

Paper:	B. Arch
Set Name:	Item05
Exam Date:	30 July 2022
Exam Shift:	1
Language:	English

Topic:	Mathematics – Part I-Section A
Item No:	1
Question ID:	101201
Question Type:	MCQ
Question:	<p>Let f and g be two twice differentiable functions in $(-2, 2)$ such that</p> $f(-1) = f(1) = 0, f\left(\frac{1}{2}\right) = 1, \text{ and}$ $g\left(-\frac{3}{2}\right) = g\left(\frac{3}{2}\right) = g(0) = 0, g(1) = 1$ <p>Then, the minimum number of roots of the equation $f(x)g''(x) + f''(x)g(x) + 2f'(x)g'(x) = 0$ in $(-2, 2)$ is :</p>
A:	2
B:	4
C:	3
D:	5

Topic:	Mathematics – Part I-Section A
Item No:	2
Question ID:	101202
Question Type:	MCQ
Question:	<p>Let $f: \mathbf{R} \rightarrow \mathbf{R}$ be a function defined as $f(x) = \alpha x + \beta x - \gamma$, where α, β, γ are distinct positive real numbers. Then, the maximum number of points at which $f(x)$ attains minima is equal to :</p>
A:	1

B:	4
C:	2
D:	3

Topic:	Mathematics – Part I-Section A
Item No:	3
Question ID:	101203
Question Type:	MCQ
Question:	Which of the following logical statements is a tautology ?
A:	$p \Rightarrow \sim q$
B:	$p \Rightarrow (\sim p) \vee q$
C:	$(p \wedge q) \Rightarrow ((\sim p) \vee q)$
D:	$(p \wedge (\sim q)) \Rightarrow ((\sim p) \vee q)$

Topic:	Mathematics – Part I-Section A
Item No:	4
Question ID:	101204
Question Type:	MCQ
Question:	The area of the region $S = \{(x, y) : 2x - x^2 \leq y^2 \leq 2x, x \leq 2, x \leq y\}$ is :
A:	$\frac{7}{4} - \frac{\pi}{4}$
B:	$\frac{2}{3}$
C:	$\frac{7}{6} - \frac{\pi}{4}$
D:	$\frac{5}{3}$

Topic:	Mathematics – Part I-Section A
Item No:	5
Question ID:	101205
Question Type:	MCQ
Question:	The area bounded by the parabola $x^2 = 12y$ and the line L, where L passes through the focus S of the parabola and meets the parabola at A' and A with the condition that no point B exists on the axis of the parabola such that ASB is a right angle triangle with right angle at A, is :
A:	$9\sqrt{3}$
B:	18
C:	27
D:	24

Topic:	Mathematics – Part I-Section A
Item No:	6
Question ID:	101206
Question Type:	MCQ
Question:	The area of the triangle whose two sides have the equations $2x - y = 1$ and $x - 2y = -1$ and whose centroid is $(2, 2)$, is :
A:	$\frac{3}{2}$
B:	$\frac{5}{2}$
C:	3
D:	$\frac{7}{2}$

Topic:	Mathematics – Part I-Section A
Item No:	7
Question ID:	101207

Question Type:	MCQ
Question:	The area of the region $A = \{(x, y) : x + 2y \leq 4 \leq (x - 2)^2 + (y - 2)^2, x, y \geq 0\}$ is :
A:	$\frac{28}{5} - \pi - 2 \sin^{-1}\left(\frac{3}{5}\right)$
B:	$\frac{144}{25} - \pi - 2 \sin^{-1}\left(\frac{3}{5}\right)$
C:	$\frac{28}{5} - \pi + 2 \sin^{-1}\left(\frac{3}{5}\right)$
D:	$\frac{28}{5} - \frac{\pi}{2} - \sin^{-1}\left(\frac{3}{5}\right)$

Topic:	Mathematics – Part I-Section A
Item No:	8
Question ID:	101208
Question Type:	MCQ
Question:	<p>Let the slope of the tangent to the curve $y = f(x)$ at any point $P(x, y)$, $x > -1$, be</p> $\frac{\sqrt{x^2 + 9} - 3x^2y}{1 + x^3}$ <p>If $f(0) = \frac{9}{2} \log_e 3 - 10$, then $f(4)$ equals :</p>
A:	$\frac{9 \log_e 3 + 10}{65}$
B:	$\frac{9 \log_e 3 + 20}{65}$
C:	$\frac{9 \log_e 3}{65}$

D:	$\frac{9\log_e 3 - 10}{65}$
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Topic:	Mathematics – Part I-Section A
Item No:	9
Question ID:	101209
Question Type:	MCQ
Question:	<p>Let \vec{a}, \vec{b} and \vec{c} be non-coplanar vectors in space. Let the components of a vector \vec{u} along \vec{a}, \vec{b} and \vec{c} be 4, -5 and 3 respectively. If the components of \vec{u} along the vectors $-\vec{a} + \vec{b} + 2\vec{c}$, $\vec{a} - \vec{b} - \vec{c}$ and $-\vec{a} - \vec{b} + \vec{c}$ are α, β, γ respectively, then the value of $\alpha + 2\beta + 2\gamma$ is :</p>
A:	31
B:	35
C:	37
D:	61

Topic:	Mathematics – Part I-Section A																
Item No:	10																
Question ID:	101210																
Question Type:	MCQ																
Question:	<p>If the mean of the distribution :</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Class :</td> <td>15 - 25</td> <td>25 - 35</td> <td>35 - 45</td> <td>45 - 55</td> <td>55 - 65</td> <td>65 - 75</td> <td>75 - 85</td> </tr> <tr> <td>Frequency :</td> <td>2</td> <td>4</td> <td>7</td> <td>α</td> <td>8</td> <td>4</td> <td>2</td> </tr> </table> <p>is $\frac{201}{4}$, then its variance is equals to :</p>	Class :	15 - 25	25 - 35	35 - 45	45 - 55	55 - 65	65 - 75	75 - 85	Frequency :	2	4	7	α	8	4	2
Class :	15 - 25	25 - 35	35 - 45	45 - 55	55 - 65	65 - 75	75 - 85										
Frequency :	2	4	7	α	8	4	2										
A:	$\frac{3319}{19}$																

B:	$\frac{3519}{29}$
C:	$\frac{3319}{16}$
D:	$\frac{3519}{16}$

Topic:	Mathematics – Part I-Section A
Item No:	11
Question ID:	101211
Question Type:	MCQ
Question:	The probability that a randomly chosen one-one function $f: \{1, 2, 3, 4, 5\} \rightarrow \{1, 2, 3, 4, 5, 6\}$ satisfies $f(1) + f(2) = f(3)$ is :
A:	$\frac{1}{12}$
B:	$\frac{1}{10}$
C:	$\frac{1}{6}$
D:	$\frac{1}{5}$

Topic:	Mathematics – Part I-Section A
Item No:	12
Question ID:	101212
Question Type:	MCQ
Question:	Let $4, A_1, A_2, \dots, A_n, 102$ and $12, B_1, B_2, \dots, B_n, 110$ be two arithmetic progressions. If $A_r = B_s$ with $1 \leq r - s \leq 100$, then the number of possible values of n is :
A:	20

B:	25
C:	50
D:	75

Topic:	Mathematics – Part I-Section A
Item No:	13
Question ID:	101213
Question Type:	MCQ
Question:	The sum of all the coefficients in the expression $(1 + x + x^2 + \dots + x^{49}) + (1 + x)(1 + x + x^2 + \dots + x^{48}) + (1 + x + x^2)(1 + x + x^2 + \dots + x^{47}) + \dots + (1 + x + x^2 + \dots + x^{48})(1 + x) + (1 + x + x^2 + \dots + x^{49})$ is equal to :
A:	21675
B:	22525
C:	22100
D:	21660

Topic:	Mathematics – Part I-Section A
Item No:	14
Question ID:	101214
Question Type:	MCQ
Question:	The remainder when $(2023)^{2021}$ is divided by 12 is :
A:	1
B:	5
C:	7
D:	11

Topic:	Mathematics – Part I-Section A
Item No:	15
Question ID:	101215
Question Type:	MCQ

Question:	The number of positive integers that are ≤ 1000 and divisible by 7 or 13, is :
A:	218
B:	208
C:	228
D:	192

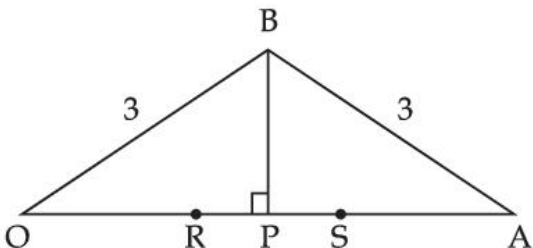
Topic:	Mathematics – Part I-Section A
Item No:	16
Question ID:	101216
Question Type:	MCQ
Question:	Let A and B be $n \times n$ real matrices such that $A = A^T$ and $B = -B^T$. If $C = A^5B^2 - B^2A^5$ and $D = A^4B^3 - B^3A^4$, then :
A:	C is symmetric and D is skew-symmetric
B:	Both C and D are symmetric
C:	Both C and D are skew-symmetric
D:	C is skew-symmetric and D is symmetric

