

# National Testing Agency

<b>Question Paper Name :</b>	B ARCH 28th Jan 2023 Shift 2
<b>Subject Name :</b>	B ARCH
<b>Creation Date :</b>	2023-01-28 23:48:16
<b>Duration :</b>	180
<b>Total Marks :</b>	400
<b>Display Marks:</b>	Yes

## **B ARCH**

<b>Group Number :</b>	1
<b>Group Id :</b>	71550529
<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
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

## **Mathematics Section A**

<b>Section Id :</b>	715505159
<b>Section Number :</b>	1

<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	20
<b>Number of Questions to be attempted :</b>	20
<b>Section Marks :</b>	80
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	715505159
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	null

**Question Number : 1 Question Id : 7155052569 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Let  $R_1$  and  $R_2$  be two relations on  $\mathbb{R}^2$  defined as

(a, b)  $R_1$  (c, d) if  $ad - bc \geq 0$

(a, b)  $R_2$  (c, d) if  $a + d \geq b + c$ . Then :

**Options :**

7155058081.  $R_1$  is transitive but  $R_2$  is not transitive

7155058082.  $R_2$  is transitive but  $R_1$  is not transitive

7155058083. Both  $R_1$  and  $R_2$  are transitive

7155058084. Neither  $R_1$  nor  $R_2$  is transitive

Question Number : 1 Question Id : 7155052569 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

समजा  $R_1$  आणि  $R_2$  हे  $\mathbb{R}^2$  वरिल दोन संबंध

(a, b)  $R_1$  (c, d), जर  $ad - bc \geq 0$

(a, b)  $R_2$  (c, d), जर  $a + d \geq b + c$ . ने निश्चित करतात, तर :

Options :

7155058081.  $R_1$  संक्रामक आहे परंतु  $R_2$  संक्रामक नाही

7155058082.  $R_2$  संक्रामक आहे परंतु  $R_1$  संक्रामक नाही

7155058083. दोन्ही  $R_1$  आणि  $R_2$  हे संक्रामक आहेत

7155058084.  $R_1$  संक्रामक नाही आणि  $R_2$  संक्रामक नाही

Question Number : 2 Question Id : 7155052570 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Let  $\alpha$  and  $\beta$  be the roots of  $x^2 - 3x + 9 = 0$ . Then  $\left( \frac{\beta^{30}}{(9\alpha)^{10}} + \frac{\alpha^{30}}{(9\beta)^{10}} \right)^2$  is equal to

Options :

7155058085. 1

7155058086.  $\frac{1}{9}$

7155058087. 3

7155058088. 9

**Question Number : 2 Question Id : 7155052570 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

समजा  $\alpha$  आणि  $\beta$  हे  $x^2 - 3x + 9 = 0$  ची असमान मूळे आहेत. तर  $\left( \frac{\beta^{30}}{(9\alpha)^{10}} + \frac{\alpha^{30}}{(9\beta)^{10}} \right)^2 = \underline{\hspace{2cm}}$ .

**Options :**

7155058085. 1

7155058086.  $\frac{1}{9}$

7155058087. 3

7155058088. 9

**Question Number : 3 Question Id : 7155052571 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

For  $z = 2 + 5i$ , the modulus of  $2z^3 + 21z^2 - 58z + 4$  is :

**Options :**

7155058089. 1153

7155058090. 947

7155058091. 537

7155058092. 837

**Question Number : 3 Question Id : 7155052571 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

$z = 2 + 5i$  साठी,  $2z^3 + 21z^2 - 58z + 4$  चा मापांक \_\_\_\_\_ आहे.

**Options :**

7155058089. 1153

7155058090. 947

7155058091. 537

7155058092. 837

**Question Number : 4 Question Id : 7155052572 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

If the system of equations

$$Kx - \sqrt{2}y + \sqrt{5}z = \sqrt{7}$$

$$\sqrt{5}x + \sqrt{3}y - \sqrt{2}z = \sqrt{11}$$

$$30x + (3\sqrt{15} - 5\sqrt{6})y + (5\sqrt{15} - 3\sqrt{10})z = 5\sqrt{21} + 3\sqrt{55}$$

has infinitely many solutions, then  $K^2$  is

**Options :**

7155058093. 27

7155058094.  $\frac{1}{3}$

7155058095. 9

7155058096. 3

**Question Number : 4 Question Id : 7155052572 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

जर  $kx - \sqrt{2}y + \sqrt{5}z = \sqrt{7}$

$$\sqrt{5}x + \sqrt{3}y - \sqrt{2}z = \sqrt{11}$$

$$30x + (3\sqrt{15} - 5\sqrt{6})y + (5\sqrt{15} - 3\sqrt{10})z = 5\sqrt{21} + 3\sqrt{55}$$

या समीकरण प्रणालीच्या अनंत उकली आहेत, तर  $k^2 =$  \_\_\_\_\_ .

**Options :**

7155058093. 27

7155058094.  $\frac{1}{3}$

7155058095. 9

7155058096. 3

**Question Number : 5 Question Id : 7155052573 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

For  $\alpha, \beta \in \mathbb{R}$ , if the matrices  $A = \begin{pmatrix} \alpha & 0 \\ 0 & \beta \end{pmatrix}$ ,  $B = \begin{pmatrix} \alpha & 0 \\ 0 & \alpha \end{pmatrix}$  and  $I = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$  satisfy the equation

$(A * B) * 2I = 20I$ , where  $*$  is defined as  $A * B = A^2 + B^2$ , then  $|\alpha\beta|$  is equal to :

**Options :**

7155058097.  $2\sqrt{3}$

7155058098.  $2\sqrt{2}$

7155058099. 4

7155058100. 2

**Question Number : 5 Question Id : 7155052573 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

$\alpha, \beta \in \mathbb{R}$  साठी, जर  $A = \begin{pmatrix} \alpha & 0 \\ 0 & \beta \end{pmatrix}$ ,  $B = \begin{pmatrix} \alpha & 0 \\ 0 & \alpha \end{pmatrix}$ ,  $I = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$  या सारण्या

$(A * B) * 2I = 20I$  या समीकरणाचे समाधान करत असतील,  $A * B = A^2 + B^2$  हे  $*$  ने निश्चित केलेले आहे.

तर  $|\alpha\beta|$  चे मूल्य \_\_\_\_\_ आहे.

**Options :**

7155058097.  $2\sqrt{3}$

7155058098.  $2\sqrt{2}$

7155058099. 4

7155058100. 2

Question Number : 6 Question Id : 7155052574 Question Type : MCQ Option Shuffling : Yes Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The sum of the first eleven terms of the series is  $\frac{1}{1+1^2+1^4} + \frac{2}{1+2^2+2^4} + \frac{3}{1+3^2+3^4} + \dots$

Options :

7155058101.  $\frac{61}{133}$

7155058102.  $\frac{66}{133}$

7155058103.  $\frac{16}{33}$

7155058104.  $\frac{33}{67}$

Question Number : 6 Question Id : 7155052574 Question Type : MCQ Option Shuffling : Yes Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

$\frac{1}{1+1^2+1^4} + \frac{2}{1+2^2+2^4} + \frac{3}{1+3^2+3^4} + \dots$  या श्रेणी च्या पहिल्या अकरा पदांची बेरीज \_\_\_\_\_ आहे.

Options :

7155058101.  $\frac{61}{133}$

7155058102.  $\frac{66}{133}$

7155058103.  $\frac{16}{33}$



7155058104.  $\frac{33}{67}$

**Question Number : 7 Question Id : 7155052575 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

$\lim_{x \rightarrow 0} (1 + 3x)^{\frac{x+2}{x}}$  is equal to

**Options :**

7155058105. e

7155058106.  $e^3$

7155058107.  $e^6$

7155058108.  $e^9$

**Question Number : 7 Question Id : 7155052575 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

$\lim_{x \rightarrow 0} (1 + 3x)^{\frac{x+2}{x}} =$

**Options :**

7155058105. e

7155058106.  $e^3$

7155058107.  $e^6$

7155058108. e<sup>9</sup>

**Question Number : 8 Question Id : 7155052576 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Let  $P(\alpha, \beta, \lambda)$  be the image of the point  $Q(1, 2, 0)$  in the line  $\frac{x-5}{3} = \frac{y-12}{1} = \frac{z-10}{2}$ , then  $(PQ)^2$  is equal to

**Options :**

7155058109. 90

7155058110. 180

7155058111. 360

7155058112. 270

**Question Number : 8 Question Id : 7155052576 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

$P(\alpha, \beta, \lambda)$  ही  $Q(1, 2, 0)$  या बिंदूची  $\frac{x-5}{3} = \frac{y-12}{1} = \frac{z-10}{2}$ , या रेषेवरील प्रतिमा आहे तर  $(PQ)^2 =$

**Options :**

7155058109. 90

7155058110. 180

7155058111. 360

7155058112. 270

**Question Number : 9 Question Id : 7155052577 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

A box contains 7 red and 9 white balls. The number of ways of drawing 8 balls such that there are at least three balls of each colour, is :

**Options :**

7155058113. 8820

7155058114. 10584

7155058115. 1764

7155058116. 3515

**Question Number : 9 Question Id : 7155052577 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

एका पेटीत 7 लाल आणि 9 सफेद चेंडू आहेत. एकूण 8 चेंडू असे काढले की त्यात किमान 3 चेंडू एकाच रंगाचे असले तर असे चेंडू \_\_\_\_\_ प्रकारे काढता येतील.

**Options :**

7155058113. 8820

7155058114. 10584

7155058115. 1764

7155058116. 3515

**Question Number : 10 Question Id : 7155052578 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Let  $[t]$  denote the greatest integer function. If  $\int_0^1 [1+x^2+x^4] dx = a$ , then  $36a - 25a^2 + 8a^3 - a^4$  is equal to

**Options :**

7155058117. 19

7155058118. -19

7155058119. 18

7155058120. -21

**Question Number : 10 Question Id : 7155052578 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

समजा  $[t]$  हे महत्तम पूर्णांक फल दर्शावते. जर  $\int_0^1 [1+x^2+x^4] dx = a$ , तर  $36a - 25a^2 + 8a^3 - a^4$  बरोबर \_\_\_\_\_ आहे.

**Options :**

7155058117. 19

7155058118. -19

7155058119. 18

7155058120. -21

**Question Number : 11 Question Id : 7155052579 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Let  $PL = 8$  units and  $QM = 2$  units be two parallel line segments such that the line segments  $PM$  and  $QL$  intersect at the point  $R$ . If  $PL$  and  $QM$  are tangents to a circle passing through points  $P, Q, R$  then radius of this circle is

**Options :**

7155058121.  $\sqrt{2}$

7155058122. 2

7155058123.  $2\sqrt{2}$

7155058124. 4

**Question Number : 11 Question Id : 7155052579 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

समजा  $PL = 8$  एकक आणि  $QM = 2$  एकक ही दोन समांतर रेषाखंड असे आहेत की रेषाखंड  $PM$  आणि  $QL$  हे  $R$  बिंदू शी छेदतात, जर  $PL$  आणि  $QM$  ह्या  $P, Q, R$  या बिंदूमधून जाणाऱ्या वर्तुळाच्या स्पर्शिका असतील तर त्यां वर्तुळाची त्रिज्या \_\_\_\_\_ आहे.

**Options :**

7155058121.  $\sqrt{2}$

7155058122. 2

7155058123.  $2\sqrt{2}$

7155058124. 4

**Question Number : 12 Question Id : 7155052580 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

For some  $\alpha \in \mathbb{N}$ , let PQR be a triangle with two fixed vertices P(2, 5) and Q( $\alpha$ , -11). If the point R moves on the line  $l_1: 9x + 7y + \alpha = 0$ , then the centroid of  $\Delta PQR$  moves on the line  $l_2$ , which is parallel to  $l_1$  at a distance  $\frac{20}{3\sqrt{130}}$  units from it. If the distance of Q from  $l_2$  is  $\frac{k}{3\sqrt{130}}$ , then k is equal to :

**Options :**

7155058125. 117

7155058126. 129

7155058127. 131

7155058128. 133

**Question Number : 12 Question Id : 7155052580 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

कांही  $\alpha \in \mathbb{N}$  साठी, समजा PQR हा त्रिकोण असा आहे की P(2, 5) आणि Q( $\alpha$ , -11) हे दोन त्याचे स्थिर शिरोबिंदू आहेत. जर बिंदू R हा रेषा  $l_1: 9x + 7y + \alpha = 0$  वर चालणारा असेल, तर  $\Delta PQR$  चा मध्यगासंपात रेषा  $l_2$  वर चालणारा असून तो  $l_1$  ला  $\frac{20}{3\sqrt{130}}$  एकक या अंतरावर समांतर आहे.

जर रेषा  $l_2$  पासून बिंदू Q चे अंतर  $\frac{k}{3\sqrt{130}}$  असेल, तर k बरोबर \_\_\_\_\_ आहे.

**Options :**

7155058125. 117

7155058126. 129

7155058127. 131

7155058128. 133

**Question Number : 13 Question Id : 7155052581 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Let  $A_i(x_i, y_i)$ ,  $i = 1, 2, 3$  be points on the circle  $x^2 + y^2 = 10$  such that  $A_1$  lies in the 1<sup>st</sup> quadrant and it is the image of point  $A_2$  with respect to  $y$ -axis. If the distance of point  $A_1$  from each of the points  $A_2$  and  $A_3$  is 2, then twenty times the area of the  $\Delta A_1 A_2 A_3$  is

**Options :**

7155058129. 12

7155058130. 30

7155058131. 24

7155058132. 48

Question Number : 13 Question Id : 7155052581 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

समजा  $A_i(x_i, y_i)$ ,  $i = 1, 2, 3$  हे बिंदू  $x^2 + y^2 = 10$  या वर्तुळावर असे आहेत. जसे की  $A_1$  हे पहिल्या चरणा मध्ये आहे. आणि तो  $y$ -अक्षाच्या संदर्भात बिंदू  $A_2$  ची प्रतिमा आहे. जर बिंदू  $A_1$  चे  $A_2$  आणि  $A_3$  या प्रत्येक बिंदू पासून चे अंतर 2 असेल, तर  $\Delta A_1 A_2 A_3$  च्या क्षेत्रफळाची 20 पट \_\_\_\_\_ आहे.

Options :

7155058129. 12

7155058130. 30

7155058131. 24

7155058132. 48

Question Number : 14 Question Id : 7155052582 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The remainder when  $7^{89}$  is divided by 15 is

Options :

7155058133. 5

7155058134. 7

7155058135. 9

7155058136. 11



**Question Number : 14 Question Id : 7155052582 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

7<sup>89</sup> ला 15 ने असता बाकी \_\_\_\_\_ आहे.

**Options :**

7155058133. 5

7155058134. 7

7155058135. 9

7155058136. 11

**Question Number : 15 Question Id : 7155052583 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

If the plane  $y = \alpha x - \beta z + \gamma$  passing through the point  $(1, -1, 3)$  is perpendicular to each of the planes  $2x + y + z = 1$  and  $3x - 2y + 2z = 0$ , then  $\alpha + \beta + \gamma$  is equal to :

**Options :**

7155058137. 5

7155058138. 13

7155058139. 19

7155058140. 27

**Question Number : 15 Question Id : 7155052583 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

जर  $y = \alpha x - \beta y + \gamma$  हे प्रतल  $(1, -1, 3)$  बिंदू मधून जाणारे आणि  $2x + y + z = 1$  आणि  $3x - 2y + 2z = 0$  या प्रत्येक प्रतलाशी लंब आहे, तर  $\alpha + \beta + \gamma$  बरोबर \_\_\_\_\_ आहे :

**Options :**

7155058137. 5

7155058138. 13

7155058139. 19

7155058140. 27

**Question Number : 16 Question Id : 7155052584 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Let  $\vec{a} = \hat{i} + 2\hat{j} + 3\hat{k}$ ,  $\vec{b} = \hat{i} - \hat{j} + 2\hat{k}$ ,  $\vec{c} = 2\hat{i} + \hat{j} - 4\hat{k}$  be three vectors. If  $\vec{r}$  is the vector such that

$\vec{r} \times \vec{a} = \left( \vec{b} + \vec{c} \right) \times \vec{a}$  and  $\vec{r} \cdot \left( \vec{b} - \vec{c} \right) = 0$ , then  $\vec{r} \cdot \left( \hat{i} + \hat{j} - \hat{k} \right)$  is equal to :

**Options :**

7155058141. 3

7155058142. 4

7155058143. 5

7155058144. 6

Question Number : 16 Question Id : 7155052584 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

समजा  $\vec{a} = \hat{i} + 2\hat{j} + 3\hat{k}$ ,  $\vec{b} = \hat{i} - \hat{j} + 2\hat{k}$  आणि  $\vec{c} = 2\hat{i} + \hat{j} - 4\hat{k}$  हे तीन सदिश आहेत. जर  $\vec{r}$  हे एक सदिश आहे

जसे की  $\vec{r} \times \vec{a} = (\vec{b} + \vec{c}) \times \vec{a}$  आणि  $\vec{r} \cdot (\vec{b} - \vec{c}) = 0$ , तर  $\vec{r} \cdot (\hat{i} + \hat{j} - \hat{k})$  बरोबर \_\_\_\_\_ आहे.

