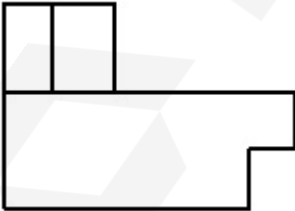


**Options :**

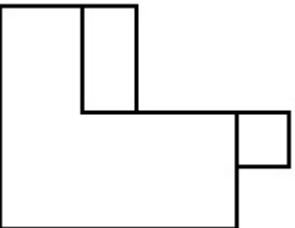
70819147933.

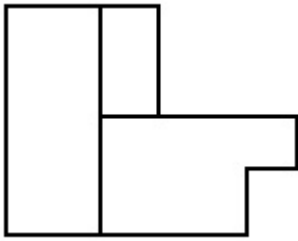


70819147934.



70819147935.





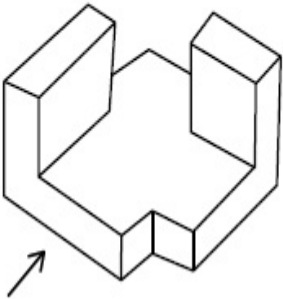
70819147936.

**Question Number : 70 Question Id : 70819114417 Question Type : MCQ Option Shuffling : Yes**

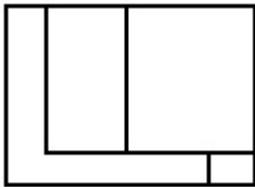
**Is Question Mandatory : No**

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

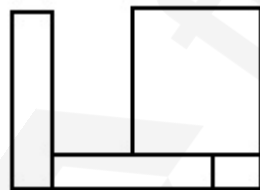
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, amongst the answer figures.



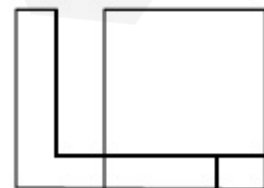
**Options :**



70819147937.

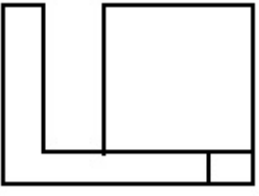


70819147938.



70819147939.

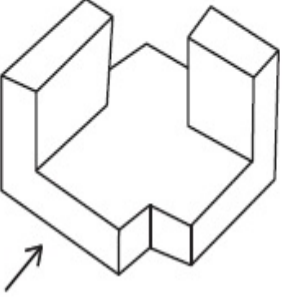
70819147940.



**Question Number : 70 Question Id : 70819114417 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

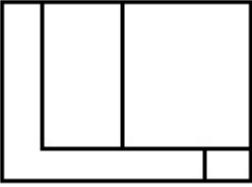
**Correct Marks : 4 Wrong Marks : 1**

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

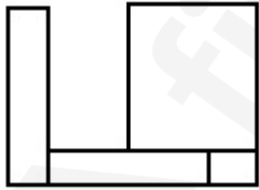


**Options :**

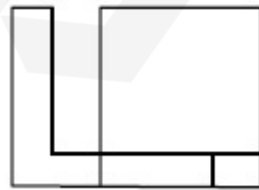
70819147937.



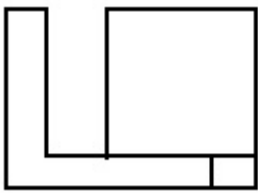
70819147938.



70819147939.



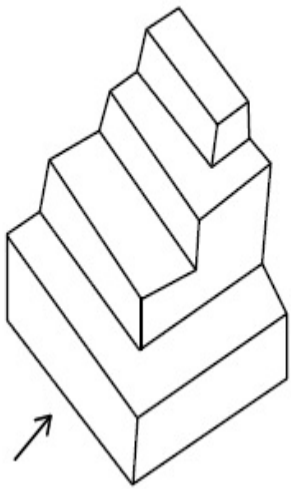
70819147940.