Topic:	Mathematics – Part I-Section A
Item No:	17
Question ID:	101217
Question Type:	MCQ
Question:	The sum of the real and imaginary parts of all the complex numbers z satisfying $\bar{z} = i(\operatorname{Re}(z) + z^2)$ is equal to :
A:	0
B:	1
C:	-1

D:	$-\frac{\sqrt{3}}{2}$
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Topic:	Mathematics – Part I-Section A
Item No:	18
Question ID:	101218
Question Type:	MCQ
Question:	Let a, b, c respectively be the sides of the triangle ABC opposite the angles A, B, C. If $\frac{\sin A}{\sin C} = \frac{\sin(A - B)}{\sin(B - C)}$, then the value of $\frac{1 + \cos(A - B) \cos C}{1 + \cos(A - C) \cos B} - \frac{a^2}{2b^2}$ is equal to :
A:	$\frac{1}{4}$
B:	$\frac{1}{2}$
C:	1
D:	2

Topic:	Mathematics – Part I-Section A
Item No:	19
Question ID:	101219
Question Type:	MCQ
Question:	If (a, b, c) is the ortho-centre of the triangle whose sides have the equations $\frac{x - 2}{-3} = \frac{y - 3}{-2} = \frac{z + 2}{4}$, $\frac{x - 2}{-1} = \frac{y - 3}{-2} = \frac{z + 2}{3}$ and $\frac{x}{1} = \frac{y - 1}{0} = \frac{z - \frac{3}{2}}{-\frac{1}{2}}$, then a - 2b + 2c is equal to _____.
A:	9
B:	11
C:	13
D:	15

Topic:	Mathematics – Part I-Section A
Item No:	20
Question ID:	101220
Question Type:	MCQ
Question:	<p>In the below diagram, let $OB = OS = AB = AR = 3$. If the area of the triangle OAB is 1 then the maximum value of $(OP)^2$ is :</p> 
A:	$\frac{9 + \sqrt{77}}{2}$
B:	$\frac{9 - \sqrt{77}}{2}$
C:	$\frac{3 + \sqrt{77}}{2}$
D:	$\frac{12 - \sqrt{77}}{2}$

Topic:	Mathematics – Part I-Section B
Item No:	21
Question ID:	101221
Question Type:	Numeric Answer
Question:	<p>The least value of $\alpha \in \mathbf{R}$ for which</p> $\lim_{x \rightarrow 0} \frac{(2^x - 1)^2 \tan^\alpha x}{(\sin^{-1} x) \log_e (1 + x^6)}$ <p>exists and is finite, is equal to _____.</p>

Topic:	Mathematics – Part I-Section B
Item No:	22
Question ID:	101222
Question Type:	Numeric Answer
Question:	Let $\vec{a} = 2\hat{i} - \hat{j} + \hat{k}$ and $\vec{b} = \hat{i} + \hat{j} - \hat{k}$. Let a vector \vec{c} be coplanar with the vectors \vec{a} and \vec{b} . If $ \vec{c} ^2 = 66$ and $\vec{c} \cdot (\vec{a} + \vec{b}) = 12$, then the value of $ \vec{b} \cdot \vec{c} - 4 $ is equal to _____.

Topic:	Mathematics – Part I-Section B
Item No:	23
Question ID:	101223
Question Type:	Numeric Answer
Question:	Let P_1 and P_2 be the images of the point $P(-1, 1, 1)$ in the planes $-2x + y + z + 1 = 0$ and $x - y - z + 2 = 0$ respectively. If the length of the line segment joining P_1 and P_2 is α , then the value of $9\alpha^2$ is equal to _____.

Topic:	Mathematics – Part I-Section B
Item No:	24
Question ID:	101224
Question Type:	Numeric Answer
Question:	If the line segment joining the points $A(a, 2)$ and $B(2, 3)$ subtends an angle $\frac{\pi}{4}$ at the origin, then the maximum absolute value of a is equal to _____.

Topic:	Mathematics – Part I-Section B
Item No:	25
Question ID:	101225
Question Type:	Numeric Answer

Question:	Let the slope of the tangent at (x, y) to a curve passing through the point $(2, 4)$ be $\frac{(x + y)^2}{(x + 1)(y - 1)}$. If the equation of the curve is $(x + 1)^\alpha (x + 2y - \beta) = \alpha^5 e^{\left(\frac{2y - \gamma x - 4}{x + 1}\right)}$, then the value of $\alpha + \beta + \gamma$ is equal to _____.
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Topic:	Mathematics – Part I-Section B
Item No:	26
Question ID:	101226
Question Type:	Numeric Answer
Question:	Let $f(t) = \int_{-t}^t e^{x^2} \left((1 + 2x^2) \sin x + x \cos x \right) dx$. Then the value of $f\left(\frac{\pi}{2}\right) + f(\pi)$ is equal to _____.

Topic:	Mathematics – Part I-Section B
Item No:	27
Question ID:	101227
Question Type:	Numeric Answer
Question:	All possible 6-digit odd numbers formed with the digits 1, 1, 2, 3, 7, 8 are written in descending order. If 378121 is the K^{th} term of the sequence so formed, then K is equal to _____.

Topic:	Mathematics – Part I-Section B
Item No:	28
Question ID:	101228
Question Type:	Numeric Answer
Question:	Let $A = [a_{ij}]$ be 3×3 real matrix and $\text{Adj}(A) = [A_{ij}]$. If $a_{1j} + a_{2j} + a_{3j} = 1$, for $j = 1, 2, 3$ and $A_{11} = 2$, $A_{31} = 4$ and $\det(A) = 10$, then A_{21} equals _____.

Topic:	Mathematics – Part I-Section B
Item No:	29
Question ID:	101229

Question Type:	Numeric Answer
Question:	The least value of a real number K for which the equation $4x^2 - 8(K - 1)x + 3K^2 + 10 - 9K = 0$ has atleast one positive root is _____.

Topic:	Mathematics – Part I-Section B
Item No:	30
Question ID:	101230
Question Type:	Numeric Answer
Question:	The number of transitive relations from the set $\{x, y\}$ to $\{x, y\}$ is equal to _____.

Topic:	Aptitude Test – Part II
Item No:	31
Question ID:	101231
Question Type:	MCQ
Question:	A plan for selecting colours for composition is also known as _____.
A:	Colour spectrum
B:	Colour wheel
C:	Colour scheme
D:	Colour mix

Topic:	Aptitude Test – Part II
Item No:	32
Question ID:	101232
Question Type:	MCQ
Question:	<p>'Rowlatt Act' passed in which year ?</p> <p>(A) 1919</p> <p>(B) 1920</p> <p>(C) 1918</p> <p>(D) 1921</p> <p>Choose the most appropriate answer from the options given below :</p>

A:	(A) only
B:	(A) and (B) only
C:	(B) only
D:	(B) and (C) only

Topic:	Aptitude Test – Part II
Item No:	33
Question ID:	101233
Question Type:	MCQ
Question:	The marble inlay work with precious and semi-precious stone in 'Taj Mahal' or elsewhere is popularly known as :
A:	Mondrian inlay work
B:	Kalamkari
C:	Pietra Dura/Parchinkari
D:	Zardosi

Topic:	Aptitude Test – Part II
Item No:	34
Question ID:	101234
Question Type:	MCQ
Question:	'Shaking Minaret' situated in the city of _____.
A:	Hyderabad
B:	Lucknow
C:	Ahmedabad
D:	Aurangabad

Topic:	Aptitude Test – Part II
Item No:	35
Question ID:	101235

Question Type:	MCQ
Question:	Which of the following personalities is not an Architect ?
A:	Renzo Piano
B:	Richard Gere
C:	Charles Correa
D:	Richard Rogers

Topic:	Aptitude Test – Part II
Item No:	36
Question ID:	101236
Question Type:	MCQ
Question:	In which state 'Bihu' is most widely celebrated ?
A:	Rajasthan
B:	Uttar Pradesh
C:	Nagaland
D:	Assam

Topic:	Aptitude Test – Part II
Item No:	37
Question ID:	101237
Question Type:	MCQ
Question:	'NRCP' stands for _____.
A:	National River Concept Plan
B:	National River Conserve Plan
C:	National River & Conservation Plan
D:	National River Conservation Plan

Topic:	Aptitude Test – Part II
Item No:	38
Question ID:	101238

Question Type:	MCQ
Question:	Vernacular Architecture mainly involves :
A:	Use of modern/contemporary materials
B:	Use of automation technology
C:	Use of composite & hightech materials
D:	Use of locally available material & traditional construction technology