Options :

7155058141. 3

7155058142. 4

7155058143. 5

7155058144. 6

Question Number : 17 Question Id : 7155052585 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The probability that a randomly selected root of the equation  $1 + x + x^2 + \dots + x^{118} = 0$  satisfies the equation  $x^7 = 1$ , is

Options :

7155058145. 0

7155058146.  $\frac{1}{59}$

7155058147.  $\frac{3}{59}$

7155058148.  $\frac{7}{118}$

**Question Number : 17 Question Id : 7155052585 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

$1 + x + x^2 + \dots + x^{118} = 0$  या समीकरणाचे मूळ यादृच्छिकरित्या निवडल्यास  $x^7 = 1$  या समीकरणाचे समाधान करण्याची संभाव्यता \_\_\_\_\_ आहे.

**Options :**

7155058145. 0

7155058146.  $\frac{1}{59}$

7155058147.  $\frac{3}{59}$

7155058148.  $\frac{7}{118}$

**Question Number : 18 Question Id : 7155052586 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Let X have the binomial distribution  $B(n, p)$ . If its mean is 3 and variance is 2, then  $P(X < \frac{n}{4})$  is equal to :

**Options :**

7155058149.  $\frac{29 \times 2^8}{3^9}$

7155058150.  $\frac{25 \times 2^9}{3^9}$

$$7155058151. \frac{163}{3^9}$$

$$7155058152. \frac{835}{3^9}$$

**Question Number : 18 Question Id : 7155052586 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

समजा  $X$  चे द्विपद वितरण  $B(n, p)$  आहे.

जर द्विपद वितरणाचा मध्य 3 आणि त्याचे प्रचरण 2 असेल तर  $P(X < \frac{n}{4})$  चे मूल्य \_\_\_\_\_ आहे.

**Options :**

$$7155058149. \frac{29 \times 2^8}{3^9}$$

$$7155058150. \frac{25 \times 2^9}{3^9}$$

$$7155058151. \frac{163}{3^9}$$

$$7155058152. \frac{835}{3^9}$$

**Question Number : 19 Question Id : 7155052587 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

The domain of the function  $f(x) = \cos^{-1}\left(\frac{x^2 - 3x + 2}{x^2 + 2x - 1}\right)$  is :

**Options :**

7155058153.  $\left(\sqrt{2}-1, \frac{3}{5}\right]$

7155058154.  $\left[\frac{3}{5}, \infty\right)$

7155058155.  $\mathbb{R} - \{-\sqrt{2}-1, \sqrt{2}-1\}$

7155058156.  $(-\infty, -1-\sqrt{2}) \cup (\sqrt{2}-1, \infty)$

**Question Number : 19 Question Id : 7155052587 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

$f(x) = \cos^{-1}\left(\frac{x^2-3x+2}{x^2+2x-1}\right)$  या फलाचे अधिक्षेत्र \_\_\_\_\_ आहे.

**Options :**

7155058153.  $\left(\sqrt{2}-1, \frac{3}{5}\right]$

7155058154.  $\left[\frac{3}{5}, \infty\right)$

7155058155.  $\mathbb{R} - \{-\sqrt{2}-1, \sqrt{2}-1\}$

7155058156.  $(-\infty, -1-\sqrt{2}) \cup (\sqrt{2}-1, \infty)$

**Question Number : 20 Question Id : 7155052588 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Which of the following statements is a tautology ?

**Options :**

7155058157.  $((p \Rightarrow q) \vee p) \Rightarrow q$

7155058158.  $((p \wedge q) \Rightarrow p) \Rightarrow q$

7155058159.  $((p \wedge q) \wedge (\sim q)) \Rightarrow p$

7155058160.  $((p \Rightarrow q) \vee p) \Rightarrow p$

**Question Number : 20 Question Id : 7155052588 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

खालीलपैकी कोणते विधान अनुलाप आहे ?

**Options :**

7155058157.  $((p \Rightarrow q) \vee p) \Rightarrow q$

7155058158.  $((p \wedge q) \Rightarrow p) \Rightarrow q$

7155058159.  $((p \wedge q) \wedge (\sim q)) \Rightarrow p$

7155058160.  $((p \Rightarrow q) \vee p) \Rightarrow p$

## Mathematics Section B

**Section Id :** 715505160

**Section Number :** 2

**Section type :** Online

**Mandatory or Optional :** Mandatory

Number of Questions :	10
Number of Questions to be attempted :	5
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	715505160
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 21 Question Id : 7155052589 Question Type : SA Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The curve  $y = x^2 + 1$  divides the area enclosed by the curves  $y + |x| = 3$  and  $y = |x-1|$  in the ratio  $m : n$ , where  $m$  and  $n$  are coprime, then  $m + n$  is equal to \_\_\_\_\_.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

10 to 12

Question Number : 21 Question Id : 7155052589 Question Type : SA Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

$y = x^2 + 1$  हा वक्र  $y + |x| = 3$  आणि  $y = |x-1|$  या वक्राद्वारे तयार होणाऱ्या क्षेत्रफळा ला  $m : n$  या गुणोत्तरात विभागत असेल तर  $m + n$  बरोबर \_\_\_\_\_ आहे. येथे  $m$  आणि  $n$  हे सापेक्ष मूळ संख्या आहेत.

Response Type : Numeric

Evaluation Required For SA : Yes



**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 22 **Question Id :** 7155052590 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

The number of ways in which 30 identical pens can be distributed among 12 students so that each student gets at least one pen and exactly two students get at least two pens each, is \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 22 **Question Id :** 7155052590 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

30 लेखण्या (pens) 12 विद्यार्थ्यांमध्ये असा वाटल्या आहेत की प्रत्येक विद्यार्थ्यास किमान एक पेन मिळते आणि फक्त दोन विद्यार्थ्यांना किमान दोन मिळतात असे वाटप \_\_\_\_\_ प्रकारे करता येईल.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

Question Number : 23 Question Id : 7155052591 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Let  $(1+x^2-x^4)^{12} = \sum_{n=0}^{48} a_n x^n$ . Then  $a_0 + a_2 + a_4 + \dots + a_{44}$  is equal to

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

10 to 12

Question Number : 23 Question Id : 7155052591 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

समजा  $(1+x^2-x^4)^{12} = \sum_{n=0}^{48} a_n x^n$ , तर  $a_0 + a_2 + a_4 + \dots + a_{44}$  बरोबर \_\_\_\_\_ आहे.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

10 to 12

Question Number : 24 Question Id : 7155052592 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If  $S_n$  denotes the sum of first  $n$  terms of the series  $7 + 10 + 16 + 25 + 37 + \dots$ , then  $S_{30} - S_{20}$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 24 **Question Id :** 7155052592 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

जर  $S_n$  हे  $7 + 10 + 16 + 25 + 37 + \dots$  या श्रेणीच्या पहिल्या  $n$  पदांची बेरीज दर्शवित असेल, तर  $S_{30} - S_{20}$  बरोबर \_\_\_\_\_ आहे.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 25 **Question Id :** 7155052593 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

If  $[t]$  denotes the greatest integer  $\leq t$ , then the number of points, at which the function

$f(x) = \left[ x + x^3 \right] + \left| x - x^3 \right| + \left| x + \frac{1}{2} \right|$  is not differentiable in the open interval  $(-10, 10)$ , is \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 25 **Question Id :** 7155052593 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

जर  $[t]$  हे  $t$  बरोबर किंवा  $t$  पेक्षा लहान असणारा महत्तम पूर्णांक दर्शवित असेल तर

$f(x) = [x+x^3] + |x-x^3| + \left|x + \frac{1}{2}\right|$  ह्या फलासाठी  $(-10, 10)$  या विवृत अंतराल मध्ये विकलनीय नसणाऱ्या बिंदूंची

संख्या \_\_\_\_\_ आहे.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 26 **Question Id :** 7155052594 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

If  $\int \frac{dx}{(3x^2+5)\sqrt{10x^2+7}} = -\frac{1}{\sqrt{580}} \log_e |f(x)| + C$  where  $C$  is an arbitrary constant, then  $f(0)$  is equal to

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

Question Number : 26 Question Id : 7155052594 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

जर  $\int \frac{dx}{(3x^2+5)\sqrt{10x^2+7}} = -\frac{1}{\sqrt{580}} \log_e |f(x)| + c$ , येथे  $c$  हा कोणताही स्थिरांक आहे तर  $f(0)$  चे मूल्य \_\_\_\_\_ आहे.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

10 to 12

Question Number : 27 Question Id : 7155052595 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Let the equation of the hyperbola with foci  $(1, 5)$ ,  $(1, -1)$  and eccentricity  $\sqrt{3}$  be  $x^2 - 2y^2 + ax + by + c = 0$ . Then  $|a + b + c|$  is equal to \_\_\_\_\_.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

10 to 12

Question Number : 27 Question Id : 7155052595 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

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

समजा उन्केन्द्रता  $\sqrt{3}$  आणि  $(1, 5), (1, -1)$  या नाभि असणाऱ्या अर्धवृत्ताचे समीकरण  $x^2 - 2y^2 + ax + by + c = 0$  आहे. तर  $|a + b + c|$  चे मूल्य \_\_\_\_\_ आहे.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number : 28 Question Id : 7155052596 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Let  $\alpha_1, \alpha_2$  be the values of  $a$  such that the distance between the point  $(2, 4, 3)$  and the plane  $3x + y + az + 10 = 0$  is  $\sqrt{35}$  units. Then the area of the triangle with vertices  $(\alpha_1, \alpha_2, 0), (\alpha_2, \alpha_1, 0)$  and  $(\frac{164}{13}, 5, 0)$  is \_\_\_\_\_ unit<sup>2</sup>.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number : 28 Question Id : 7155052596 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

समजा  $\alpha_1, \alpha_2$  हे  $\alpha$  चे दोन भिन्न मूल्ये अशी आहेत जसे की  $(2, 4, 3)$  हा बिंदु आणि  $3x + y + \alpha z + 10 = 0$  हे प्रतल यांच्यामधील अंतर  $\sqrt{35}$  एकक आहे. तर  $(\alpha_1, \alpha_2, 0), (\alpha_2, \alpha_1, 0)$  आणि  $(\frac{164}{13}, 5, 0)$  हे शिरोबिंदू असणाऱ्या त्रिकोणाचे क्षेत्रफळ \_\_\_\_\_ (एकक)<sup>2</sup> आहे.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 29 **Question Id :** 7155052597 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

Let O be the origin and let the vectors  $\overrightarrow{OA} = -3\hat{i} + 7\hat{j} + 5\hat{k}, \overrightarrow{OB} = -5\hat{i} + 7\hat{j} - 3\hat{k}$  and  $\overrightarrow{OC} = \hat{u}$  represent three sides of a parallelepiped, where  $\hat{u}$  is a unit vector in the  $xy$ - plane. If the maximum volume of the parallelepiped is  $2\sqrt{\alpha}$ , then  $\alpha$  is equal to \_\_\_\_\_.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 29 **Question Id :** 7155052597 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

समजा  $O$  हा आरंभबिंदू आहे आणि समजा  $\vec{OA} = -3\hat{i} + 7\hat{j} + 5\hat{k}$ ,  $\vec{OB} = -5\hat{i} + 7\hat{j} - 3\hat{k}$   $\vec{OC} = \vec{u}$  हे सदिश समांतर षट्फलकाच्या तीन बाजू आहेत, येथे  $\hat{u}$  हा  $xy$  प्रतलातील एकक सदिश आहे.

जर समांतर षट्फलकाचे महत्तम घनफळ  $2\sqrt{\alpha}$  असेल तर  $\alpha$  बरोबर \_\_\_\_\_ आहे.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 30 **Question Id :** 7155052598 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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

If the solution curve of the differential equation  $\frac{x+y-2}{x+y-1} \frac{dy}{dx} = \frac{x+y+2}{x+y+1}$ ,  $x+y > 2$  passes through the

points  $(\sqrt{2}, \sqrt{2})$  and  $(2, \alpha)$ , then  $2\alpha - \log_e \left( \frac{\alpha^2 + 4\alpha + 2}{6} \right)$  is equal to \_\_\_\_\_ .

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

**Question Number :** 30 **Question Id :** 7155052598 **Question Type :** SA **Calculator :** None

**Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

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



जर  $\frac{x+y-2}{x+y-1} \frac{dy}{dx} = \frac{x+y+2}{x+y+1}$ ,  $x+y > 2$ , या विकलक समीकरणाचा उकल वक्र  $(\sqrt{2}, \sqrt{2})$  आणि  $(2, \alpha)$  या

बिंदूमधून जात असेल तर  $2\alpha - \log_e \left( \frac{\alpha^2 + 4\alpha + 2}{6} \right)$  चे मूल्य \_\_\_\_\_ आहे.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

10 to 12

## Aptitude Test

<b>Section Id :</b>	715505161
<b>Section Number :</b>	3
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50
<b>Number of Questions to be attempted :</b>	50
<b>Section Marks :</b>	200
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	715505161
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	null

**Question Number :** 31 **Question Id :** 7155052599 **Question Type :** MCQ **Option Shuffling :** Yes **Is Question Mandatory :** No **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum**

**Instruction Time : 0**

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

Adobe is a

**Options :**

7155058171. Type of cement

7155058172. Type of floor finish

7155058173. Type of paint

7155058174. Type of Brick

**Question Number : 31 Question Id : 7155052599 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Adobe हे काय आहे ?

**Options :**

7155058171. सिमेंटचा प्रकार

7155058172. फरशी/लादी (floor finish) चा प्रकार

7155058173. पेंटचा प्रकार

7155058174. वीट्टेचा प्रकार

**Question Number : 32 Question Id : 7155052600 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Given below are two statements:

**Statement I :** Chandigarh is the first planned city of Independent India

**Statement II :** Chandigarh city was designed by Swiss French architect Le Corbusier

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

**Options :**

7155058175. Both Statement I and Statement II are correct

7155058176. Both Statement I and Statement II are incorrect

7155058177. Statement I is correct but statement II is incorrect

7155058178. Statement I is incorrect but statement II is correct

**Question Number : 32 Question Id : 7155052600 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

खाली दोन विधाने दिली आहेत:

**विधान I :** चंदीगढ हे स्वतंत्र भारताचे पहिले नियोजित शहर (Planned city) आहे.

**विधान II :** चंदीगढ शहराची रचना स्वीस-फ्रेंच वास्तुशिल्पकार Le Corbusier यांनी केली आहे.

वरील विधानांवरून, खाली दिलेल्या पर्यायांपैकी सर्वाधिक योग्य पर्याय निवडा.

**Options :**

7155058175. विधान I आणि विधान II दोन्ही योग्य आहेत

7155058176. विधान I आणि विधान II दोन्ही अयोग्य आहेत

7155058177. विधान I योग्य आहे परंतु विधान II अयोग्य आहे

7155058178. विधान I अयोग्य आहे परंतु विधान II योग्य आहे

**Question Number : 33 Question Id : 7155052601 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Given below are two statements:

**Statement I :** Glass has low thermal conductivity

**Statement II :** Glass can absorb, refract and transmit light.

In the light of above statements, choose the most appropriate answer form the options given below

**Options :**

7155058179. Both Statement I and Statement II are correct

7155058180. Both Statement I and Statement II are incorrect

7155058181. Statement I is correct but statement II is incorrect

7155058182. Statement I is incorrect but statement II is correct

**Question Number : 33 Question Id : 7155052601 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

खाली दोन विधाने दिली आहेत:

**विधान I :** चंदीगढ हे स्वतंत्र भारताचे पहिले नियोजित शहर (Planned city) आहे.

**विधान II :** चंदीगढ शहराची रचना स्वीस-फ्रेंच वास्तुशिल्पकार Le Corbusier यांनी केली आहे.

वरील विधानांवरून, खाली दिलेल्या पर्यायांपैकी सर्वाधिक योग्य पर्याय निवडा.

**Options :**

7155058179. विधान I आणि विधान II दोन्ही योग्य आहेत

7155058180. विधान I आणि विधान II दोन्ही अयोग्य आहेत

7155058181. विधान I योग्य आहे परंतु विधान II अयोग्य आहे

7155058182. विधान I अयोग्य आहे परंतु विधान II योग्य आहे

**Question Number : 34 Question Id : 7155052602 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Match List I with List II

LIST I		LIST II	
A.	PMUY	I.	KAUSHAL VISKAS YOJNA
B.	PMAY	II.	JAN DHAN YOJANA
C.	PMKVY	III.	UJJWALA YOJANA
D.	PMJDY	IV.	AWAS YOJANA

Choose the correct answer from the options given below:

**Options :**

7155058183. A-I, B-III, C-II, D-IV

7155058184. A-III, B-IV, C-I, D-II

7155058185. A-IV, B-II, C-III, D-I

7155058186. A-IV, B-III, C-I, D-II

**Question Number : 34 Question Id : 7155052602 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

यादी I आणि यादी II यांच्या जोड्या जुळवा.