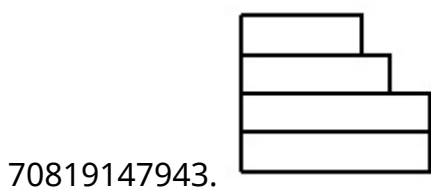
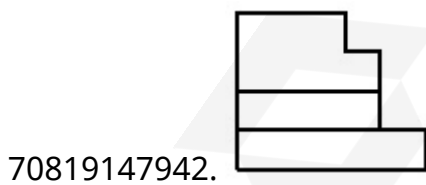
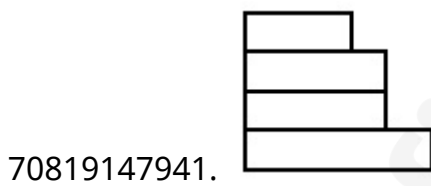
**Question Number : 71 Question Id : 70819114418 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

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

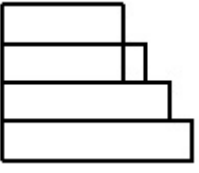
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, amongst the answer figures.



**Options :**



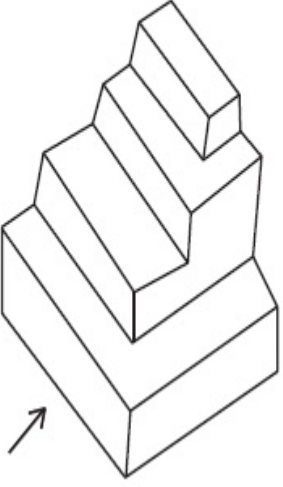
70819147944.



Question Number : 71 Question Id : 70819114418 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

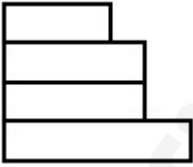
Correct Marks : 4 Wrong Marks : 1

ఒక వస్తువును ఒక వైపునుంచి చూసినప్పుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినప్పుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

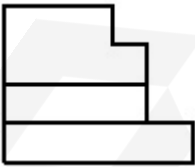


Options :

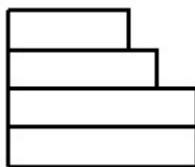
70819147941.



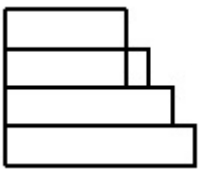
70819147942.



70819147943.



70819147944.

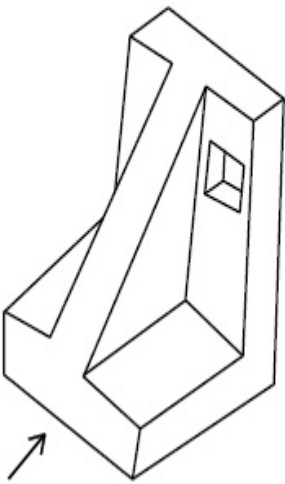


Question Number : 72 Question Id : 70819114419 Question Type : MCQ Option Shuffling : Yes

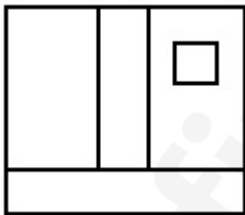
Is Question Mandatory : No

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.



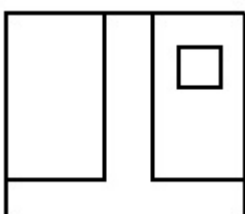
Options :



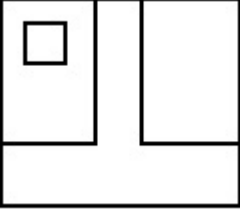
70819147945.



70819147946.



70819147947.



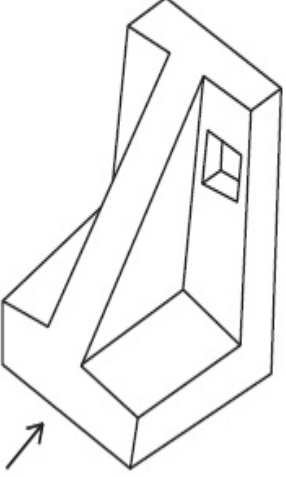
70819147948.

**Question Number : 72 Question Id : 70819114419 Question Type : MCQ Option Shuffling : Yes**

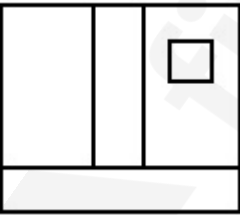
**Is Question Mandatory : No**

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

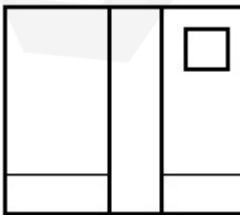
ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.