Topic:	Aptitude Test – Part II
Item No:	39
Question ID:	101239
Question Type:	MCQ
Question:	A discomfort caused by light contrast is known as _____.
A:	Heat
B:	Glare
C:	Skin allergy
D:	Reflection of light

Topic:	Aptitude Test – Part II
Item No:	40
Question ID:	101240
Question Type:	MCQ
Question:	'Red Fort' of Agra was commissioned by whom ?
A:	Akbar
B:	Bahadur Shah Zafar
C:	Shahjahan
D:	Babar

Topic:	Aptitude Test – Part II
Item No:	41

Question ID:	101241
Question Type:	MCQ
Question:	The unit of measuring sound absorption in a room is :
A:	Sabin
B:	Phon
C:	Hertz
D:	Decibel

Topic:	Aptitude Test – Part II
Item No:	42
Question ID:	101242
Question Type:	MCQ
Question:	A land size of 60 meter × 30 meter for a house design is drawn on paper at scale of 1 : 100, then what size is drawn on paper to represent land ?
A:	6 meter × 3 meter
B:	60 cm × 30 cm
C:	6 cm × 3 cm
D:	3 m × 1.5 m

Topic:	Aptitude Test – Part II
Item No:	43
Question ID:	101243
Question Type:	MCQ
Question:	<p>Albedo refers to :</p> <p>The diagram shows two scenarios of solar radiation. In the 'High Albido' scenario, 100% of the incident sun rays are reflected, leaving 80% of the original energy. In the 'Low Albido' scenario, only 10% of the incident sun rays are reflected, leaving 90% of the original energy.</p>
A:	Thermal properties of external surface material

B:	Sound absorption properties of material
C:	Roughness of surface
D:	Porous properties of surface/material

Topic:	Aptitude Test – Part II										
Item No:	44										
Question ID:	101244										
Question Type:	MCQ										
Question:	<p>Match List - I with List - II.</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; width: 50%;">List - I</th> <th style="text-align: left; width: 50%;">List - II</th> </tr> </thead> <tbody> <tr> <td>(A) Solid lines</td> <td>(I) Relatively long line segments separated by zigzag strokes</td> </tr> <tr> <td>(B) Dashed lines</td> <td>(II) Delineate form of objects, edge of plane & intersection of planes</td> </tr> <tr> <td>(C) Grid lines</td> <td>(III) Indicate hidden segments</td> </tr> <tr> <td>(D) Break lines</td> <td>(IV) Rectangular or radial system of lines for regulating plan</td> </tr> </tbody> </table> <p>Choose the correct answer from the options given below :</p>	List - I	List - II	(A) Solid lines	(I) Relatively long line segments separated by zigzag strokes	(B) Dashed lines	(II) Delineate form of objects, edge of plane & intersection of planes	(C) Grid lines	(III) Indicate hidden segments	(D) Break lines	(IV) Rectangular or radial system of lines for regulating plan
List - I	List - II										
(A) Solid lines	(I) Relatively long line segments separated by zigzag strokes										
(B) Dashed lines	(II) Delineate form of objects, edge of plane & intersection of planes										
(C) Grid lines	(III) Indicate hidden segments										
(D) Break lines	(IV) Rectangular or radial system of lines for regulating plan										
A:	(A) - (IV), (B) - (I), (C) - (II), (D) - (III)										
B:	(A) - (II), (B) - (I), (C) - (IV), (D) - (III)										
C:	(A) - (II), (B) - (III), (C) - (IV), (D) - (I)										
D:	(A) - (II), (B) - (I), (C) - (III), (D) - (IV)										

Topic:	Aptitude Test – Part II
Item No:	45
Question ID:	101245
Question Type:	MCQ
Question:	<p>Given below are two statements :</p> <p>Statement I : Modular Proportioning system was developed by German Architect Mics Van der Rohe.</p> <p>Statement II : It combines the aesthetic dimensions of Golden ratio & Fibonacci series.</p> <p>In the light of the above statements, choose the most appropriate answer from the options given below :</p>

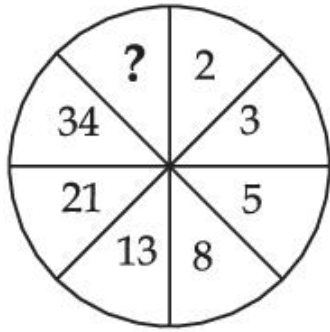
A:	Both Statement I and Statement II are correct
B:	Both Statement I and Statement II are incorrect
C:	Statement I is correct but Statement II is incorrect
D:	Statement I is incorrect but Statement II is correct

Topic:	Aptitude Test – Part II
Item No:	46
Question ID:	101246
Question Type:	MCQ
Question:	'My Architect' 'A son's journey' documentary is on which of the following Architect ?
A:	Louis Kahn
B:	Moshe Shafdi
C:	Zaha Hadid
D:	I.M. Pei

Topic:	Aptitude Test – Part II
Item No:	47
Question ID:	101247
Question Type:	MCQ
Question:	Which one of the following is not related to prestigious international awards in Architecture ?
A:	Royal Gold Medal (RIBA)
B:	Pritzker Prize
C:	Aga Khan Award
D:	META Award

Topic:	Aptitude Test – Part II
Item No:	48
Question ID:	101248
Question Type:	MCQ

Identify the missing number in the given image :



Question:

A: 83

B: 48

C: 55

D: 84

Topic: Aptitude Test – Part II

Item No: 49

Question ID: **101249**

Question Type: MCQ

Question:

Match List - I with List - II.

List - I

List - II

(A)



(I) The Shard, London by Renzo Piano

(B)



(II) Infosys Building, Pune by Hafeez Contractor

(C)



(III) Jubilee Church, Rome by Richard Mier

(D)



(IV) LIC Building, New Delhi by Charles Correa

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

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

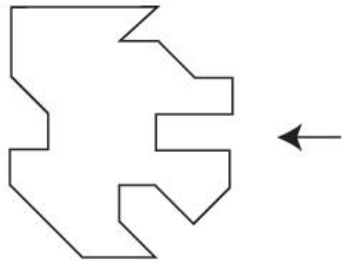
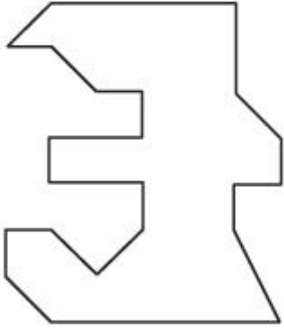

B: (A) - (IV), (B) - (II), (C) - (I), (D) - (III)

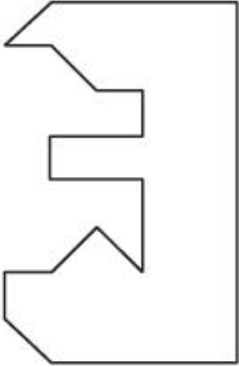
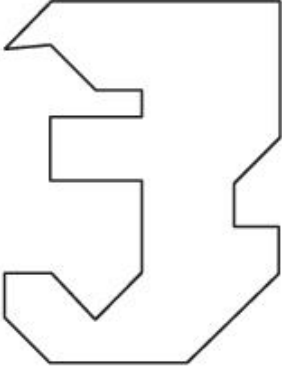
C: (A) - (III), (B) - (I), (C) - (II), (D) - (IV)

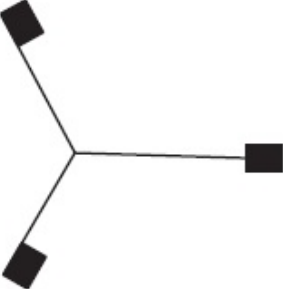
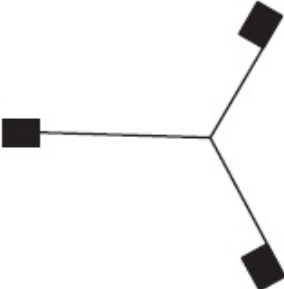
D: (A) - (III), (B) - (II), (C) - (I), (D) - (IV)

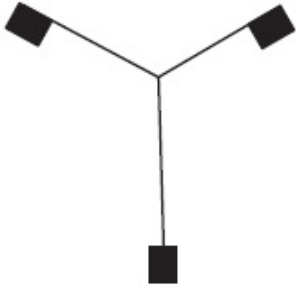
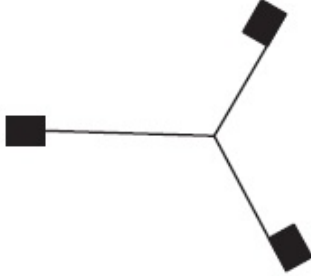
Topic:	Aptitude Test – Part II
Item No:	50
Question ID:	101250
Question Type:	MCQ
Question:	'Green is Red' book is written by which of the following Architect ?
A:	Revathi Kamath