यादी I		यादी II	
A.	PMUY	I.	कौशल विकास योजना
B.	PMAY	II.	जन धन योजना
C.	PMKVY	III.	उज्ज्वला योजना
D.	PMJDY	IV.	आवास योजना

खाली दिलेल्या पर्यायांपैकी योग्य उत्तर निवडा:

**Options :**

7155058183. A-I, B-III, C-II, D-IV

7155058184. A-III, B-IV, C-I, D-II

7155058185. A-IV, B-II, C-III, D-I

7155058186. A-IV, B-III, C-I, D-II

**Question Number : 35 Question Id : 7155052603 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Match List I with List II

LIST I		LIST II	
A.	CP Kukreja	I.	IIM Ahmedabad
B.	Louis I Kahn	II.	Jawahar Lal Nehru University
C.	B.V Doshi	III.	IIT Kanpur
D.	Achyut Kanvinde	IV.	IIM Bengaluru

Choose the correct answer from the options given below:

**Options :**

7155058187. A-IV, B-II, C-I, D-III

7155058188. A-III, B-I, C-II, D-IV

7155058189. A-II, B-I, C-IV, D-III

7155058190. A-I, B-IV, C-III, D-II

**Question Number : 35 Question Id : 7155052603 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

यादी I आणि यादी II यांच्या जोड्या जुळवा.

LIST I		LIST II	
A.	सी पी कुकरेजा	I.	आयआयएम अहमदाबाद
B.	लुईस I काहन	II.	जवाहरलाल नेहरू विद्यापीठ
C.	बी व्ही दोशी	III.	आयआयटी कानपूर
D.	अच्युत कानविंदे	IV.	आयआयएम कानपूर

खाली दिलेल्या पर्यायांपैकी योग्य उत्तर निवडा:

**Options :**

7155058187. A-IV, B-II, C-I, D-III

7155058188. A-III, B-I, C-II, D-IV

7155058189. A-II, B-I, C-IV, D-III

7155058190. A-I, B-IV, C-III, D-II

**Question Number : 36 Question Id : 7155052604 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Which one of these is not a complimentary colour?

**Options :**

7155058191. Blue-Orange

7155058192. Red-Green

7155058193. Blue-Green

7155058194. Violet-Yellow

**Question Number : 36 Question Id : 7155052604 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

खालीलपैकी पूरक रंग नाहीत ?

**Options :**

7155058191. निळा-केशरी

7155058192. लाल-हिरवा

7155058193. निळा-हिरवा

7155058194. जांभळा-पिवळा

**Question Number : 37 Question Id : 7155052605 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

In which State of India, Robbers cave is situated:

**Options :**

7155058195. Himachal Pradesh



7155058196. Uttarakhand

7155058197. Uttar Pradesh

7155058198. Madhya Pradesh

**Question Number : 37 Question Id : 7155052605 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

भारतातील कोणत्या राज्यात रॉबर्स गुहा आहे ?

**Options :**

7155058195. हिमाचल प्रदेश

7155058196. उत्तराखंड

7155058197. उत्तर प्रदेश

7155058198. मध्य प्रदेश

**Question Number : 38 Question Id : 7155052606 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Choose the correct option among the following:

Petronas Tower is situated in:

**Options :**

7155058199. Paris

7155058200. Dubai

7155058201. Kuala Lumpur

7155058202. New York

**Question Number : 38 Question Id : 7155052606 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

खालीलपैकी योग्य पर्याय निवडा:

पेट्रोनास टॉवर येथे आहे:

**Options :**

7155058199. पॅरीस

7155058200. दुबई

7155058201. कालालंपूर

7155058202. न्यूयॉर्क

**Question Number : 39 Question Id : 7155052607 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

The Konark Temple is located in which state?

**Options :**

7155058203. Madhya Pradesh

7155058204. Odisha

7155058205. Karnataka

7155058206. Rajasthan

**Question Number : 39 Question Id : 7155052607 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

कोणार्क मंदिर कोणत्या राज्यात आहे ?

**Options :**

7155058203. मध्य प्रदेश

7155058204. ओडिशा

7155058205. कर्नाटक

7155058206. राजस्थान

**Question Number : 40 Question Id : 7155052608 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Who is the architect of the Lotus Temple?

**Options :**

7155058207. Louis I Kahn

7155058208. Mohse Safdi

7155058209. Fariborz Sahba

7155058210. Richard Meyer

**Question Number : 40 Question Id : 7155052608 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

लोटस टेंपलचे वास्तुशिल्पकार कोण आहेत ?

**Options :**

7155058207. लुईस I काहन

7155058208. मोहशे साफदी

7155058209. फरीबोर्झ साहबा

7155058210. रीचर्ड मेयर

**Question Number : 41 Question Id : 7155052609 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

A small lift for carrying only a small load is known as:

**Options :**

7155058211. A dead Bearer

7155058212. A Dumb Waiter

7155058213. A Jockey Boy

7155058214. A push upper

**Question Number : 41 Question Id : 7155052609 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

कमी वजनासाठीच्या छोट्या लिफ्टला या नावाने ओळखतात :

**Options :**

7155058211. डेड बिअर

7155058212. डंब वेटर

7155058213. जोकी बॉय

7155058214. पुश अप्पर

**Question Number : 42 Question Id : 7155052610 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Which are often referred as 'twin cities' of Odisha?

**Options :**

7155058215. Bhubaneshwar-Puri

7155058216. Puri-Cuttack

7155058217. Bhubaneshwar-Cuttack

7155058218. Bhubaneshwar-Rourkela

**Question Number : 42 Question Id : 7155052610 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

ओडिशातील 'द्विन सीटी' म्हणून कोणाला ओळखले जाते?

**Options :**

7155058215. भुवनेश्वर-पुरी

7155058216. पुरी-कटक

7155058217. भुवनेश्वर-कटक

7155058218. भुवनेश्वर-राऊरकेला

**Question Number : 43 Question Id : 7155052611 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Which is the correct chronology of Human Civilizations in terms of their existence?

**Options :**

7155058219. Mesopotamia-Harappa-Egyptian-Chinese

7155058220. Mesopotamia-Egyptian-Harappa-Chinese

7155058221. Mesopotamia-Chinese-Harappa-Egyptian

7155058222. Egyptian-Mesopotamia-Harappa-Sumerian

**Question Number : 43 Question Id : 7155052611 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

मानवी संस्कृतीच्या अस्तित्वानुसार योग्य क्रम कोणता ?

**Options :**

7155058219. मिझोपोटॅमिआ-हडप्पा-इजिप्शियन-चीनी

7155058220. मिझोपोटॅमिआ-इजिप्शियन-हडप्पा-चीनी

7155058221. मिझोपोटॅमिआ-चीनी-हडप्पा-इजिप्शियन

7155058222. इजिप्शियन-मिझोपोटॅमिआ-हडप्पा-चीनी

**Question Number : 44 Question Id : 7155052612 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Qutub-Minar in Delhi was built by:

**Options :**

7155058223. Shah Jahan

7155058224. Jahangir

7155058225. Akbar

7155058226. Qutub ud-din Aibak

**Question Number : 44 Question Id : 7155052612 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

दिल्लीतील कुतुब-मिनार कोणी बांधला ?

**Options :**

7155058223. शाह जहान

7155058224. जहांगीर

7155058225. अकबर

7155058226. कुतुब-उद-दीन-ऐबक

**Question Number : 45 Question Id : 7155052613 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Which direction in the southern hemisphere would you get glare free (diffused) light throughout the year?

**Options :**

7155058227. North

7155058228. South

7155058229. East

7155058230. West

**Question Number : 45 Question Id : 7155052613 Question Type : MCQ Option Shuffling : Yes Is**



**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

दक्षिण गोलार्धातील कोणत्या दिशेला तुम्हाला वर्षभर विकीर्ण प्रकाश आढळेल?

**Options :**

7155058227. उत्तर

7155058228. दक्षिण

7155058229. पूर्व

7155058230. पश्चिम

**Question Number : 46 Question Id : 7155052614 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Who is the architect of the famous "Jawaharlal Kala Complex" in Jaipur?

**Options :**

7155058231. Raj Rewal

7155058232. Charles Correa

7155058233. Achyut Kanvinde

7155058234. Hafeez Contractor

**Question Number : 46 Question Id : 7155052614 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

जयपूरमधील प्रसिद्ध "जवाहर कला संकुल" याचे वास्तुशिल्पकार कोण आहेत?

**Options :**

7155058231. राज रेवाल

7155058232. चार्ल्स कोरैया

7155058233. अच्युत कानपिंदे

7155058234. हाफीझ कॉन्ट्रॅक्टर

**Question Number : 47 Question Id : 7155052615 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Dhajji-Dewari is a construction style popular predominantly in \_\_\_\_\_.

**Options :**

7155058235. Coastal Areas

7155058236. Plains

7155058237. Mountainous Region

7155058238. Desert Areas

**Question Number : 47 Question Id : 7155052615 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

धाजी-देवरी ही मुख्यत्वे \_\_\_\_\_ येथे प्रसिद्ध असलेली बांधकाम पद्धत आहे.

**Options :**

7155058235. किनारी भाग

7155058236. मैदान

7155058237. डोंगराळ प्रदेश

7155058238. वाळवंटी भाग

**Question Number : 48 Question Id : 7155052616 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Which stone is used for roofing in mountainous regions?

**Options :**

7155058239. Marble

7155058240. Granite

7155058241. Shale

7155058242. Sand Stone

**Question Number : 48 Question Id : 7155052616 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

डोंगराळ प्रदेशात छप्पर घालण्यासाठी कोणता दगड वापरला जातो ?

**Options :**

7155058239. मारबल

7155058240. ग्रेनार्ड

7155058241. शेल

7155058242. सँडस्टोन

**Question Number : 49 Question Id : 7155052617 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Chandigarh is an example of which type of city planning.

**Options :**

7155058243. Radio Centric

7155058244. Grid-iron

7155058245. Linear

7155058246. Organic

**Question Number : 49 Question Id : 7155052617 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

चंदीगढ शहर रचनेच्या कोणत्या प्रकाराचे उदाहरण आहे ?

**Options :**

7155058243. रेडिओ सँट्रिक

7155058244. ग्रीड-आयरन

7155058245. लिनिअर

7155058246. ऑर्गॉनिक

**Question Number : 50 Question Id : 7155052618 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

If you have to build on the seashore in Goa, which rooms would have the best view of the sea?

**Options :**

7155058247. Those facing North

7155058248. Those facing South

7155058249. Those facing East

7155058250. Those facing West

**Question Number : 50 Question Id : 7155052618 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

जर तुम्हाला गोव्यातील समुद्रकिनाऱ्यावर बांधकाम करायचे आहे, तर कोणत्या खोल्यांना समुद्राचे सर्वोत्तम दृष्य दिसेल?

**Options :**

7155058247. उत्तरमुखी असणाऱ्या

7155058248. दक्षिणमुखी असणाऱ्या

7155058249. पूर्वमुखी असणान्या

7155058250. पश्चिममुखी असणान्या

**Question Number : 51 Question Id : 7155052619 Question Type : MCQ Option Shuffling : Yes Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

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

"NIFT" National Institute of Fashion Technology, Delhi is designed by

**Options :**

7155058251. B.V Doshi

7155058252. C.P Kukreja

7155058253. Raj Rewal

7155058254. Bimal Patel

**Question Number : 51 Question Id : 7155052619 Question Type : MCQ Option Shuffling : Yes Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

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

"NIFT" नॅशनल इंस्टिट्यूट ऑफ फॅशन टेक्नॉलॉजी, दिल्लीची रचना कोणी केली ?

**Options :**

7155058251. बी. व्ही. दोशी

7155058252. सी. पी. कुकरेजा

7155058253. राज रेवाल

7155058254. बिमल पटेल





Question Number : 52 Question Id : 7155052620 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

LIST I		LIST II	
A.		I.	Empire state Building
B.		II.	Hagia Sophia
C.		III.	Sydney Opera House
D.		IV.	Colosseum

Choose the correct answer from the options given below:

**Options :**

7155058255. A-II, B-I, C-IV, D-III

7155058256. A-I, B-III, C-IV, D-II

7155058257. A-I, B-II, C-III, D-IV

7155058258. A-IV, B-III, C-II, D-I

**Question Number : 52 Question Id : 7155052620 Question Type : MCQ Option Shuffling : Yes Is**





**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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



यादी I आणि यादी II यांच्या जोड्या जुळवा.

LIST I		LIST II	
A.		I.	एम्पायर स्टेट बिल्डिंग
B.		II.	हाजिया सोफिया
C.		III.	सिडनी ओपेरा हाऊस
D.		IV.	कोलोजिअम

खालील पर्यायांपैकी योग्य उत्तर निवडा:

**Options :**

7155058255. A-II, B-I, C-IV, D-III

7155058256. A-I, B-III, C-IV, D-II





7155058257. A-I, B-II, C-III, D-IV

7155058258. A-IV, B-III, C-II, D-I

Question Number : 53 Question Id : 7155052621 Question Type : MCQ Option Shuffling : Yes Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List I with List II

LIST I		LIST II	
A.		I.	Tesla
B.		II.	Ferrari
C.		III.	Porsche
D.		IV.	Toyota

Choose the correct answer from the options given below:

**Options :**

7155058259. A-IV, B-I, C-II, D-III

7155058260. A-II, B-III, C-I, D-IV

7155058261. A-III, B-II, C-I, D-IV

7155058262. A-IV, B-III, C-II, D-I





Question Number : 53 Question Id : 7155052621 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यादी । आणि यादी ॥ यांच्या जोड्या जुळवा.

LIST I		LIST II	
A.		I.	टेस्ला
B.		II.	फेरारी
C.		III.	पोर्शे
D.		IV.	टोयोटा

खाली दिलेल्या पर्यायांपैकी योग्य उत्तर निवडा:

Options :

7155058259. A-IV, B-I, C-II, D-III

7155058260. A-II, B-III, C-I, D-IV

7155058261. A-III, B-II, C-I, D-IV

7155058262. A-IV, B-III, C-II, D-I

Question Number : 54 Question Id : 7155052622 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

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

Given below are two statements:

**Statement I :** Red, Blue and Yellow are the primary colours of a colour wheel.

**Statement II :** The colours which are positioned opposite to each other in a colour wheel are known as complementary colours.

In the light of above statements, choose the correct answer form the options given below

**Options :**

7155058263. Both Statement I and Statement II are correct

7155058264. Both Statement I and Statement II are incorrect

7155058265. Statement I is correct but statement II is incorrect

7155058266. Statement I is incorrect but statement II is correct

**Question Number : 54 Question Id : 7155052622 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

खाली दोन विधाने दिली आहेत:

विधान I : लाल, निळा आणि पिवळा हे रंग चक्रातील प्राथमिक रंग आहेत.

विधान II : रंग चक्रात एकमेकांच्या विरुद्ध दिशेला असणाऱ्या रंगांना पूरक रंग म्हणतात.

वरील विधानांवरून, खाली दिलेल्या पर्यायांपैकी सर्वाधिक योग्य पर्याय निवडा.

**Options :**

7155058263. विधान I आणि विधान II दोन्ही योग्य आहेत

7155058264. विधान I आणि विधान II दोन्ही अयोग्य आहेत

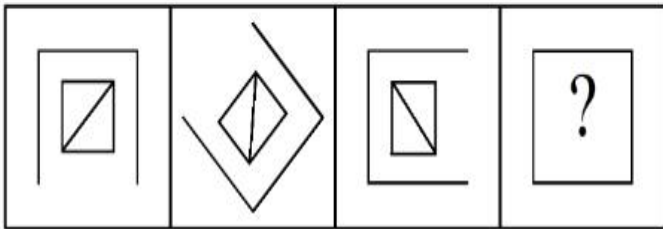
7155058265. विधान I योग्य आहे परंतु विधान II अयोग्य आहे

**Question Number : 55 Question Id : 7155052623 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

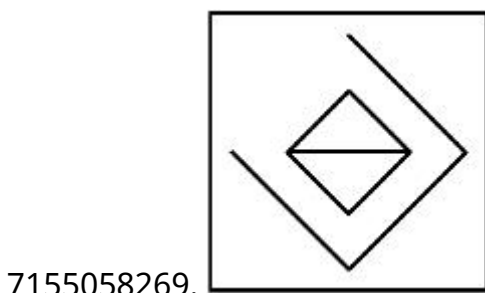
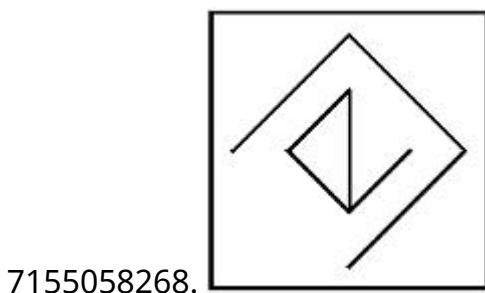
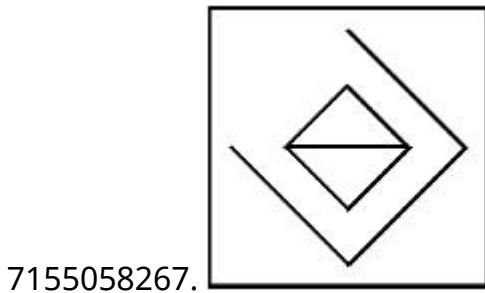
**Correct Marks : 4 Wrong Marks : 1**

Following question consists of problem figures followed by answer figures. Select a figure from amongst the answer figures which will continue the same series or pattern as established by the problem figures.

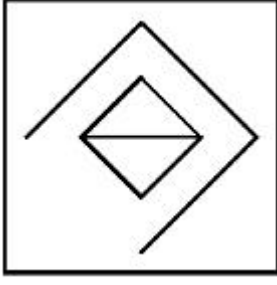
PROBLEM FIGURES



Options :



7155058270.