**Options :**

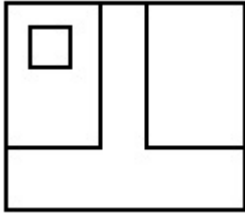
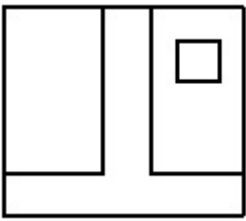


70819147945.



70819147946.

70819147947.



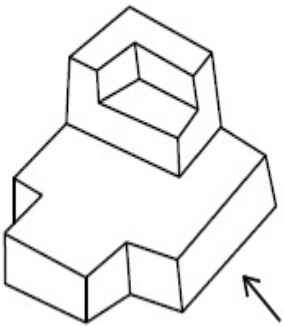
70819147948.

**Question Number : 73 Question Id : 70819114420 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

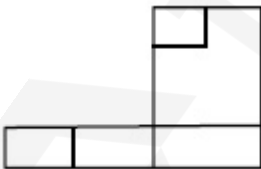
**Correct Marks : 4 Wrong Marks : 1**

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

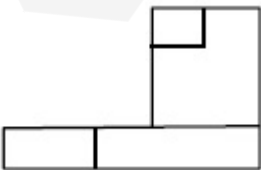


**Options :**

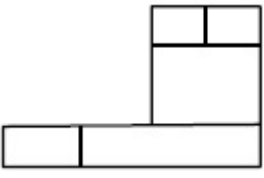
70819147949.



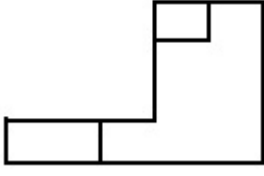
70819147950.



70819147951.



70819147952.

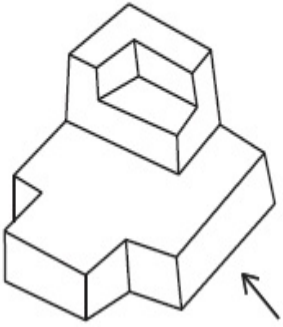


**Question Number : 73 Question Id : 70819114420 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**

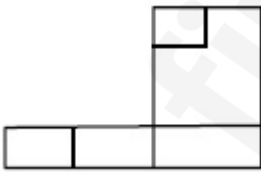
**Correct Marks : 4 Wrong Marks : 1**

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

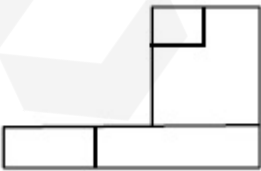


**Options :**

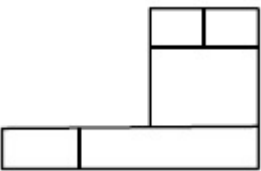
70819147949.



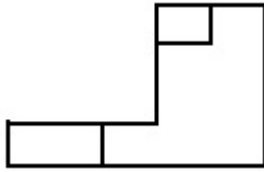
70819147950.



70819147951.



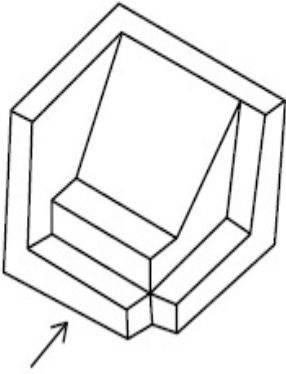
70819147952.



**Question Number : 74 Question Id : 70819114421 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No**

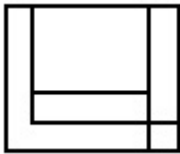
**Correct Marks : 4 Wrong Marks : 1**

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

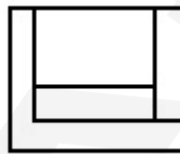


**Options :**

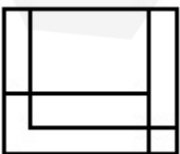
70819147953.



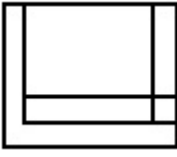
70819147954.



70819147955.



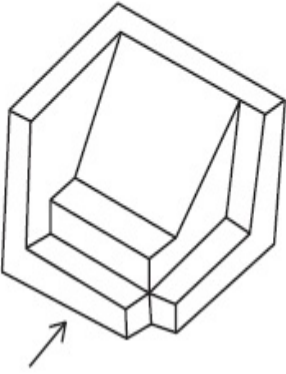
70819147956.