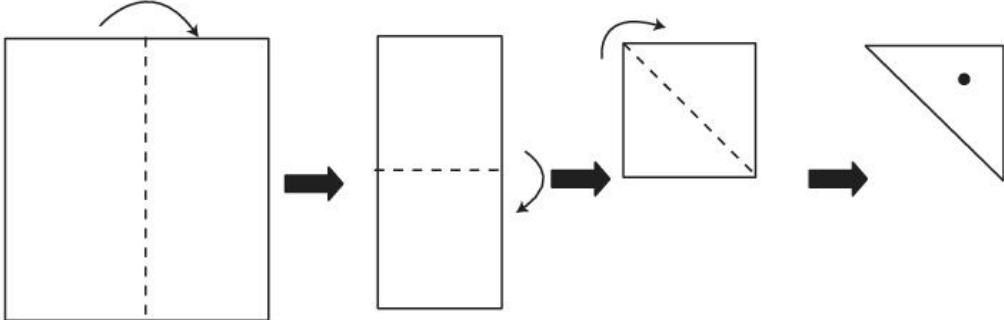
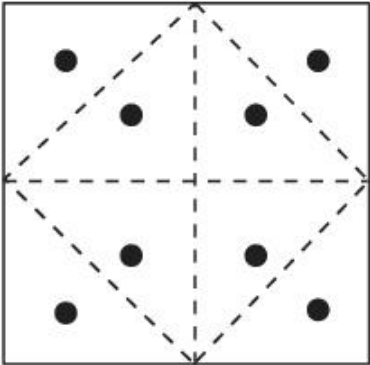
B:	Anupama Kundu
C:	Anil Laul
D:	P.K. Das

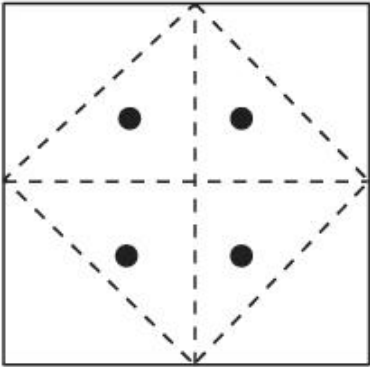
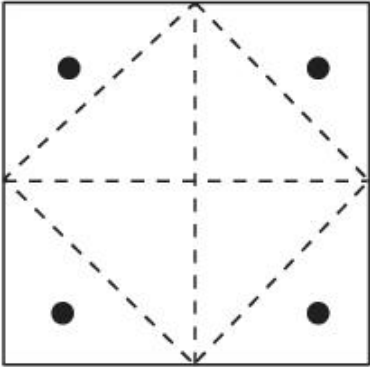
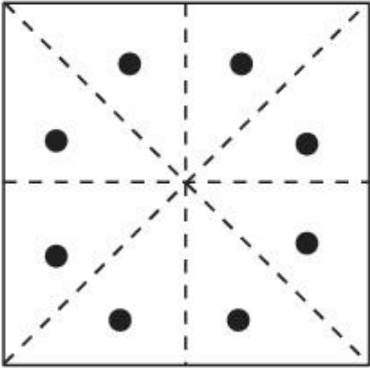
Topic:	Aptitude Test – Part II
Item No:	51
Question ID:	101251
Question Type:	MCQ
Question:	<p>Given figure shows plan of an object. Identify the correct option from answer figure which will perfectly fit on right hand side of the question figure ?</p> 
A:	
B:	

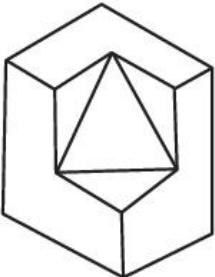
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	52
Question ID:	101252
Question Type:	MCQ
Question:	Find the odd figure in the problem figure given below.
A:	
B:	

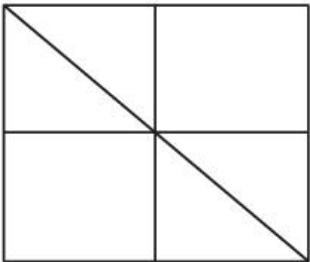
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	53
Question ID:	101253
Question Type:	MCQ
Question:	 <p>A square paper is folded as shown in the figure (above). A circular hole is created in the triangular portion. Now paper is unfolded. What will be the right diagram ?</p>
A:	

B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	54
Question ID:	101254
Question Type:	MCQ
Question:	<p>Question figure shows 3 D view of an object. Identify number of surfaces in given object.</p> 

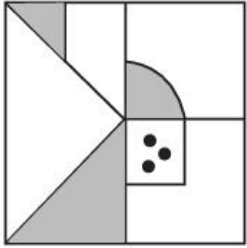
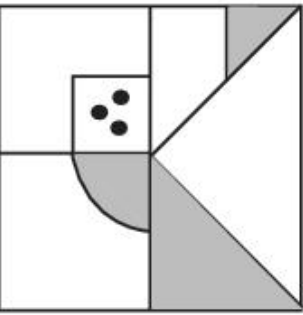
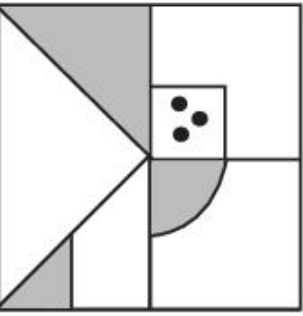
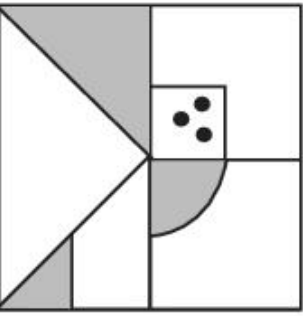
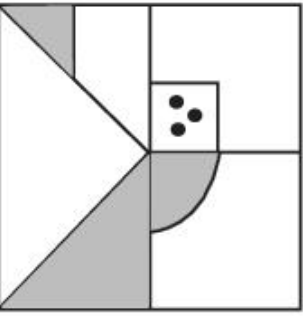
A:	11
B:	10
C:	9
D:	13

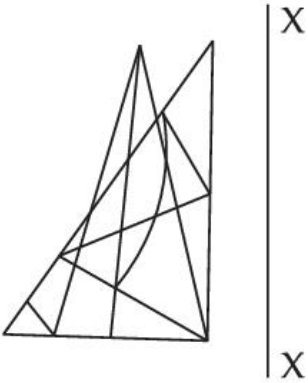
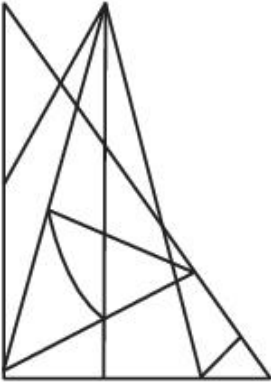
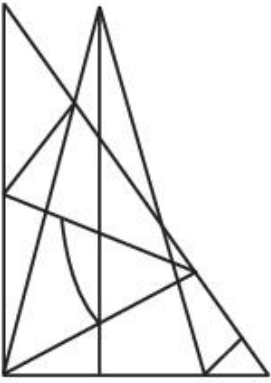
Topic:	Aptitude Test – Part II
Item No:	55
Question ID:	101255
Question Type:	MCQ
Question:	<p>How many total number of triangles are hidden in the problem figure given below ?</p> 
A:	16
B:	12
C:	06
D:	08

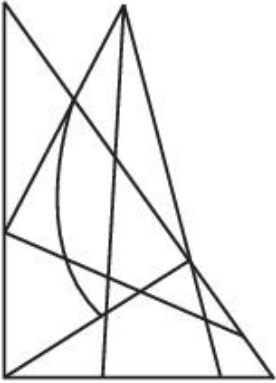
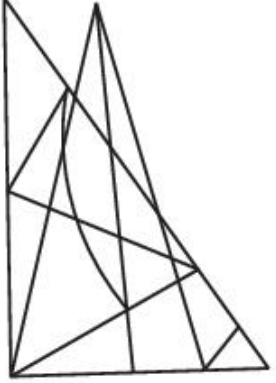
Topic:	Aptitude Test – Part II
Item No:	56
Question ID:	101256
Question Type:	MCQ
Question:	In a code language if 'PLEASE' is written as '573183' then 'LAPSE' will be written as _____.
A:	71853
B:	81573
C:	71583
D:	715831

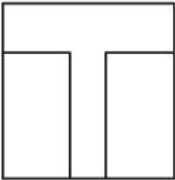


Topic:	Aptitude Test – Part II
Item No:	57
Question ID:	101257
Question Type:	MCQ
Question:	<p>Which one of the answer figures will complete the sequence of the three problem figures ?</p>
A:	
B:	
C:	
D:	

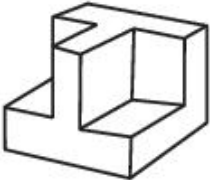
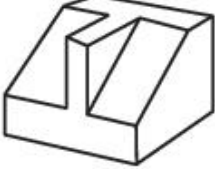