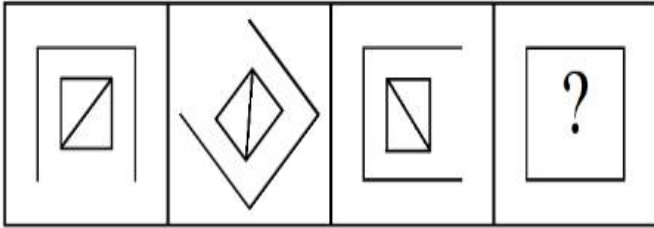


**Question Number : 55 Question Id : 7155052623 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

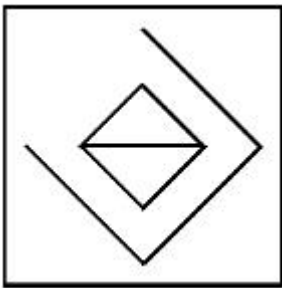
**Correct Marks : 4 Wrong Marks : 1**

खालील प्रश्नांमध्ये प्रश्न आकृती आणि उत्तर आकृती आहेत. प्रश्न आकृतीमध्ये स्थापित क्रम किंवा रचनेला पुढे नेणारी आकृती उत्तर आकृत्यांमधून निवडा.

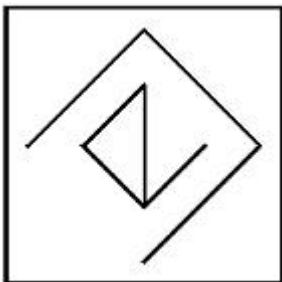
प्रश्न आकृत्या



**Options :**

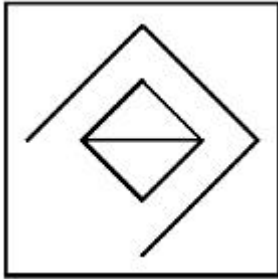
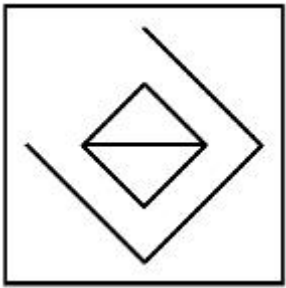


7155058267.



7155058268.

7155058269.

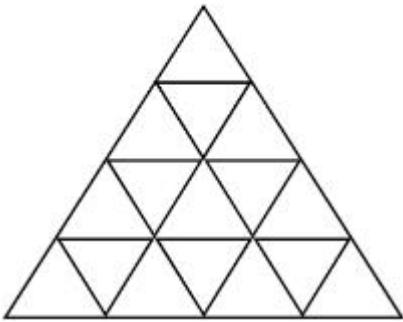


7155058270.

**Question Number : 56 Question Id : 7155052624 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

How many triangles are there in given figure:-



**Options :**

7155058271. 26

7155058272. 25

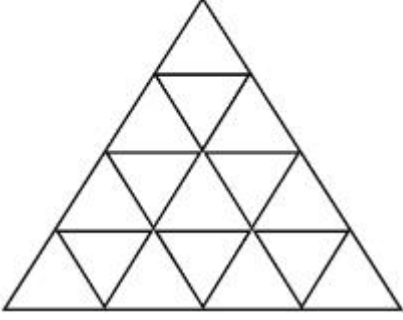
7155058273. 27

7155058274. 24

Question Number : 56 Question Id : 7155052624 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

खालील आकृतीमध्ये किती त्रिकोण आहेत ?



Options :

7155058271. 26

7155058272. 25

7155058273. 27

7155058274. 24

Question Number : 57 Question Id : 7155052625 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Find the odd one out:-

7, 9, 25, 32, 43, 59

Options :

7155058275. 59

7155058276. 32



7155058277. 25

7155058278. 9

**Question Number : 57 Question Id : 7155052625 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

गटात न बसणारी संख्या निवडा:-

7, 9, 25, 32, 43, 59

**Options :**

7155058275. 59

7155058276. 32

7155058277. 25

7155058278. 9

**Question Number : 58 Question Id : 7155052626 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

A residential building has 15 floors. The height of ground floor is 4.2 meter (including length and slab thickness). Rest all other floors are of 3.3 meter high (including slab thickness). What is the total height of the building (from ground to terrace) in meters?

**Options :**

7155058279. 45.6 meter

7155058280. 50 meter

7155058281. 50.4 meter

7155058282. 51.6 meter

**Question Number : 58 Question Id : 7155052626 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

एका निवासी इमारतीला 15 मजले आहेत. तळमजल्याची उंची 4.2 मीटर (लांबी व छताची जाडी गृहीत धरून) आहे. इतर सर्व मजले 3.3 मीटर उंचीचे (छताची जाडी गृहीत धरून) आहेत. इमारतीची (तळापासून गच्चीपर्यंत) एकूण मीटरमध्ये उंची किती?

**Options :**

7155058279. 45.6 मीटर

7155058280. 50 मीटर

7155058281. 50.4 मीटर

7155058282. 51.6 मीटर

**Question Number : 59 Question Id : 7155052627 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

Identify the mirror image of the given word:-

SUCCESS

**Options :**

7155058283. 22ECCU2

7155058284. 22ECCU2

7155058285. SUCCESS

7155058286. SSECCUS

**Question Number : 59 Question Id : 7155052627 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

दिलेल्या शब्दाची आरशातील प्रतिमा ओळखा:-

SUCCESS

**Options :**

7155058283. 22ECCU2

7155058284. 22ECCU2

7155058285. SUCCESS

7155058286. SSECCUS

**Question Number : 60 Question Id : 7155052628 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

The scale of a map is 1:1000. If a car travels 7 cm from point 'A' to point 'B' on the Map. Then how much the car has travelled in original:-

**Options :**

7155058287. 0.7 km

7155058288. 7000 mm

7155058289. 7 km

7155058290. 70 meter

**Question Number : 60 Question Id : 7155052628 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

एका नकाशाचे प्रमाण 1:1000 आहे. जर एक कार या नकाशावर बिंदू 'A' पासून 'B' बिंदू पर्यंत 7 सेंमी चालते, तर प्रत्यक्षपणे कार किती चालली?

**Options :**

7155058287. 0.7 किमी

7155058288. 7000 मीमी

7155058289. 7 किमी

7155058290. 70 मीटर

**Question Number : 61 Question Id : 7155052629 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

A land size of 80 meter  $\times$  40 meter for a house design is drawn on paper at a scale of 1:100, then what size is drawn on paper to represent the land?

**Options :**

7155058291. 8 meter  $\times$  4 meter

7155058292. 80 meter  $\times$  40 meter

7155058293. 8 centimeter  $\times$  4 centimeter

7155058294. 4 meter  $\times$  2 meter

**Question Number : 61 Question Id : 7155052629 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

एका घराच्या रचनेसाठी प्रमाणानुसार एका कागदावर 80 मीटर  $\times$  40 मीटर च्या जमिनीचे आकारमान काढले, तर जमिनीसाठी कागदावर काढलेले आकारमान किती ?

**Options :**

7155058291. 8 मीटर  $\times$  4 मीटर

7155058292. 80 मीटर  $\times$  40 मीटर

7155058293. 8 सेंटीमीटर  $\times$  4 सेंटीमीटर

7155058294. 4 मीटर  $\times$  2 मीटर

**Question Number : 62 Question Id : 7155052630 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Find the missing number in given series.

16, 33, 65, 131, 261, (.....)

**Options :**

7155058295. 523

7155058296. 521

7155058297. 524

7155058298. 520

**Question Number : 62 Question Id : 7155052630 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

दिलेल्या क्रमतालिकेत हरवलेला आकडा शोधा.

16, 33, 65, 131, 261, (.....)

**Options :**

7155058295. 523

7155058296. 521

7155058297. 524

7155058298. 520

**Question Number : 63 Question Id : 7155052631 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

In a code language if ROMAN is written as TQOCP: then ITALY is.....

**Options :**

7155058299. KVCMA

7155058300. KWCNB

7155058301. KUCLA

7155058302. KVCNA

**Question Number : 63 Question Id : 7155052631 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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

एका सांकेतिक भाषेत जर ROMAN हे TQOCP असे लिहिले जाते: तर ITALY कसे लिहिले जाईल.....

**Options :**

7155058299. KVCMA

7155058300. KWCNB

7155058301. KUCLA

7155058302. KVCNA

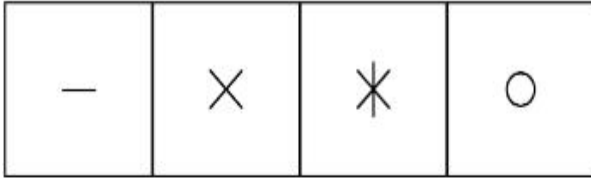
**Question Number : 64 Question Id : 7155052632 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

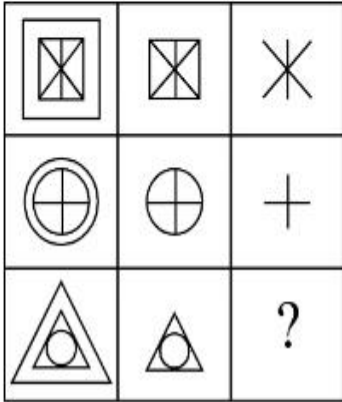
**Instruction Time : 0**

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

Select a suitable figure from the four alternatives which will come in the empty box.



(A) (B) (C) (D)



**Options :**

7155058303. D

7155058304. C

7155058305. B

7155058306. A

**Question Number : 64 Question Id : 7155052632 Question Type : MCQ Option Shuffling : Yes Is**

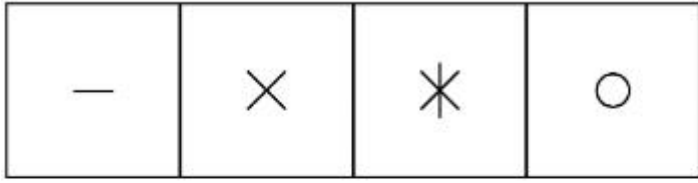
**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

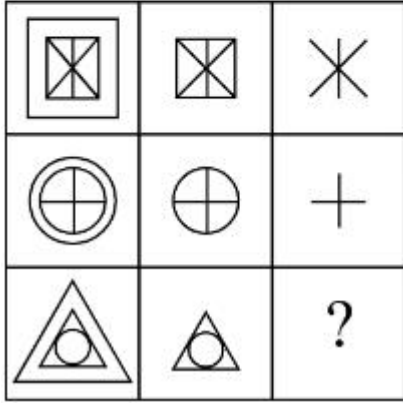
**Correct Marks : 4 Wrong Marks : 1**



चार पर्यायांपैकी रिकाम्या चौकटीत बसणारी योग्य आकृती निवडा.



(A) (B) (C) (D)



**Options :**

7155058303. D

7155058304. C

7155058305. B

7155058306. A

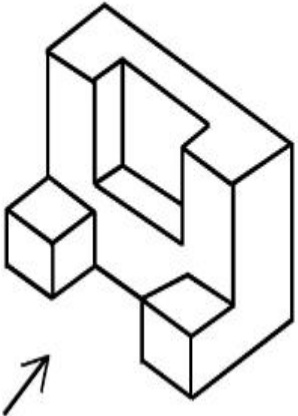
**Question Number : 65 Question Id : 7155052633 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

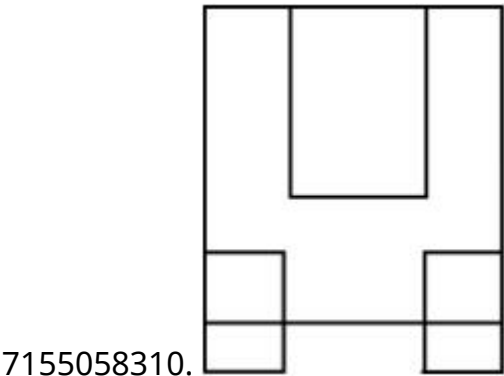
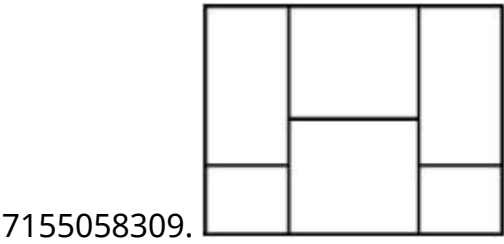
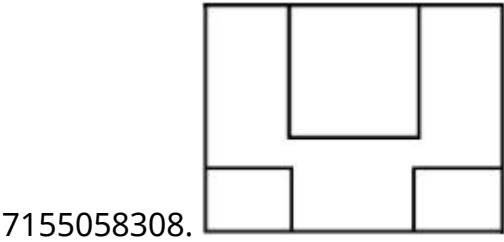
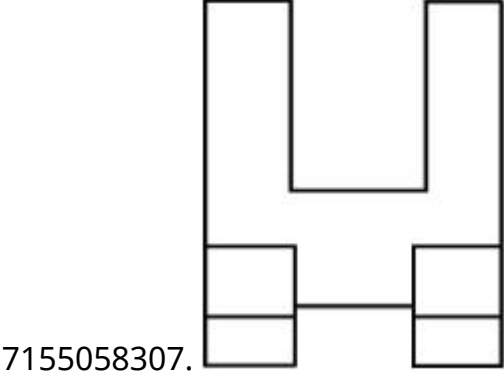
**Instruction Time : 0**

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

The 3D figure shows the view of an object. Looking in the direction of arrow, identify the most appropriate elevation from the given answer figures.



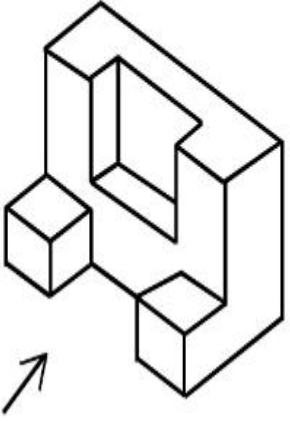
Options :



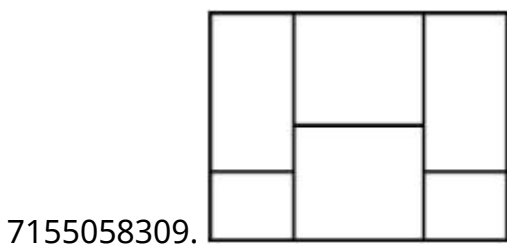
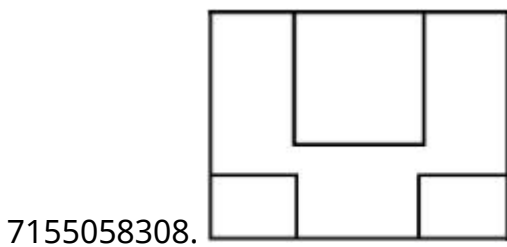
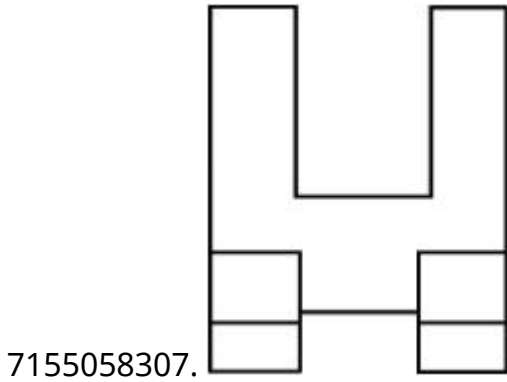
Question Number : 65 Question Id : 7155052633 Question Type : MCQ Option Shuffling : Yes Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

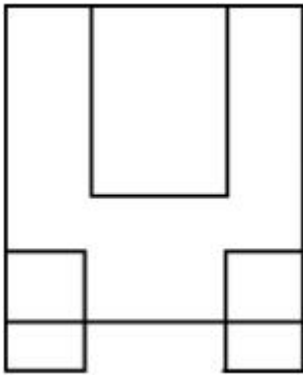
दिलेली 3D आकृती एका वस्तूचे दृष्य दाखवते. बाणाच्या दिशेने पाहून, दिलेल्या उत्तर आकृत्यांपैकी सर्वाधिक योग्य आरेखन निवडा.



Options :



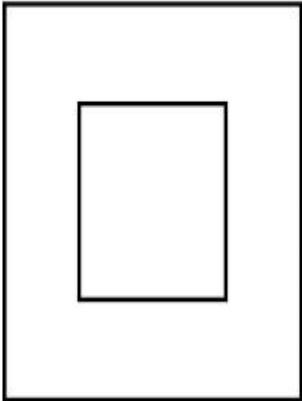
7155058310.



**Question Number : 66 Question Id : 7155052634 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

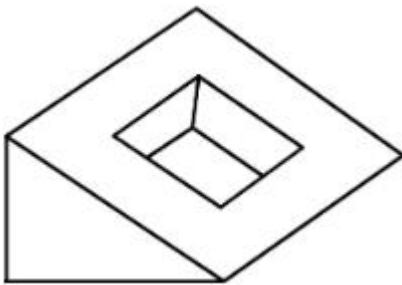
**Correct Marks : 4 Wrong Marks : 1**

Question figure shows top view/ plan of an object. Identify the INCORRECT 3D view from the given answers figure.