Question Number : 74 Question Id : 70819114421 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

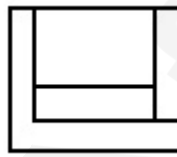


Options :

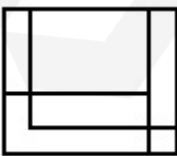
70819147953.



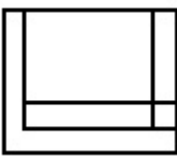
70819147954.



70819147955.



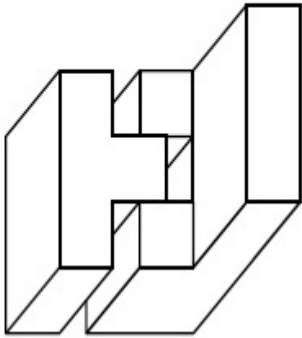
70819147956.



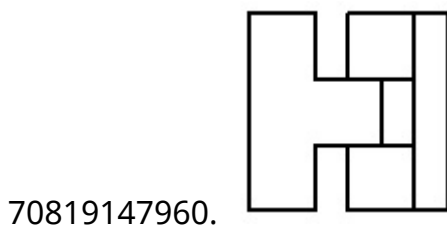
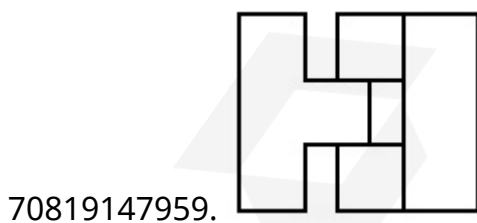
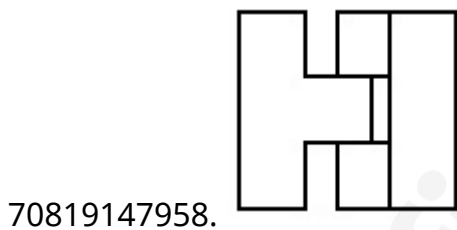
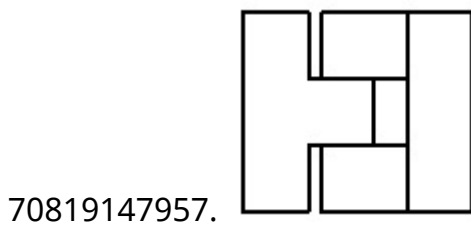
Question Number : 75 Question Id : 70819114422 Question Type : MCQ Option Shuffling : Yes  
 Is Question Mandatory : No

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 :

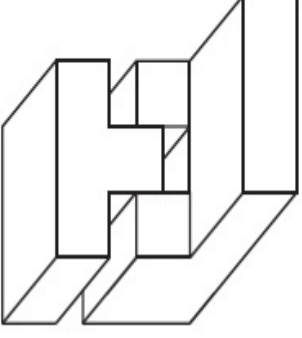


Question Number : 75 Question Id : 70819114422 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

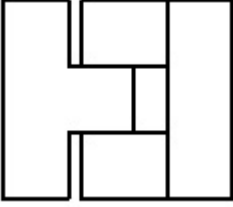
Correct Marks : 4 Wrong Marks : 1

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.

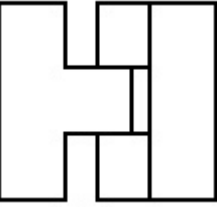


Options :

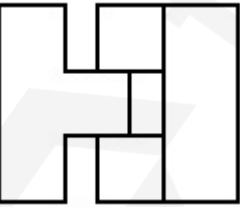
70819147957.



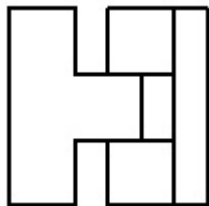
70819147958.



70819147959.



70819147960.

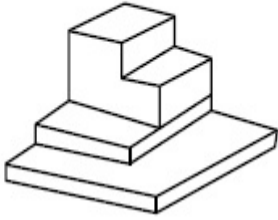


Question Number : 76 Question Id : 70819114423 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

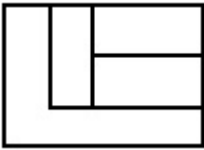
Correct Marks : 4 Wrong Marks : 1

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



Options :

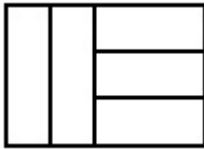
70819147961.