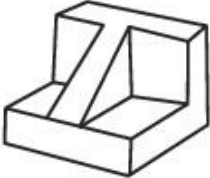
Topic:	Aptitude Test – Part II
Item No:	58
Question ID:	101258

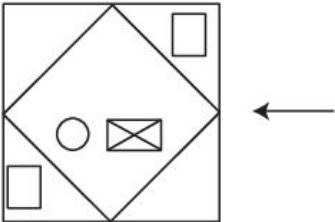
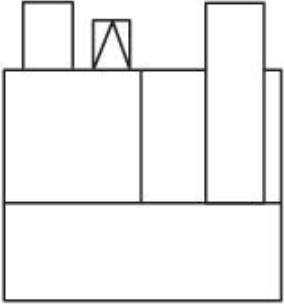
Question Type:	MCQ
Question:	<p>Choose one out of four figures which shows the correct water image of the problem figure (X).</p>  <p>(X)</p>
A:	
B:	
C:	
D:	

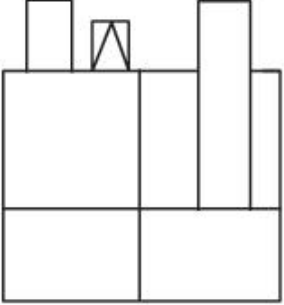
Topic:	Aptitude Test – Part II
Item No:	59
Question ID:	101259
Question Type:	MCQ
Question:	<p>Which one of the answer figure is the correct mirror image of the problem figure with respect to X - X ?</p> 
A:	
B:	

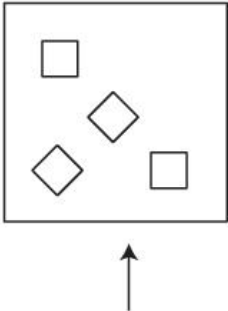
C:	
D:	

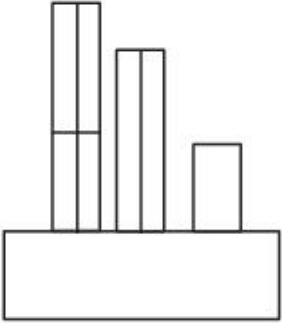
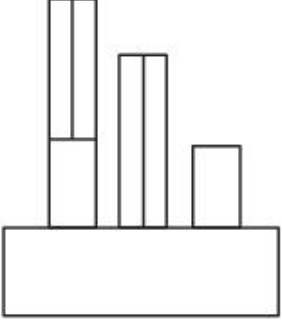
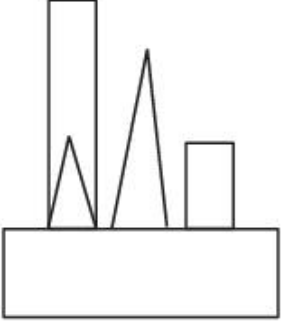
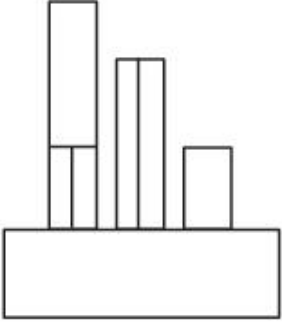
Topic:	Aptitude Test – Part II	
Item No:	60	
Question ID:	101260	
Question Type:	MCQ	
Question:	<p>Question figure shows top view/plan, front elevation and right side elevation of the same object. Identify the most appropriate 3 D view of the problem figures from given answer figure.</p> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: center; margin-bottom: 20px;">  </div> <div style="text-align: center; margin-bottom: 20px;">TOP</div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="display: flex; flex-direction: column; align-items: center;">  </div> <div style="display: flex; flex-direction: column; align-items: center;">  </div> </div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">FRONT</div> <div style="text-align: center;">RIGHT SIDE</div> </div> </div>	

A:	
B:	
C:	
D:	

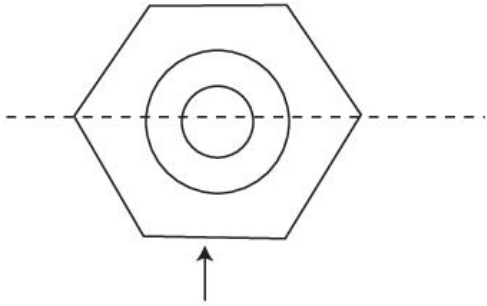
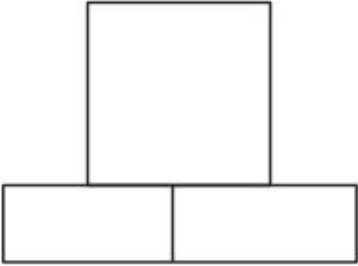
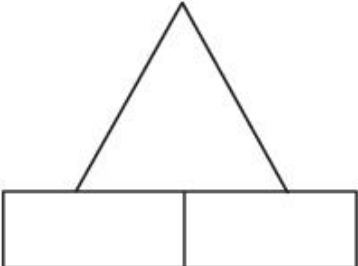
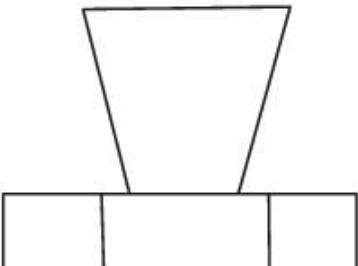
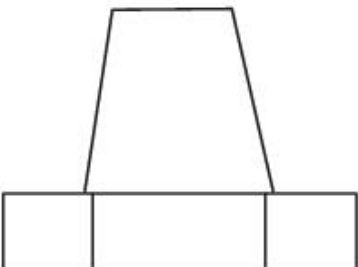
Topic:	Aptitude Test – Part II
Item No:	61
Question ID:	101261
Question Type:	MCQ
Question:	<p>Question figure shows top view/plan of an object. Looking in the direction of arrow, identify the correct elevation from given answer figures.</p> 
A:	

B:	
C:	
D:	

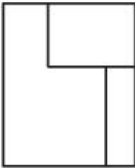


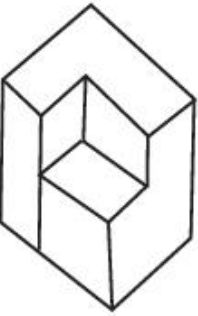
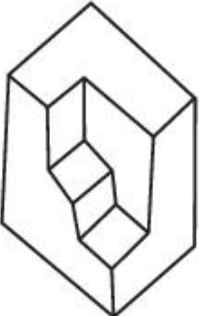
Topic:	Aptitude Test – Part II
Item No:	62
Question ID:	101262
Question Type:	MCQ
Question:	<p>The problem figure shows top view/plan of an object. Looking in the direction of arrow identify the correct elevation from given answer figures.</p> 

A:	
B:	
C:	
D:	

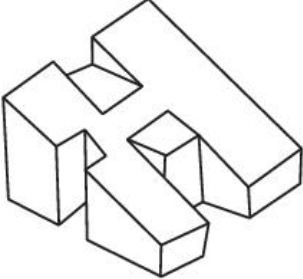
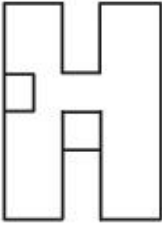
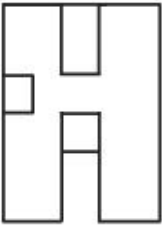
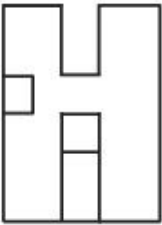
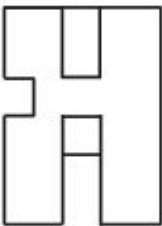
Topic:	Aptitude Test – Part II
Item No:	63
Question ID:	101263
Question Type:	MCQ

Question:	<p>Question figure shows top view/plan of an object. Looking in the direction of arrow. Identify the correct elevation from given answer figure.</p> 
A:	
B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	64
Question ID:	101264

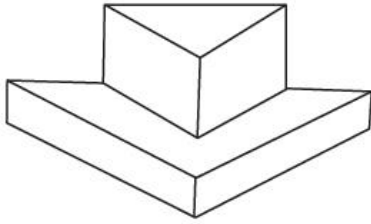
Question Type:	MCQ
Question:	<p>Question figure shows elevation of an object. Identify most appropriate 3 D view of the problem figure from given answer figures.</p> 
A:	
B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	65

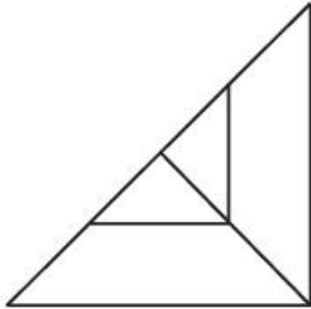
Question ID:	101265
Question Type:	MCQ
Question:	<p>Question figure shows 3 D view of an object. Identify the most appropriate top view/ plan of given 3 D figure from answer figure.</p> 
A:	
B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	66
Question ID:	101266
Question Type:	MCQ

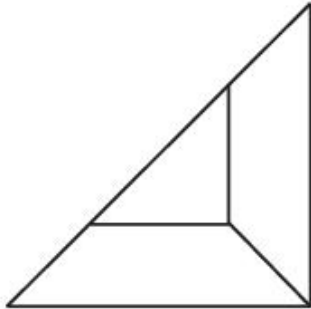
Question: Question figure shows 3 D view of an object. Identify most appropriate top view / plan of the object from given answer figures.