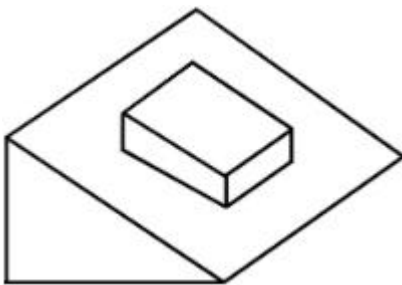


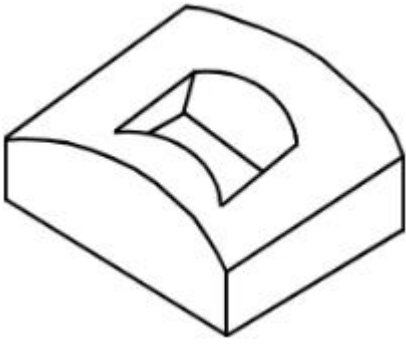
**Options :**

7155058311.

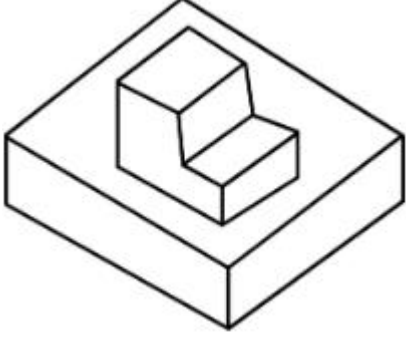


7155058312.





7155058313.

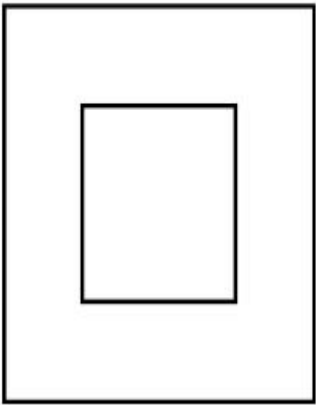


7155058314.

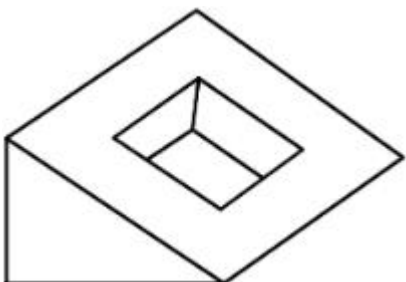
**Question Number : 66 Question Id : 7155052634 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

प्रश्न आकृती एका वस्तूचे सर्वोच्च दृष्य/रेखाटन दाखवते. दिलेल्या उत्तर आकृत्यांमधून अयोग्य 3D दृष्य ओळखा.

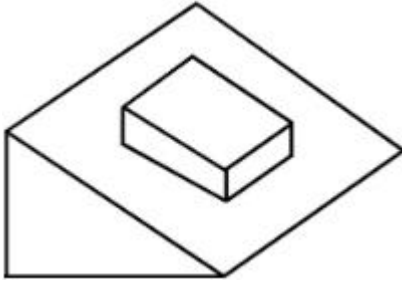


**Options :**

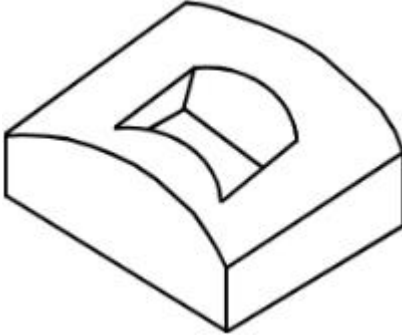


7155058311.

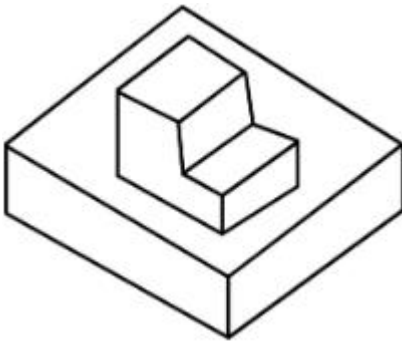
7155058312.



7155058313.



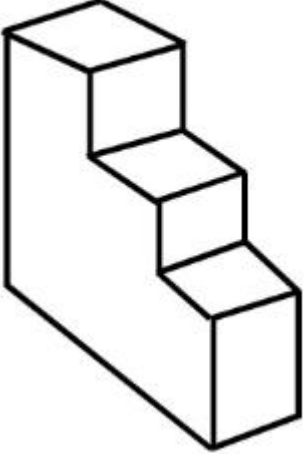
7155058314.



**Question Number : 67 Question Id : 7155052635 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

How many surfaces does the object have?



**Options :**

7155058315. 9

7155058316. 10

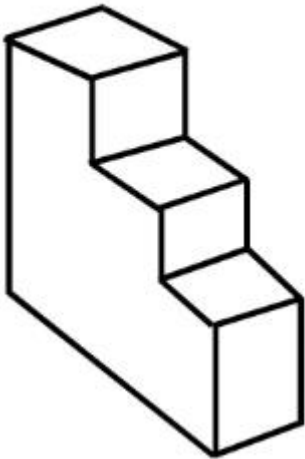
7155058317. 8

7155058318. 11

**Question Number : 67 Question Id : 7155052635 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

या वस्तूला किती पृष्ठभाग आहेत ?



**Options :**

7155058315. 9

7155058316. 10

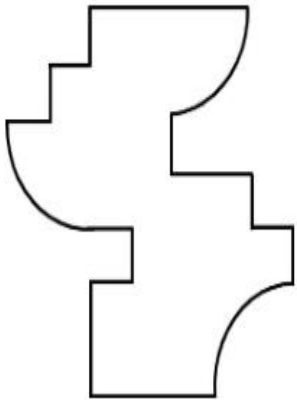
7155058317. 8

7155058318. 11

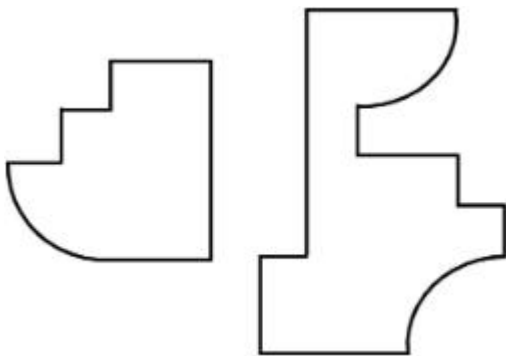
**Question Number : 68 Question Id : 7155052636 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

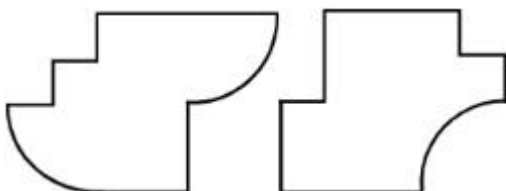
If the question figure is cut into two parts, which of the answer figures complete the question figure without any overlappings?



**Options :**



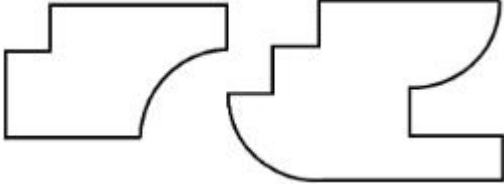
7155058319.



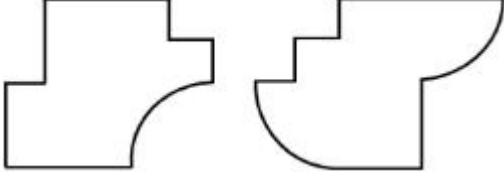
7155058320.



7155058321.



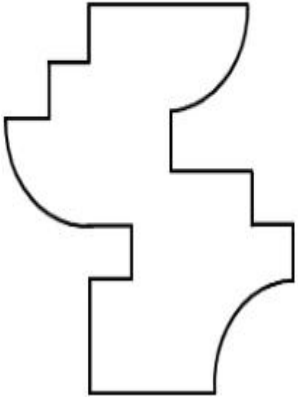
7155058322.



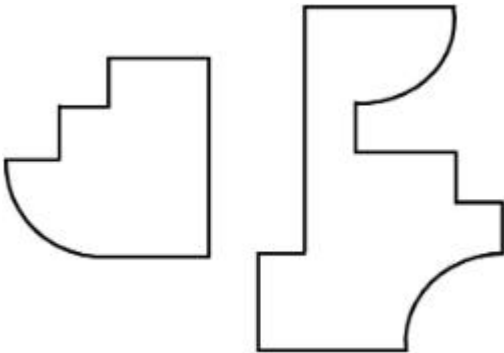
**Question Number : 68 Question Id : 7155052636 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

जर प्रश्न आकृतीला दोन भागांमध्ये कापले, तर उत्तर आकृत्यांपैकी कोणती आकृती प्रश्न आकृतीला कोणत्याही प्रकारे अतिव्याप्त न करता पूर्ण करते ?

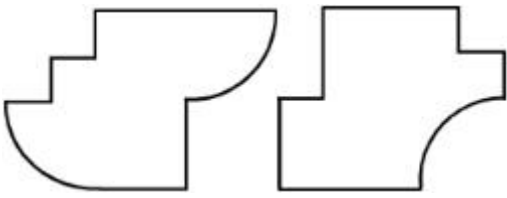


**Options :**

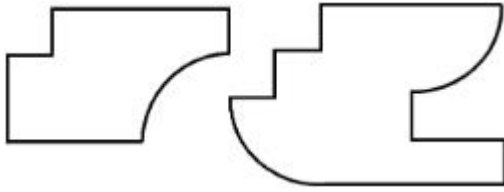


7155058319.

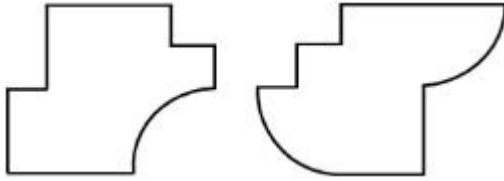
7155058320.



7155058321.



7155058322.



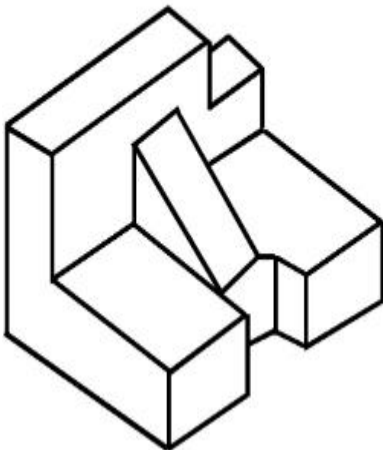
**Question Number : 69 Question Id : 7155052637 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

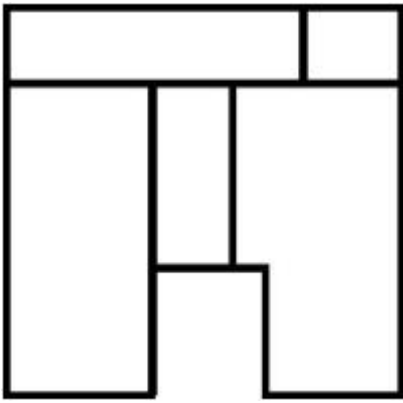
**Correct Marks : 4 Wrong Marks : 1**

The 3D problem figure shows the view of an object. Identify its appropriate top view from the answer figures.

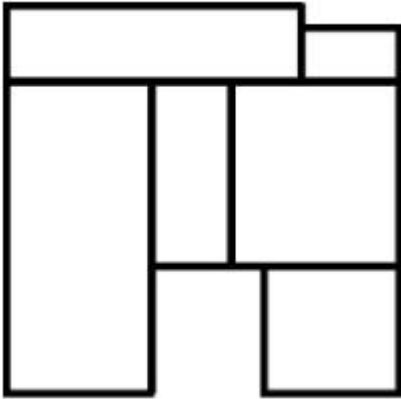


**Options :**

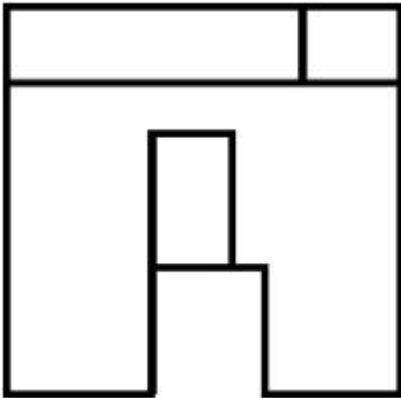
7155058323.



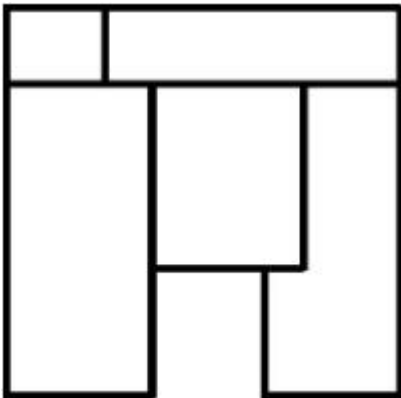
7155058324.



7155058325.



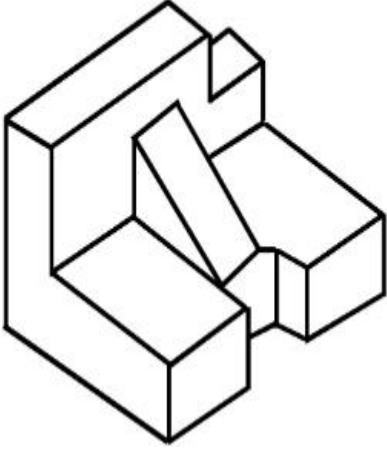
7155058326.



**Instruction Time : 0**

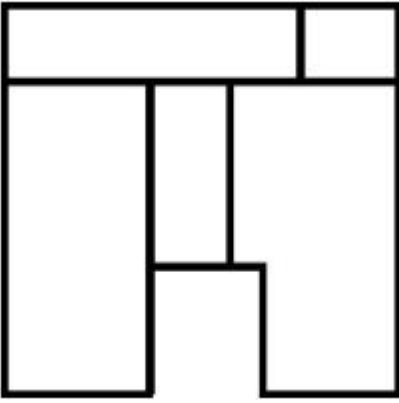
**Correct Marks : 4 Wrong Marks : 1**

3D प्रश्न आकृती एका वस्तूचे दृष्य दाखवते. त्याचे योग्य वरून दिसणारे दृष्य उत्तर आकृत्यांमधून निवडा.

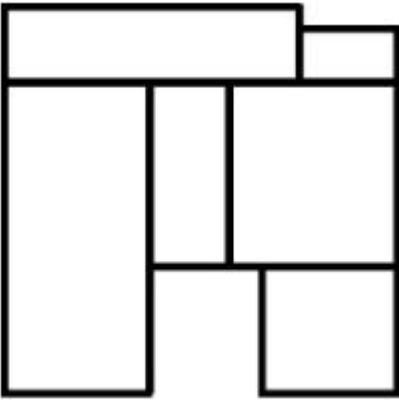


**Options :**

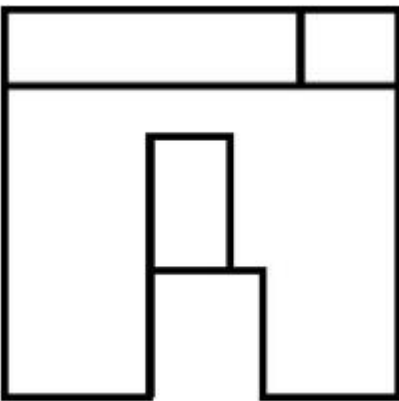
7155058323.



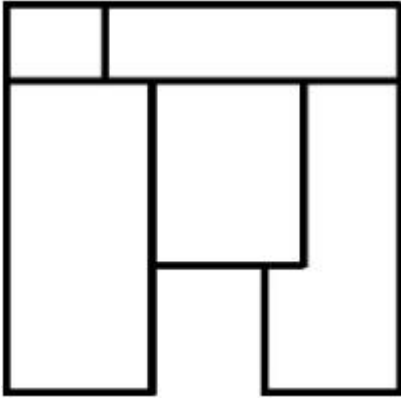
7155058324.



7155058325.



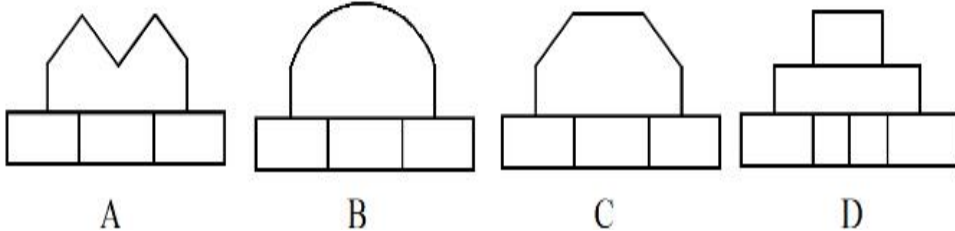
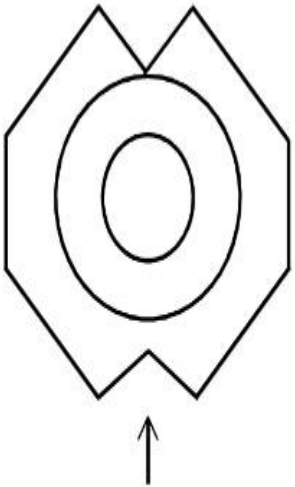
7155058326.