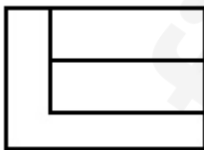
70819147962.



70819147963.



70819147964.

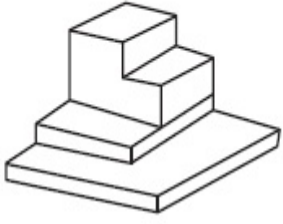


Question Number : 76 Question Id : 70819114423 Question Type : MCQ Option Shuffling : Yes

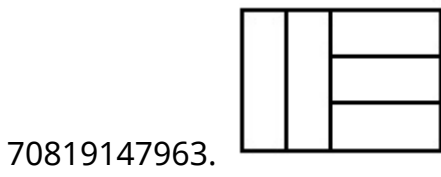
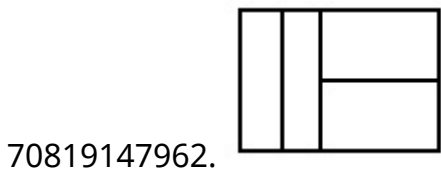
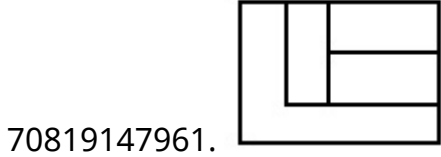
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.



Options :

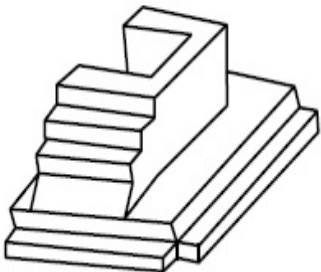


Question Number : 77 Question Id : 70819114424 Question Type : MCQ Option Shuffling : Yes

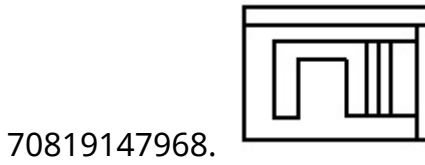
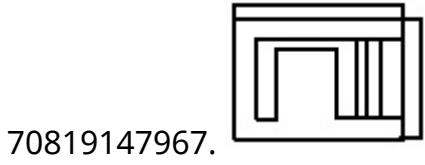
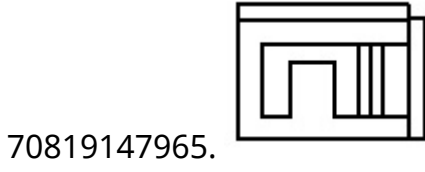
Is Question Mandatory : No

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 :

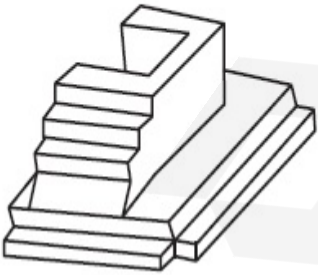


Question Number : 77 Question Id : 70819114424 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

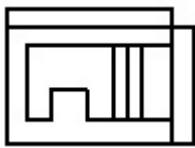
ఒక వస్తువును ఒక వైపునుంచి చూసినపుడు కనిపించే దాన్ని క్రింది 3-డి పటం చూపుతుంది. బాణం గుర్తు చూపిన దిశలో నుంచి చూసినపుడు కనిపించే బొమ్మను క్రింది జవాబు బొమ్మల్లోంచి గుర్తించండి.



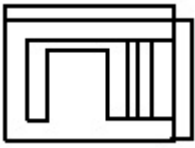
Options :



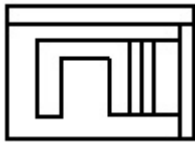
70819147966.



70819147967.



70819147968.