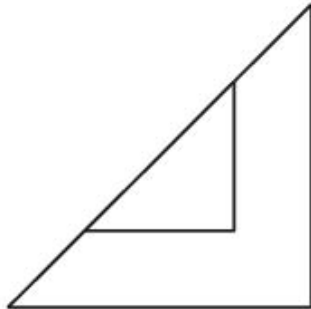
A:



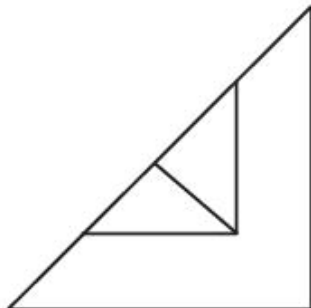
B:



C:



D:



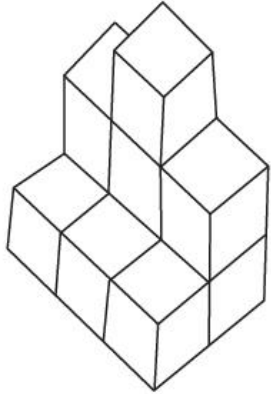
Topic: Aptitude Test – Part II

Item No: 67

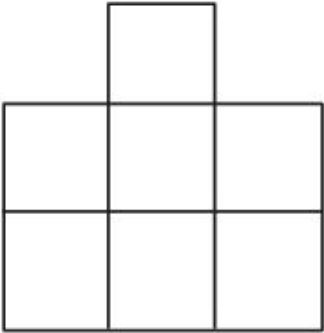
Question ID: 101267

Question Type: MCQ

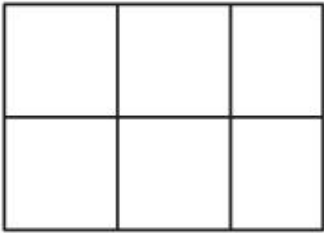
Question: Question figure shows 3 D view of an object. Identify most appropriate top view/plan of the given object from given answer figures.



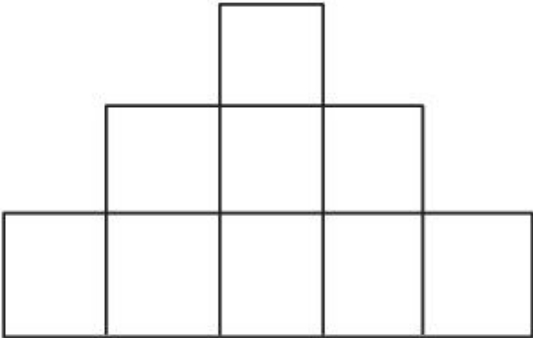
The 3D object is composed of 10 cubes. The front row has 3 cubes. The middle row has 2 cubes, with the second cube from the left being taller (2 cubes high). The back row has 1 cube, which is the tallest (3 cubes high) and is positioned behind the second cube of the middle row.

A: 

Top view A shows a 3x3 grid of squares. The top-middle square is missing, leaving a shape that is 3 squares wide and 2 squares high.

B: 

Top view B shows a 3x2 grid of squares, which is a simple 2x3 rectangle.

C: 

Top view C shows a 5x3 grid of squares. The top-middle square is missing, leaving a shape that is 5 squares wide and 2 squares high.

D:	
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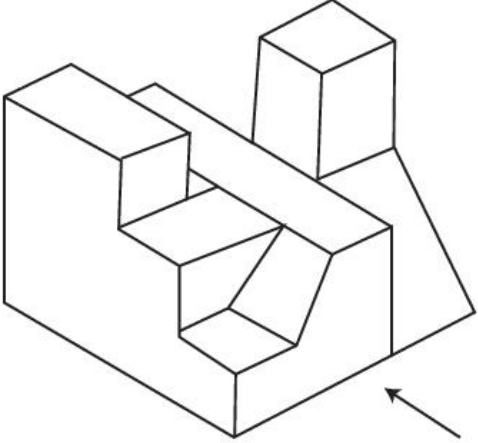
Topic: Aptitude Test – Part II

Item No: 68

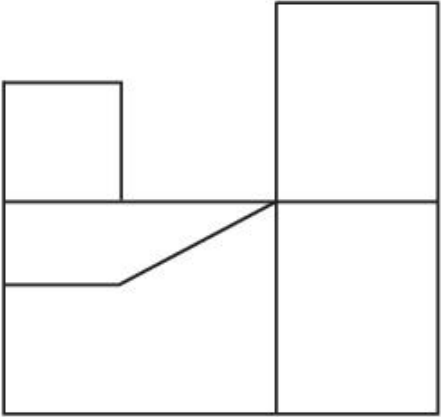
Question ID: **101268**

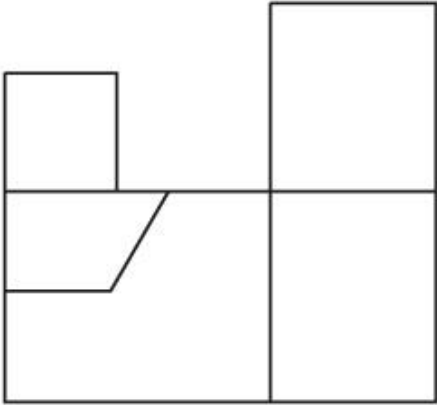
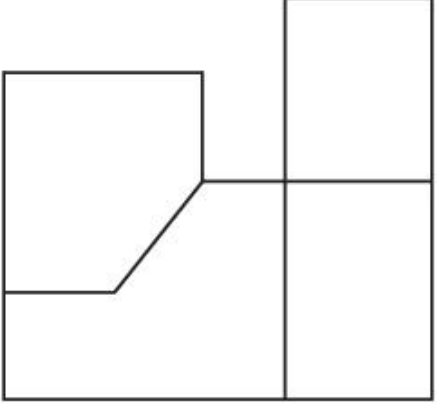
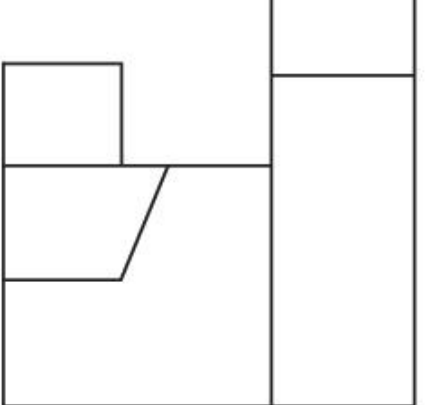
Question Type: MCQ

Question: The question figure shows 3 D view of an object. Identify the most appropriate elevation of the given 3 D object, looking in the direction of an arrow, from the given answer figures.



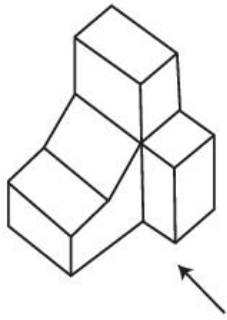
A:

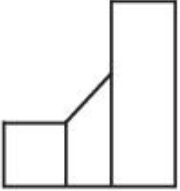


B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	69
Question ID:	101269
Question Type:	MCQ

Question: Question figure shows 3 D view of an object. Identify the most appropriate elevation of the given 3 D object, looking in the direction of an arrow from the given answer figures.



A: 

B: 

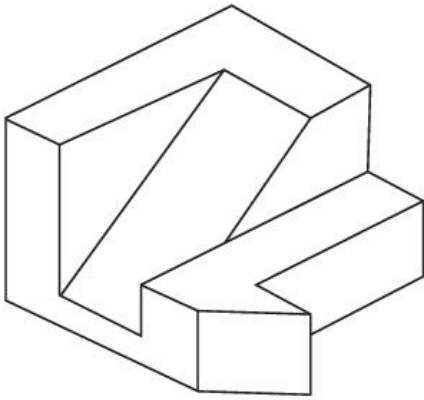
C: 

D: 

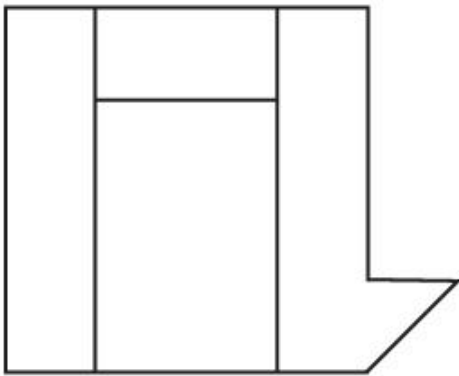
Topic:	Aptitude Test – Part II
Item No:	70
Question ID:	101270
Question Type:	MCQ

The question figure shows 3 D view of an object. Identify the most appropriate top view / plan of given 3 D object from given answer figures.