**Question Number : 70 Question Id : 7155052638 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

Identify the correct elevation when you look into the object from the marked arrow side of the plan of the object.



**Options :**

7155058327. D

7155058328. A

7155058329. B

7155058330. C

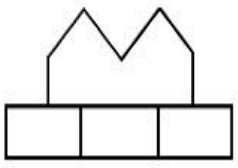
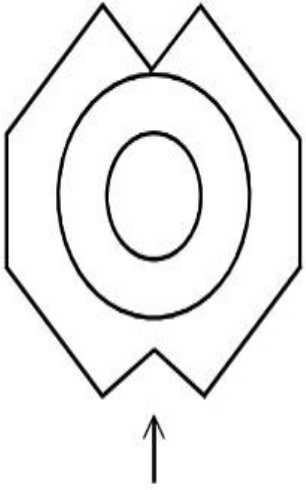
Question Number : 70 Question Id : 7155052638 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

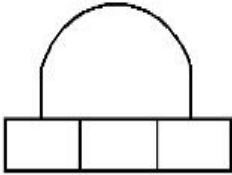
Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

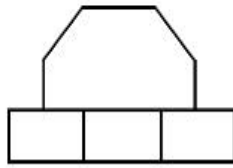
एका वस्तूच्या आराखड्याकडे निर्देशित बाणाच्या बाजूने पाहिले असता त्या वस्तूचे योग्य आरेखन कोणते ते ओळखा.



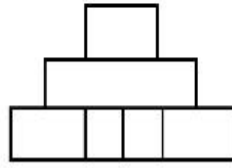
A



B



C



D

Options :

7155058327. D

7155058328. A

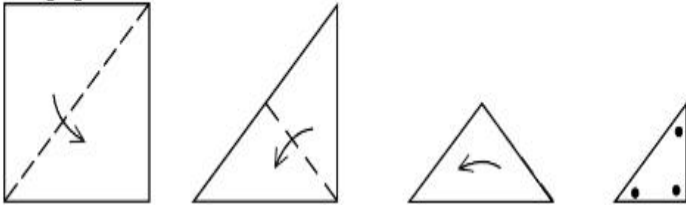
7155058329. B

7155058330. C

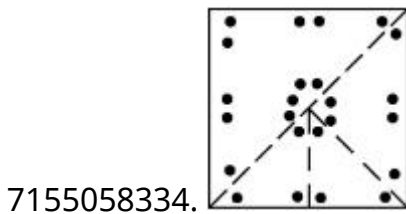
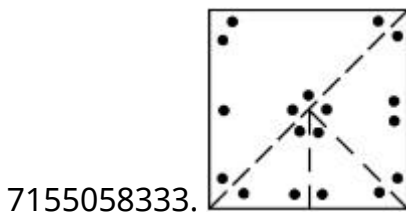
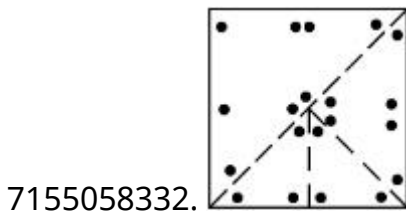
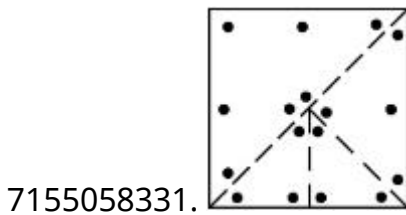
Question Number : 71 Question Id : 7155052639 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

A paper is folded in a given pattern and it is cut at the end. Identify which pattern is formed when the paper is unfold.



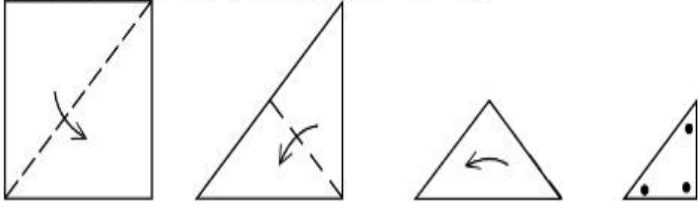
Options :



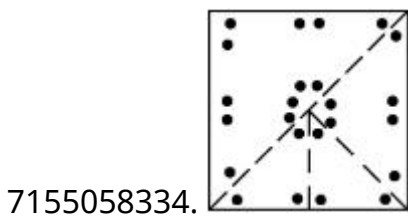
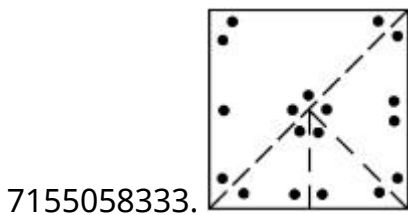
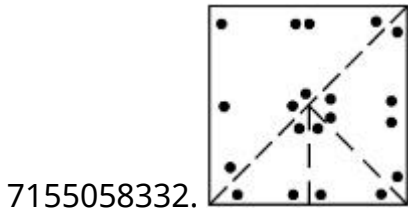
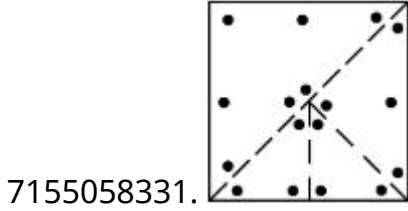
Question Number : 71 Question Id : 7155052639 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

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

एक कागद दिलेल्या रचनेनुसार घडी केला आणि शेवटी तो कापला. जेव्हा कागदाची घडी उलगाडली तेव्हा तेव्हा कोणती रचना तयार झाली, ते ओळखा.



**Options :**



**Question Number : 72 Question Id : 7155052640 Question Type : MCQ Option Shuffling : Yes Is**

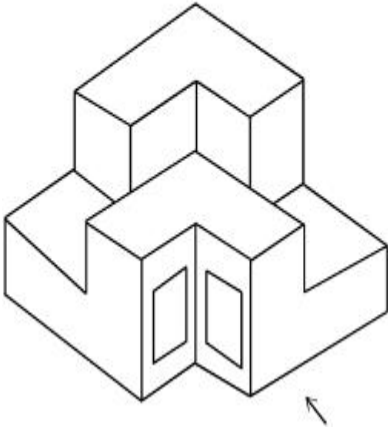
**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

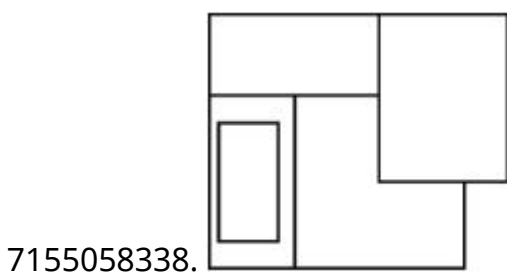
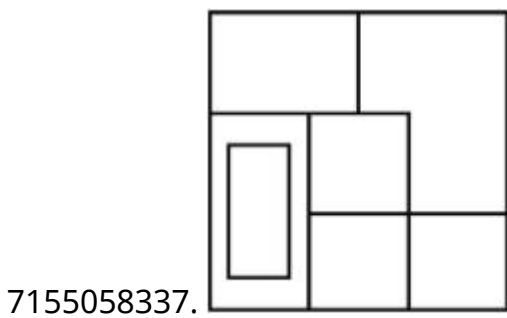
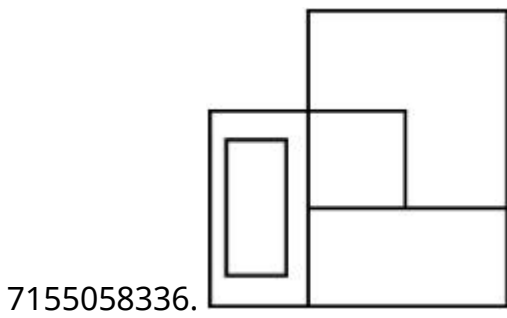
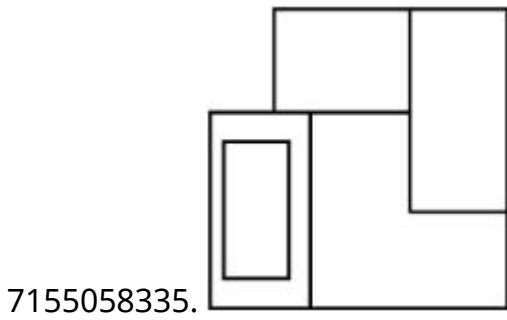
**Correct Marks : 4 Wrong Marks : 1**



The question figure shows the 3-D view of an object. Identify the correct view, looking in the direction of arrow.



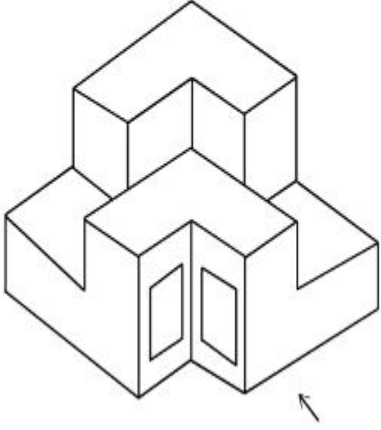
**Options :**



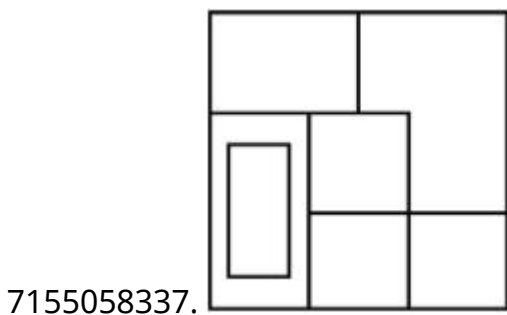
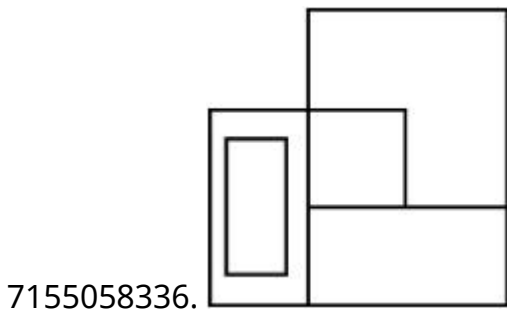
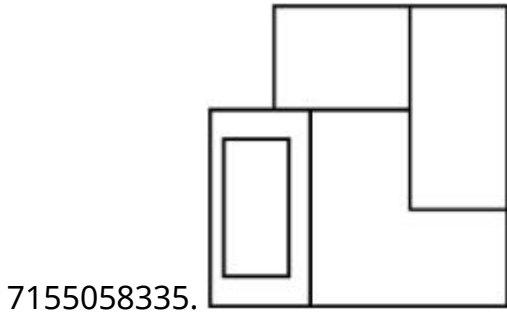
Question Number : 72 Question Id : 7155052640 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

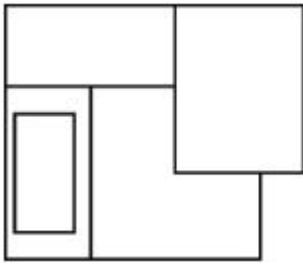
प्रश्न आकृतीमध्ये एका वस्तूचे 3-D दृष्य दाखवले आहे. बाणाच्या दिशेने पाहिले असता योग्य दृष्य कोणते ते ओळखा.



Options :



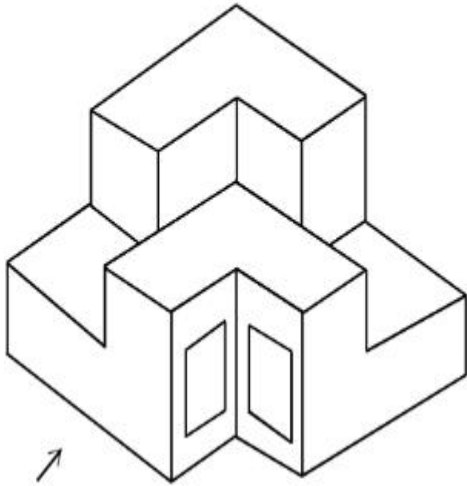
7155058338.



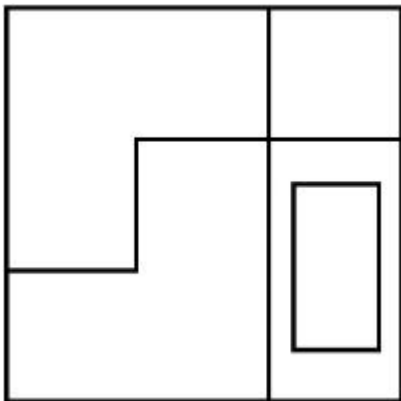
**Question Number : 73 Question Id : 7155052641 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

The question figure shows the 3-D view of an object. Identify the correct view, looking in the direction of arrow.

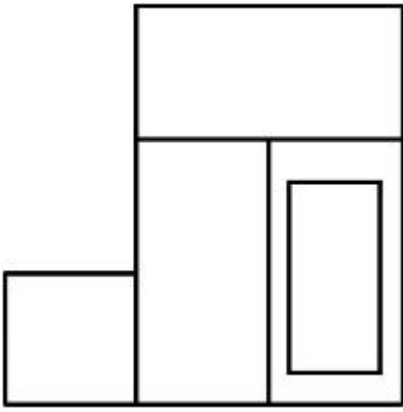


**Options :**

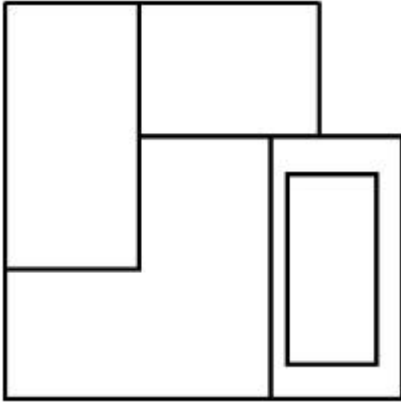


7155058339.

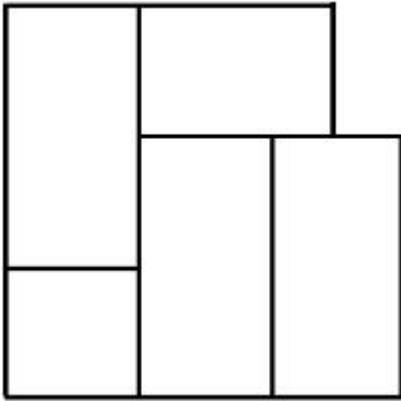
7155058340.



7155058341.



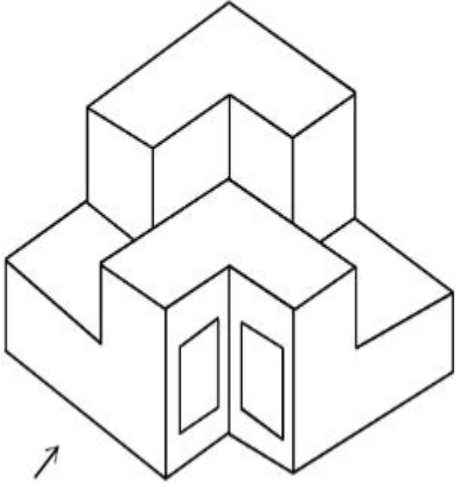
7155058342.



**Question Number : 73 Question Id : 7155052641 Question Type : MCQ Option Shuffling : Yes Is  
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum  
Instruction Time : 0**

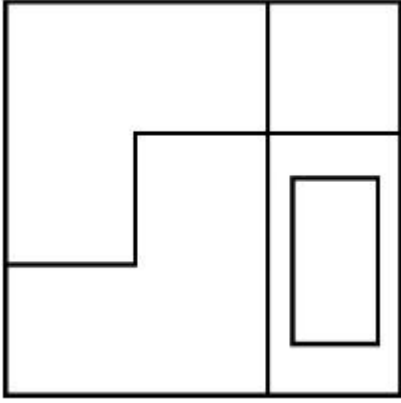
**Correct Marks : 4 Wrong Marks : 1**

प्रश्न आकृतीमध्ये एका वस्तूचे 3-D दृष्य दाखवले आहे. बाणाच्या दिशेने पाहिले असता योग्य दृष्य कोणते ते ओळखा.

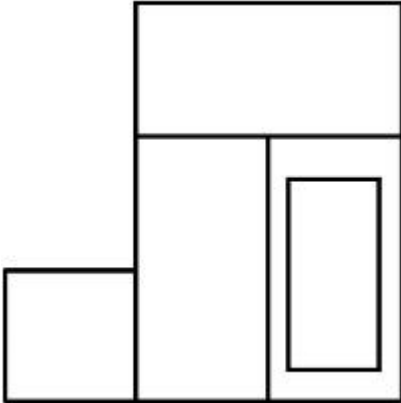


Options :

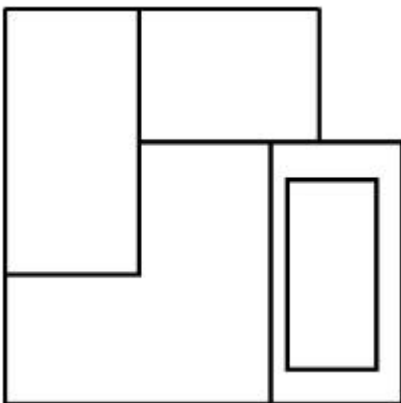
7155058339.