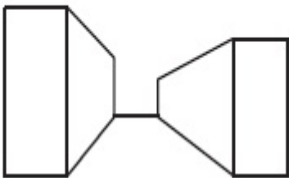
Question Number : 78 Question Id : 70819114425 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

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

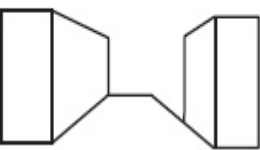
(A)



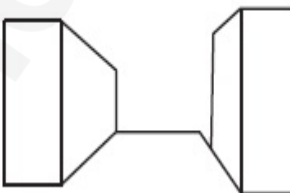
(B)



(C)



(D)



Options :

70819147969. (A) and (B)

70819147970. (B) and (C)

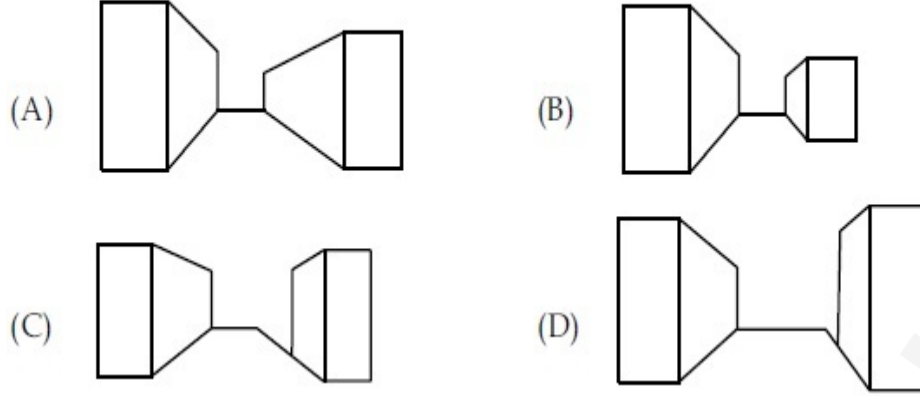
70819147971. (C) and (D)

70819147972. (D) and (A)

Question Number : 78 Question Id : 70819114425 Question Type : MCQ Option Shuffling : Yes  
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

ఈ క్రింద ఇవ్వబడిన భవనాల మేళనలో మన కళ్ళకు అతి తక్కువ శాతం ఒత్తిడి కలిగించేవి గుర్తించండి.



Options :

70819147969. (A) మరియు (B)

70819147970. (B) మరియు (C)

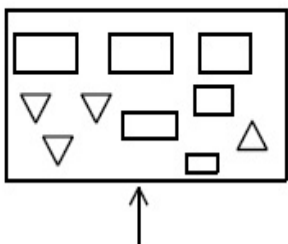
70819147971. (C) మరియు (D)

70819147972. (D) మరియు (A)


Question Number : 79 Question Id : 70819114426 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 :

70819147973. 

70819147974. 

70819147975. 

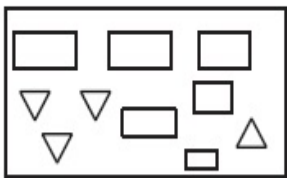
70819147976. 

**Question Number : 79 Question Id : 70819114426 Question Type : MCQ Option Shuffling : Yes**

**Is Question Mandatory : No**


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

క్రింది సమస్యలో ఇచ్చిన బొమ్మ ఒక వస్తువును పై నుండి చూసినపుడు కనిపించే భాగాన్ని చూపుతుంది. బాణపు గుర్తు చూపిన దిశలో సరిగ్గా చూసినపుడు కనిపించేదాన్ని క్రింది సమాధానపు బొమ్మల్లో గుర్తించండి.

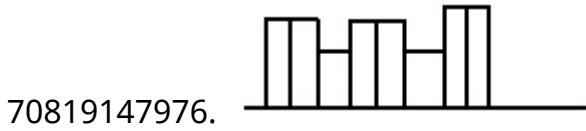


**Options :**

70819147973. 

70819147974. 

70819147975. 

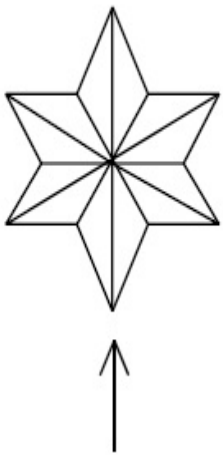


Question Number : 80 Question Id : 70819114427 Question Type : MCQ Option Shuffling : Yes

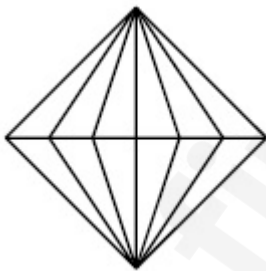
Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

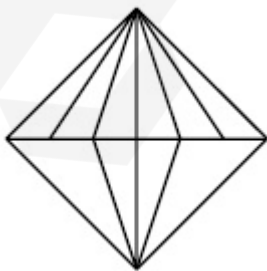
The problem figure shows the top view of an object. Identify the correct elevation amongst the answer figures looking in the direction of arrow.