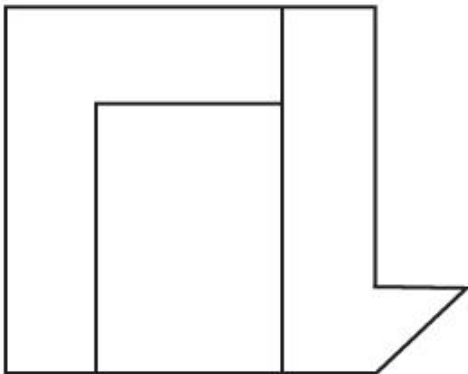
Question:



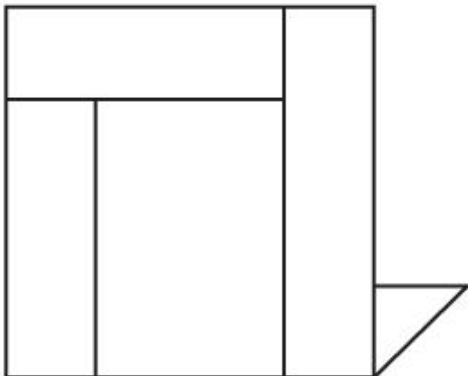
A:

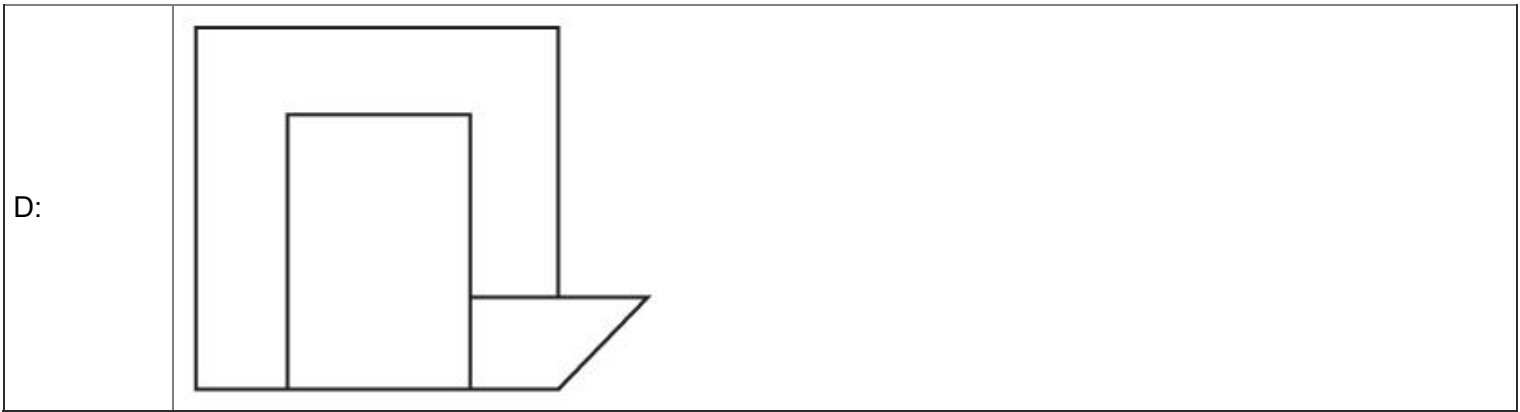


B:



C:

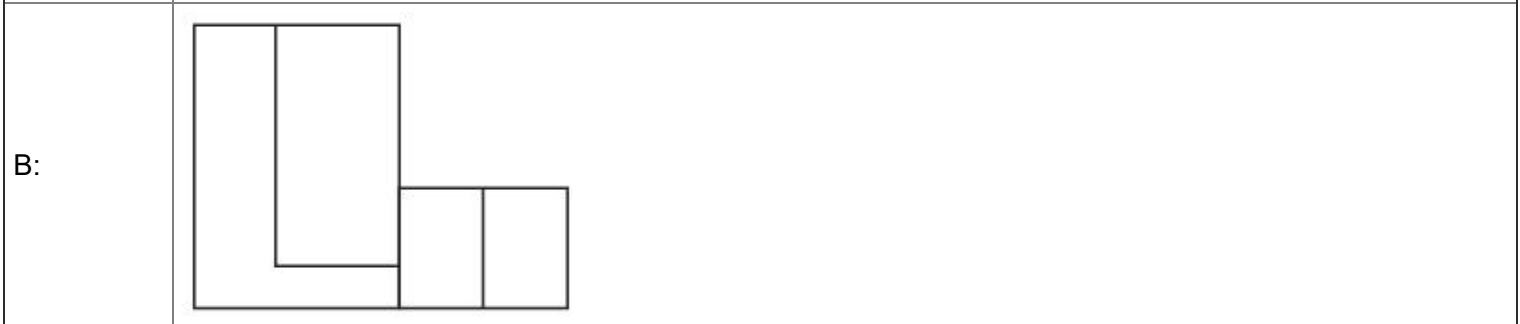
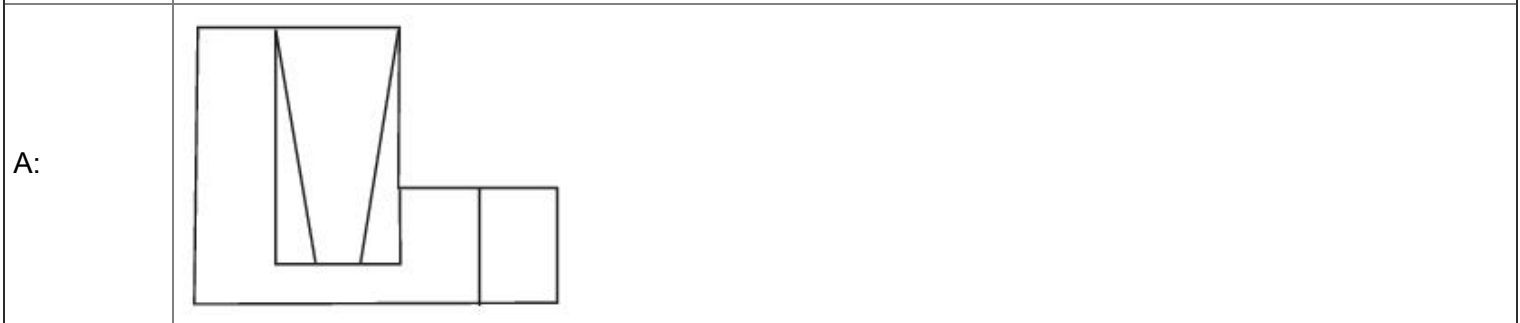


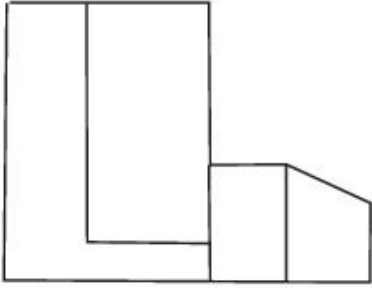
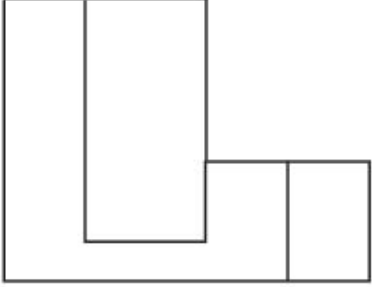


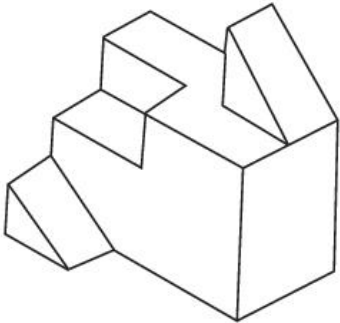
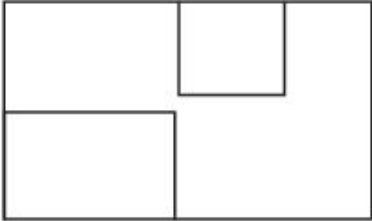
Topic:	Aptitude Test – Part II
Item No:	71
Question ID:	101271
Question Type:	MCQ

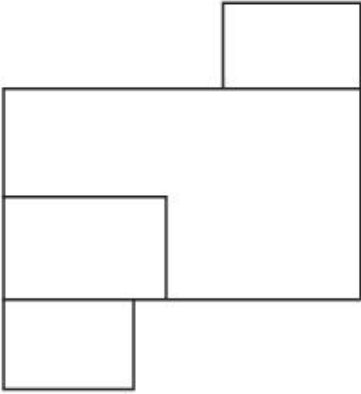
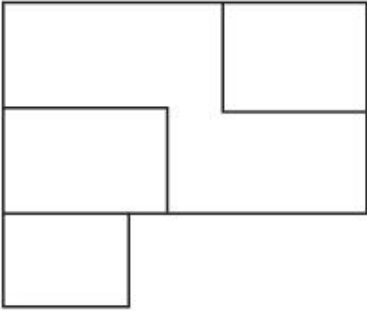
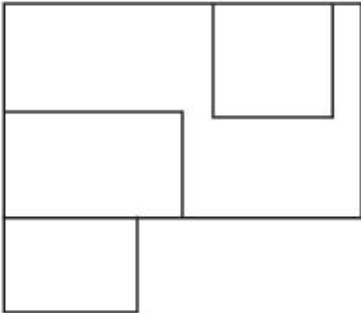
Question:

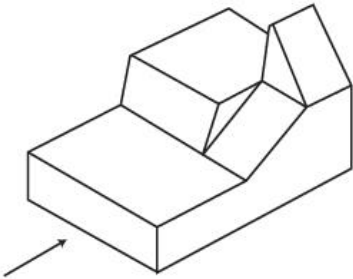
Question figure shows 3 D view of an object. Identify the most appropriate elevation of the given 3 D object. Looking in the direction of an arrow, from the given answer figures.