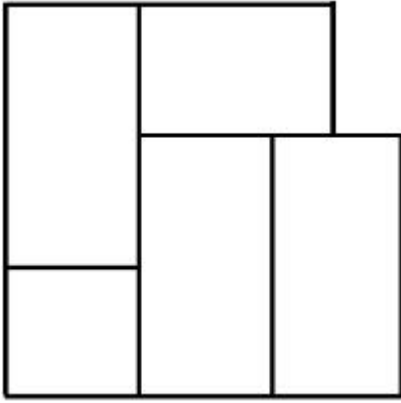
7155058340.



7155058341.



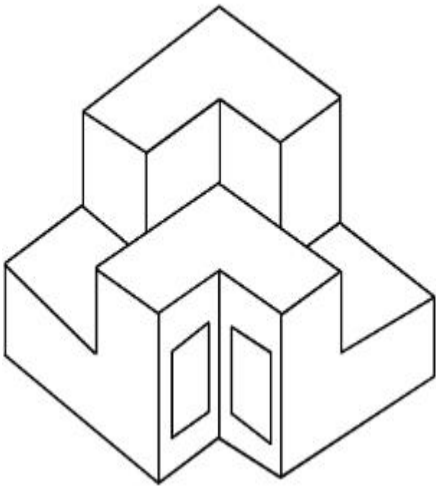
7155058342.



**Question Number : 74 Question Id : 7155052642 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

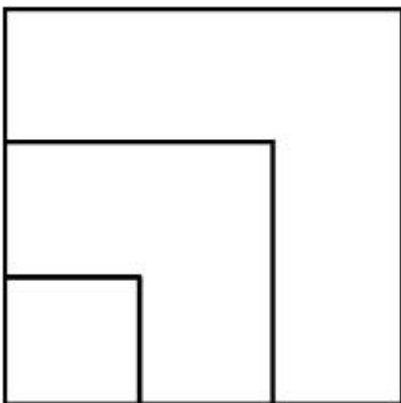
**Correct Marks : 4 Wrong Marks : 1**

From the given options below, choose the correct plan of the 3-D object, when viewed from the top.

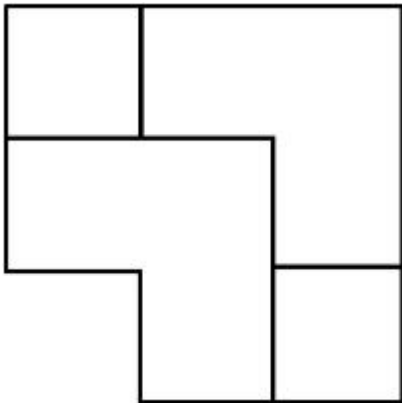
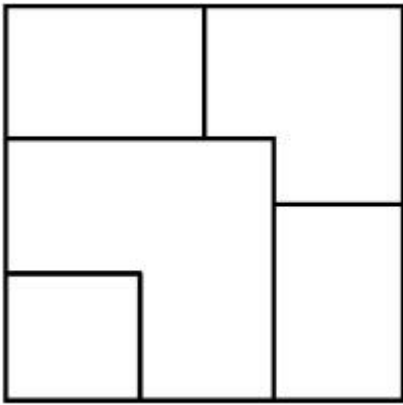


**Options :**

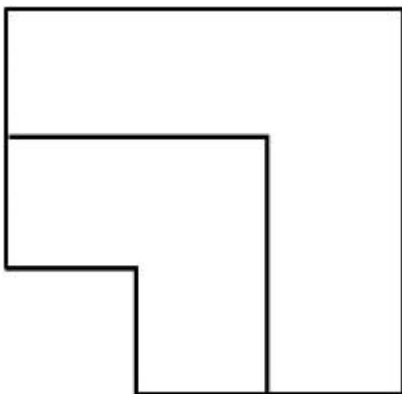
7155058343.



7155058344.



7155058345.

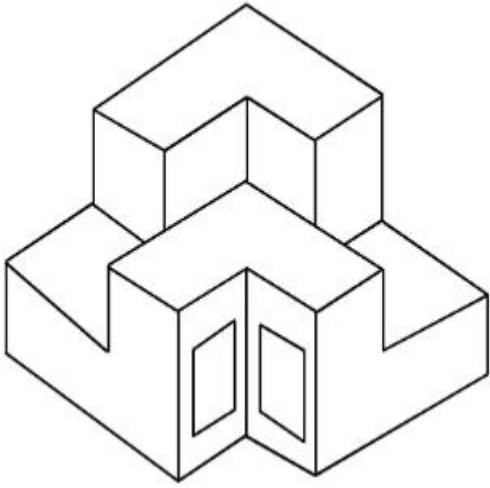


7155058346.

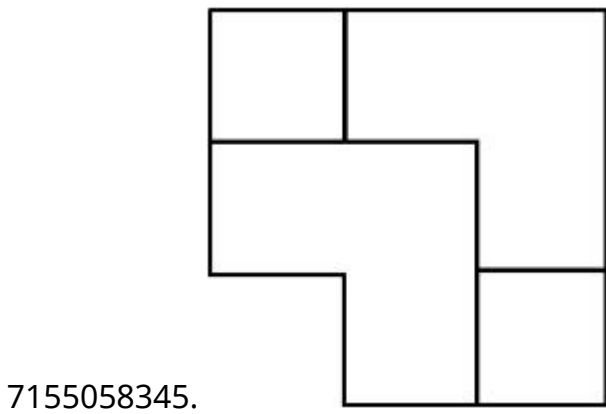
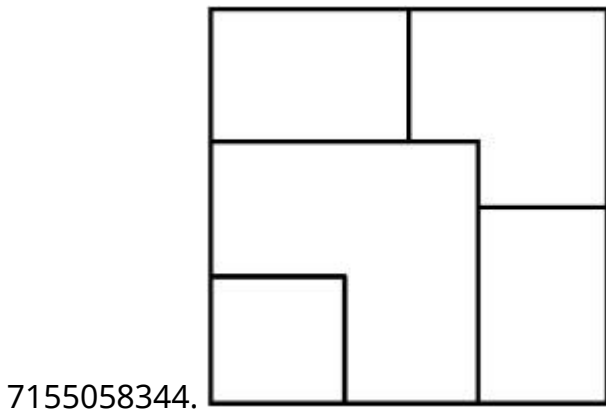
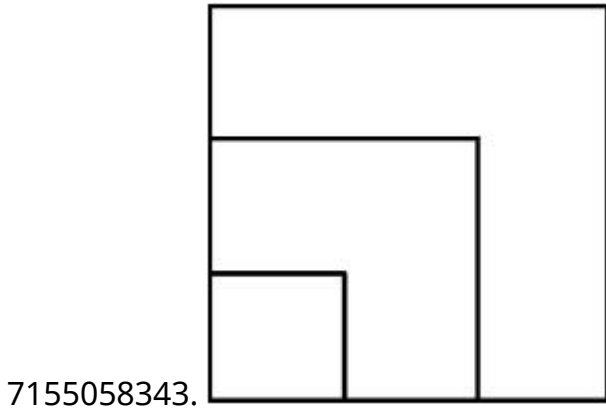
**Question Number : 74 Question Id : 7155052642 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

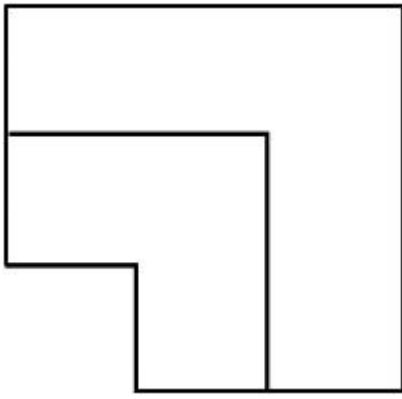
खाली दिलेल्या पर्यायांमधून, वरून दृष्य पाहिले असता, 3-D वस्तूची योग्य रचना कोणती ते निवडा.



Options :





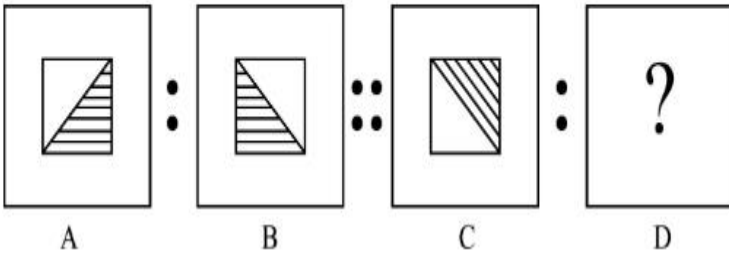


7155058346.

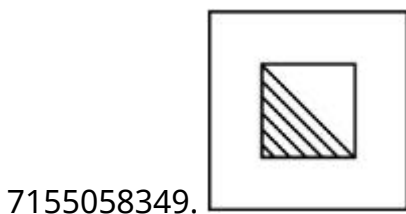
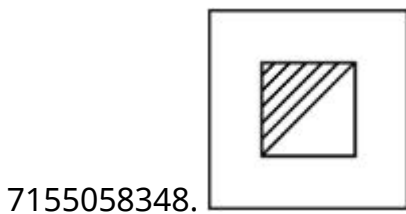
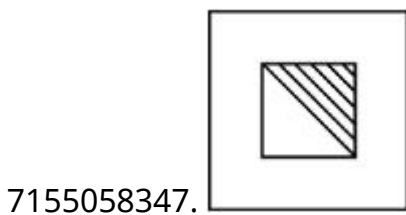
**Question Number : 75 Question Id : 7155052643 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

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

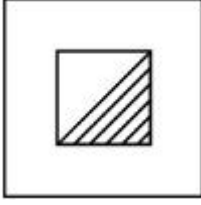
The second figure in the first part of the problem figures bears certain relationship to the first figure. Similarly, one of the figures of answer figures bears the same relationship to the first figure of the second part. Identify the correct option from the given answer figures.



**Options :**



7155058350.



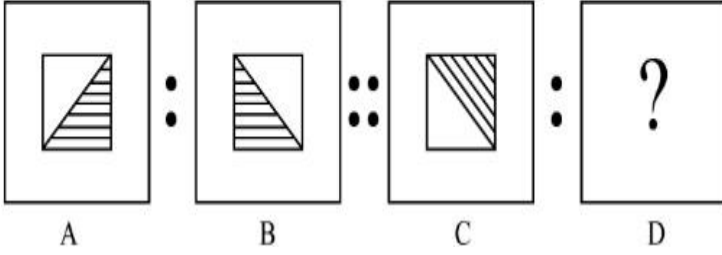
Question Number : 75 Question Id : 7155052643 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

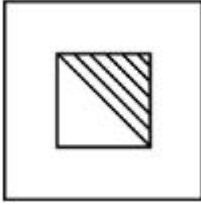
Correct Marks : 4 Wrong Marks : 1

प्रश्न आकृतीमधील पहिल्या भागातील दुसऱ्या आकृतीचा पहिल्या आकृतीशी काहीतरी संबंध आहे. त्याचप्रमाणे उत्तर आकृत्यांपैकी एक आकृती दुसऱ्या भागातील पहिल्या आकृतीशी तसाच संबंध दर्शविते. दिलेल्या उत्तर आकृत्यांमधून योग्य पर्याय शोधा.

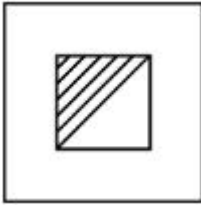


Options :

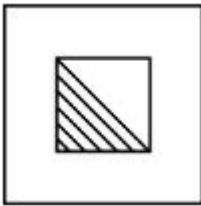
7155058347.



7155058348.



7155058349.



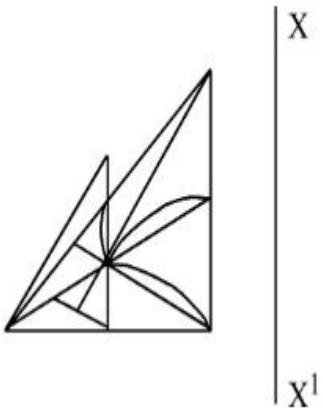
7155058350.



**Question Number : 76 Question Id : 7155052644 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

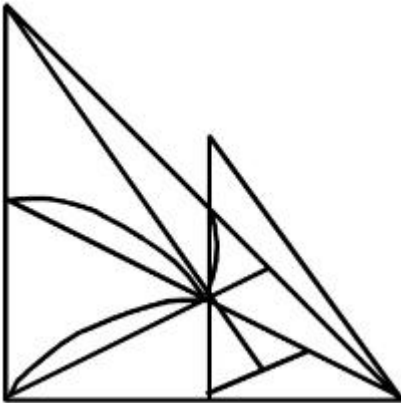
**Correct Marks : 4 Wrong Marks : 1**

Identify the true mirror image of the figure amongst the answer figures with respect to X-X

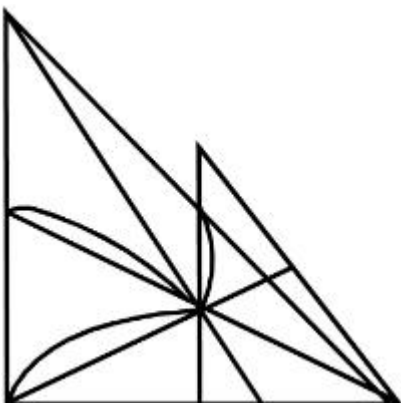


**Options :**

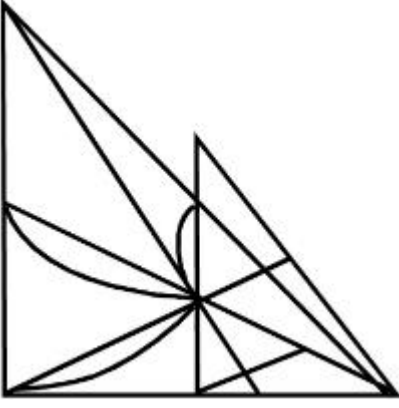
7155058351.



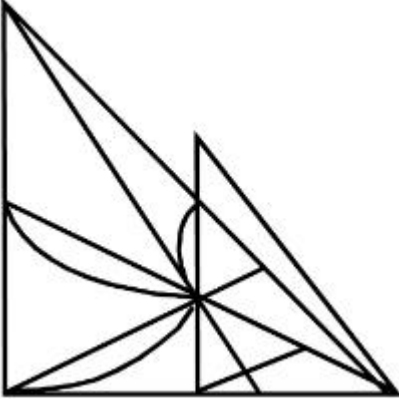
7155058352.



7155058353.



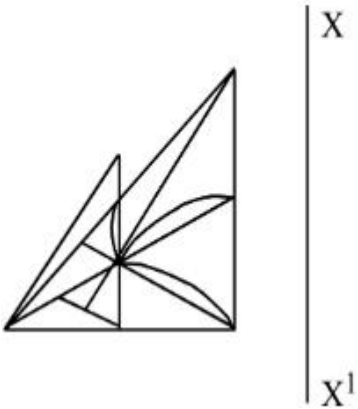
7155058354.



Question Number : 76 Question Id : 7155052644 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

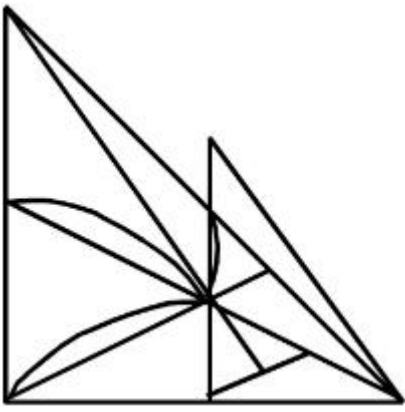
Correct Marks : 4 Wrong Marks : 1

X-X च्या अनुसार, दिलेल्या आकृतीची सत्य आरशातील प्रतिमा उत्तर आकृत्यांमधून शोधा.

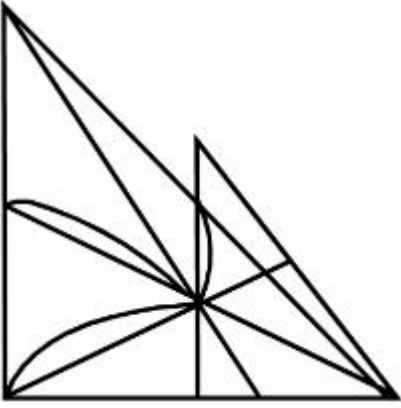


Options :

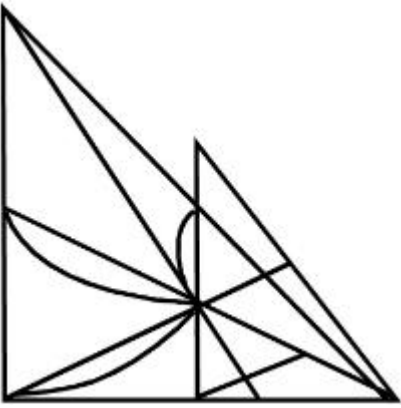
7155058351.