Options :

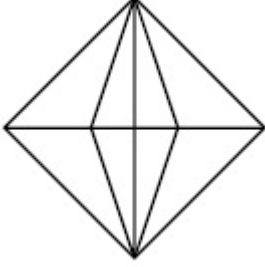
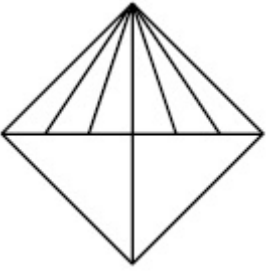


70819147977.



70819147978.

70819147979.



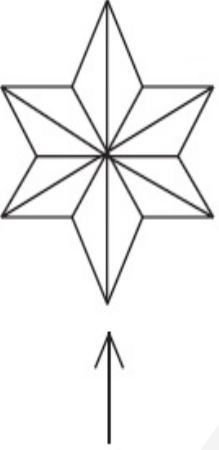
70819147980.

Question Number : 80 Question Id : 70819114427 Question Type : MCQ Option Shuffling : Yes

Is Question Mandatory : No

Correct Marks : 4 Wrong Marks : 1

క్రింది సమస్యలో ఇచ్చిన బొమ్మ ఒక వస్తువును పై నుండి చూసినపుడు కనిపించే భాగాన్ని చూపుతుంది. బాణపు గుర్తు చూపిన దిశలో సరిగ్గా చూసినపుడు కనిపించేదాన్ని క్రింది సమాధానపు బొమ్మల్లో గుర్తించండి.

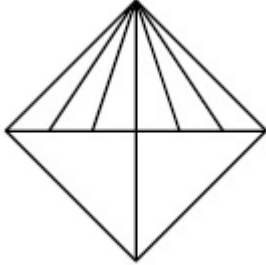
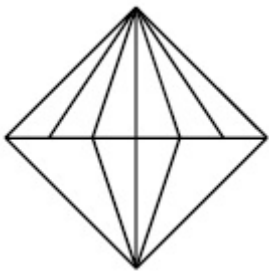


Options :

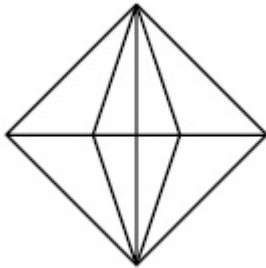


70819147977.

70819147978.



70819147979.



70819147980.

## Drawing

<b>Section Id :</b>	708191515
<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>	708191795
<b>Question Shuffling Allowed :</b>	No

**Question Number : 81 Question Id : 70819114428 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 : 70819114428 Question Type : SUBJECTIVE**

**Correct Marks : 50**

మీకు నచ్చిన ఏదైనా నలుపు మరియు తెలుపు రంగుల రెండరింగ్ పద్ధతులను ఉపయోగించి నచ్చిన చిత్రం యొక్క దామషా ఆకారం గీయండి.

**లేదా**

ఏదైనా నలుపు మరియు తెలుపు రెండరింగ్ పద్ధతులను ఉపయోగించి చిత్రాన్ని డీకోడ్ చేయండి మరియు మీకు నచ్చిన ఫ్రేమ్లో సమతుల్య కూర్పును సిద్ధంచేయండి.



**Question Number : 82 Question Id : 70819114429 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 : 70819114429 Question Type : SUBJECTIVE**

**Correct Marks : 50**

రంగులను ఉపయోగించి ఒక పతంగుల పండగ యొక్క దృశ్యాన్ని గీయండి.

**లేదా**

కింది రెండు రకాల వస్తువులతో హార్మోనిక్ త్రిమితీయ కూర్పును గీయండి.

(i) క్యూబాయిడ్ A : పరిమాణం 2 cm × 2 cm × 2 cm, 5 నెంబర్లు

(ii) క్యూబాయిడ్ B : పరిమాణం 5 cm × 2 cm × 2 cm, 4 నెంబర్లు

కూర్పుకు "కూల్ కలర్ స్కీమ్"ను ఉపయోగించుము.