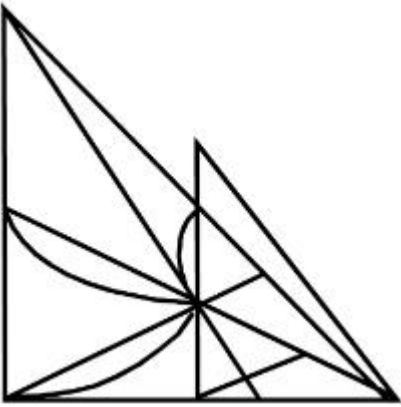
7155058352.



7155058353.



7155058354.

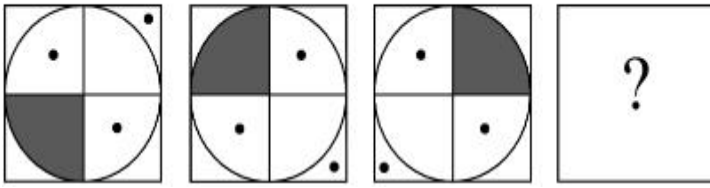


Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

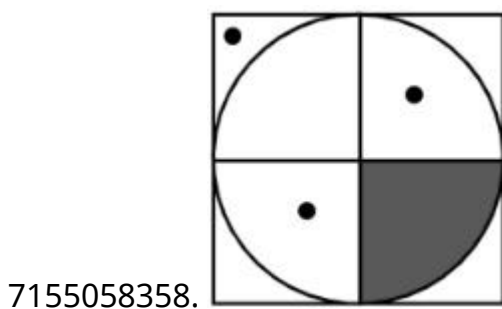
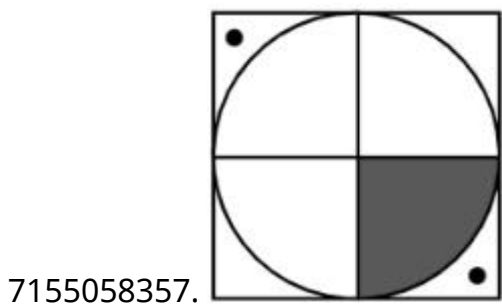
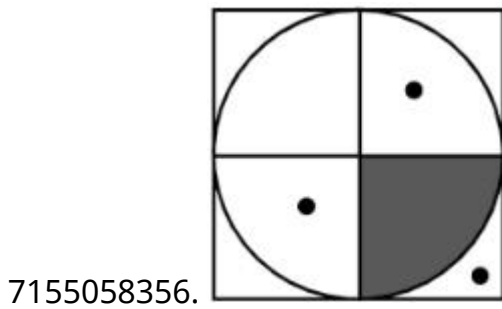
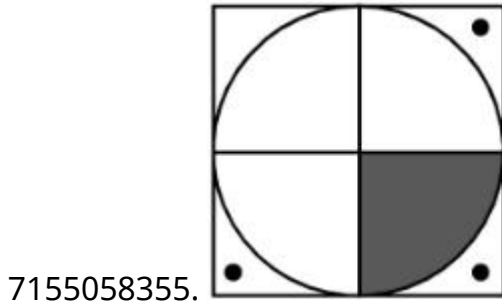
Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Choose the correct option amongst the answer figures which complete the series.



Options :



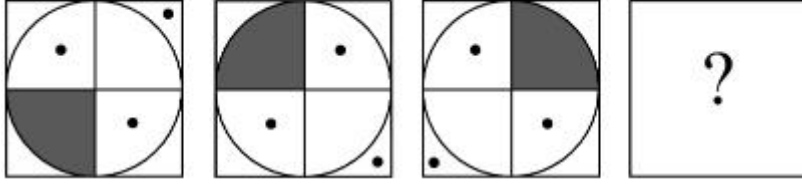
Question Number : 77 Question Id : 7155052645 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

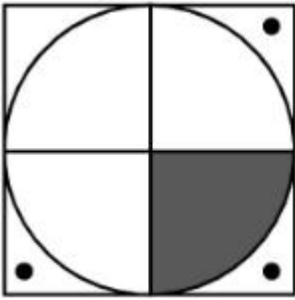
Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

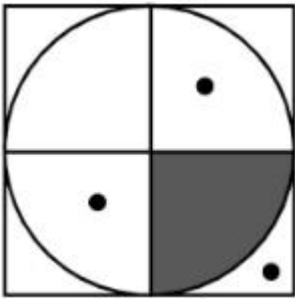
मालिकेला पूर्ण करणारा योग्य पर्याय उत्तरांमधून निवडा.



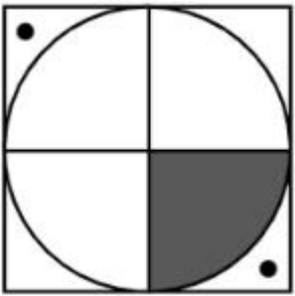
Options :



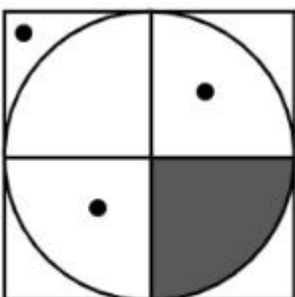
7155058355.



7155058356.



7155058357.



7155058358.

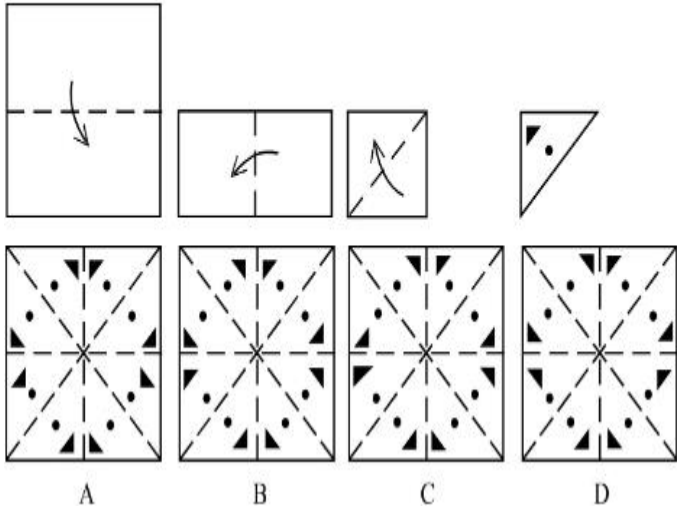
Question Number : 78 Question Id : 7155052646 Question Type : MCQ Option Shuffling : Yes Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Sheet is folded in marked format and cut led at last as shown. Identify from the options below, how the pattern will be made when it's fully unfold?



Options :

7155058359. B

7155058360. A

7155058361. D

7155058362. C

Question Number : 78 Question Id : 7155052646 Question Type : MCQ Option Shuffling : Yes Is

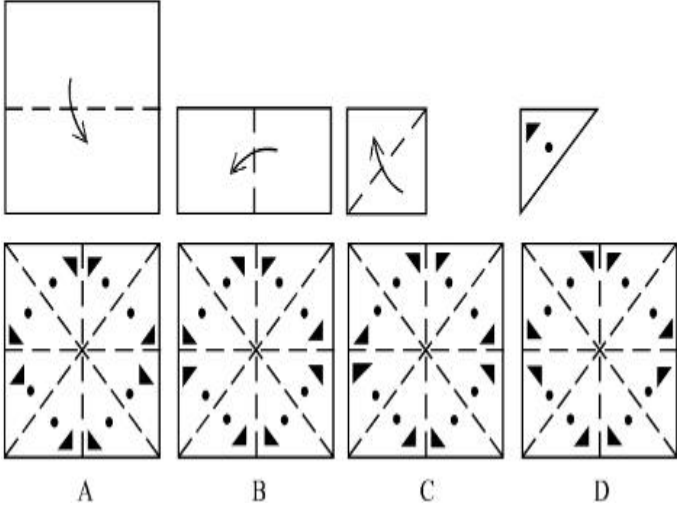
Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1



एक कागदाचा ताव नोंदवलेल्या पद्धतीने घडी केला आणि दाखवल्याप्रमाणे शेवटी कापला. जेव्हा तो उकलला तेव्हा तशी रचना तयार होईल ? खालील पर्यायांमधून शोधा.



**Options :**

7155058359. B

7155058360. A

7155058361. D

7155058362. C

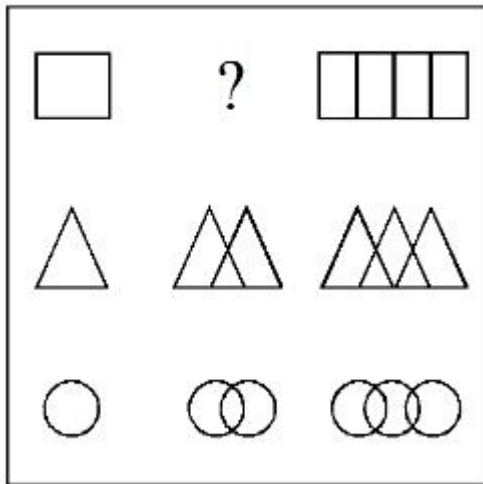
**Question Number : 79 Question Id : 7155052647 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

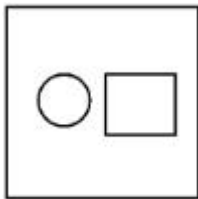
**Instruction Time : 0**

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

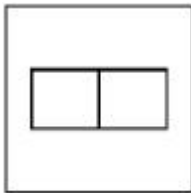
In the figure mentioned below find the missing series:-



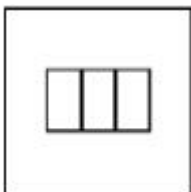
Options :



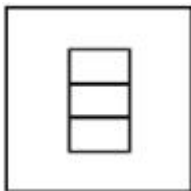
7155058363.



7155058364.



7155058365.

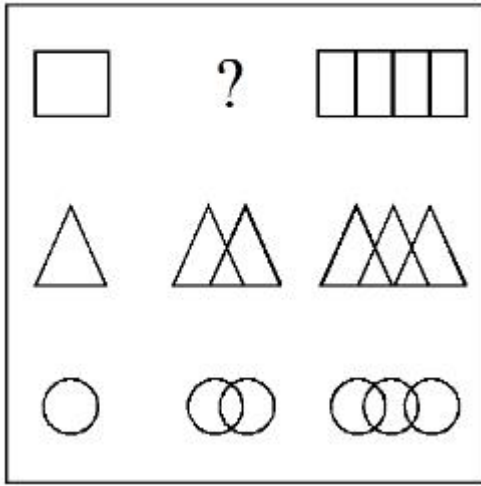


7155058366.

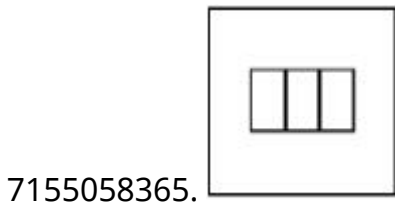
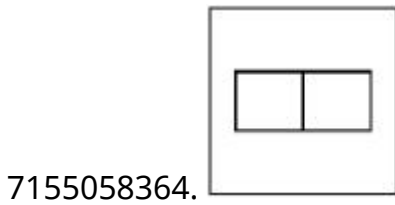
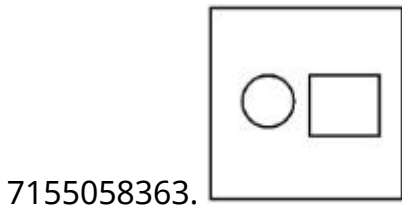
Question Number : 79 Question Id : 7155052647 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

खाली दिलेल्या आकृतीमध्ये मालिकेतील हरवलेला भाग शोधा:-

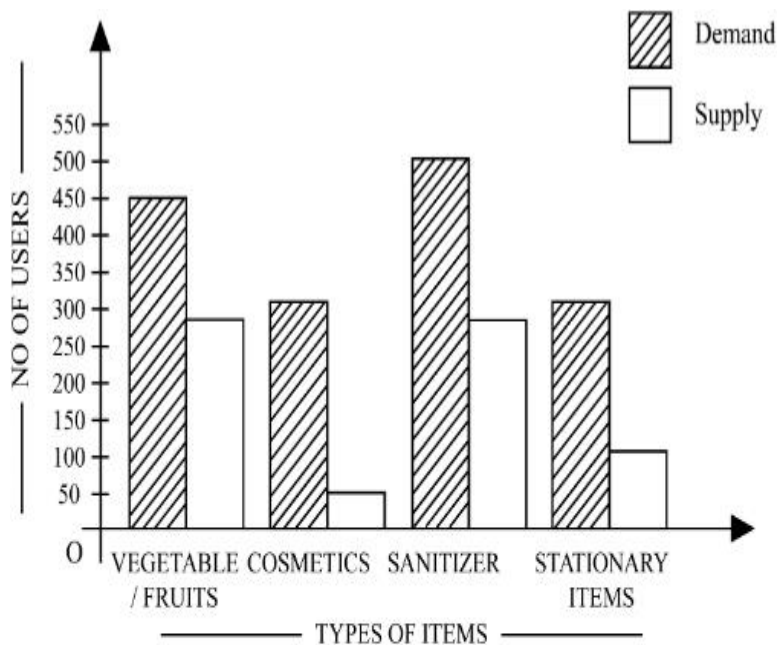


Options :



Question Number : 80 Question Id : 7155052648 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1



The diagram shows the supply and demand of different users for different items. Which of the following is/are correct?

- A. Sanitizer only meet 50% of the demand
- B. Cosmetics has the least supply among all.
- C. Among all, two items have equal demand but difference in supply
- D. Among all, two items have equal supply and two items have equal demand.

Choose the correct answer from the options given below:-

**Options :**

7155058367. B and D only

7155058368. A and B only

7155058369. A and C only

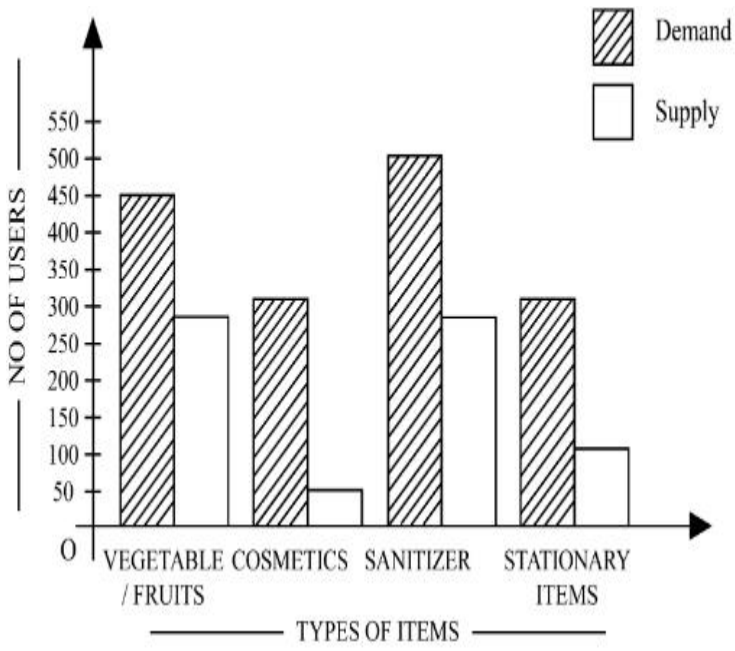
7155058370. B, C and D only

**Question Number : 80 Question Id : 7155052648 Question Type : MCQ Option Shuffling : Yes Is**

**Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum**

**Instruction Time : 0**

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



दिलेल्या आकृतीत विविध वस्तुंसाठी विविध वापरकर्त्यांची मागणी व पुरवठा दर्शविला आहे. खालीलपैकी काय बरोबर आहे/आहेत?

- सेनिटाइझरचा पुरवठा मागणीच्या केवळ 50% आहे.
- कॉस्मेटिकचा पुरवठा सर्वात कमी आहे.
- सर्वामध्ये, दोन वस्तूंची मागणी सारखी आहे परंतु पुरवठा वेगळा आहे.
- सर्वामध्ये दोन वस्तूंचा पुरवठा सारखा आहे आणि दोन वस्तूंची मागणी सारखीच आहे.

खाली दिलेल्या पर्यायांमधून योग्य उत्तर निवडा:-

**Options :**

7155058367. B आणि D फक्त

7155058368. A आणि B फक्त

7155058369. A आणि C फक्त

7155058370. B, C आणि D फक्त

## Drawing

**Section Id :**

715505162

**Section Number :**

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>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	715505162
<b>Question Shuffling Allowed :</b>	No
<b>Is Section Default? :</b>	null

**Question Number : 81 Question Id : 7155052649 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 50**

Draw a proportionate sketch of given reference image. Use black and white rendering techniques of your choice.



**Question Number : 81 Question Id : 7155052649 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 50**

दिलेल्या संदर्भ प्रतिमेचे प्रमाणबद्ध रेखाचित्र रेखाटा. तुमच्या पसंतीच्या कृष्ण धवल सादरीकरण तंत्रांचा वापर करा.



**Question Number : 82 Question Id : 7155052650 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 50**

Use the basic 2D shapes found in a motor cycle and create an interesting 2D composition of your choice, colour with any three colours of your choice.

**Question Number : 82 Question Id : 7155052650 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 50**

मोटर साइकलमध्ये मिळणारे मूलभूत 2D आकारांचा वापर करा आणि तुमच्या आवडीनुसार एक 2D रचना तयार करा, तुमच्या आवडीच्या कोणत्याही तीन रंगांत रंगवा.