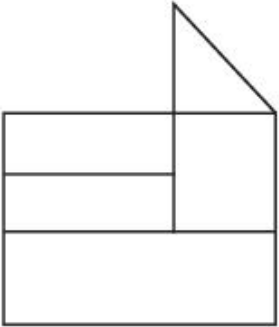
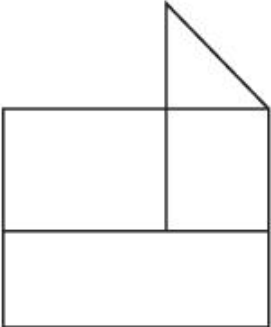
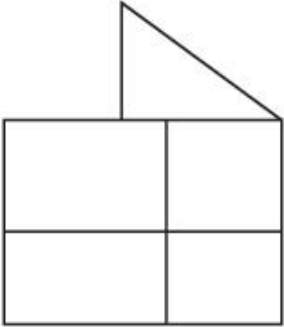
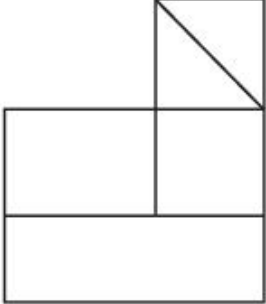


C:	
D:	

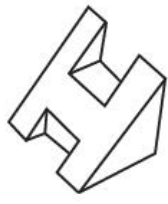
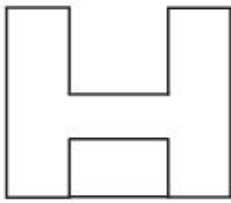
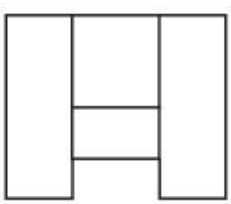
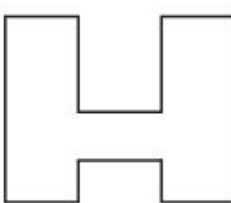
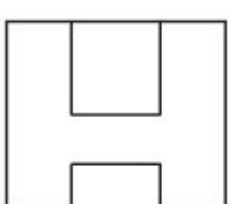
Topic:	Aptitude Test – Part II
Item No:	72
Question ID:	101272
Question Type:	MCQ
Question:	<p>Question figure shows 3 D view of an object. Identify most appropriate top view / plan of the object from given answer figures.</p> 
A:	

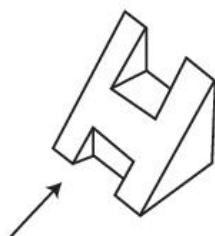
B:	
C:	
D:	

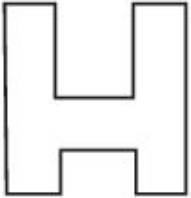

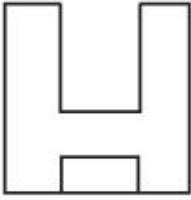
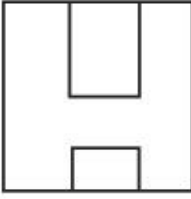
Topic:	Aptitude Test – Part II
Item No:	73
Question ID:	101273
Question Type:	MCQ
Question:	<p>Question figure shows 3 D view of an object. Identify the most appropriate elevation of the given 3 D object, looking in the direction of an arrow, from the given answer figures.</p> 

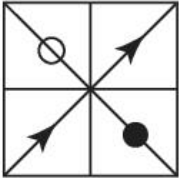
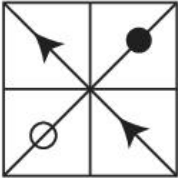
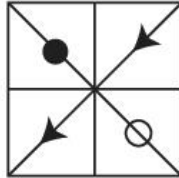
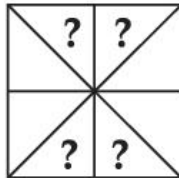

A:	
B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	74
Question ID:	101274
Question Type:	MCQ

Question:	<p>Question figure shows 3 D view of an object. Identify the most appropriate top view/ plan of the object from the given answer figures.</p> 
A:	
B:	
C:	
D:	

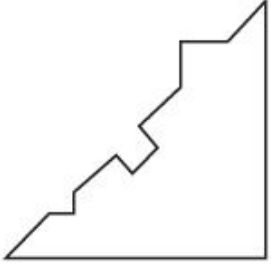
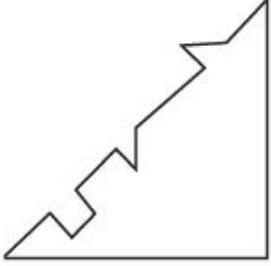
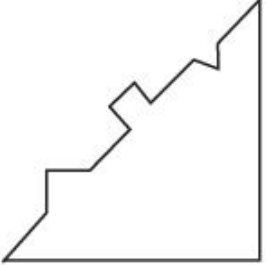
Topic:	Aptitude Test – Part II
Item No:	75
Question ID:	101275
Question Type:	MCQ
Question:	<p>Question figure shows 3 D view of an object. Identify the most appropriate elevation of the given 3 D object, looking in the direction of an arrow from the given answer figures.</p> 

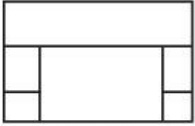
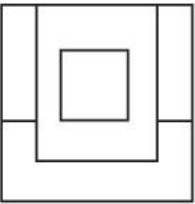

A:	
B:	
C:	
D:	

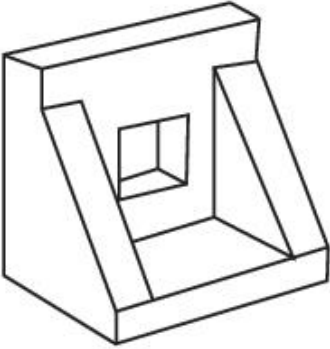
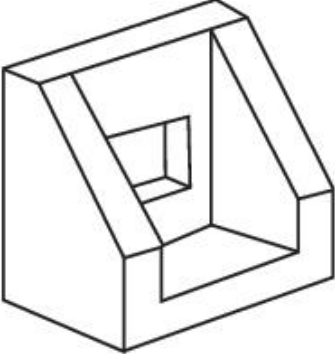
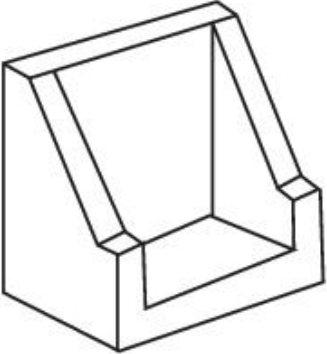
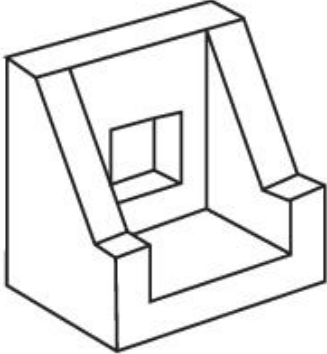
Topic:	Aptitude Test – Part II
Item No:	76
Question ID:	101276
Question Type:	MCQ
Question:	<p>In the problem figure, 'A' & 'B' have certain relation. Identify which one of the answer figures will have similar relation between 'C' & 'D' ?</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>(A)</p> </div> <div style="text-align: center;">  <p>(B)</p> </div> <div style="text-align: center;">  <p>(C)</p> </div> <div style="text-align: center;">  <p>(D)</p> </div> </div>
A:	

B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	77
Question ID:	101277
Question Type:	MCQ
Question:	Which of the following answer figures will interlock diagonally into the question figure ?
A:	

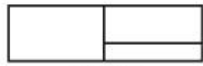
B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	78
Question ID:	101278
Question Type:	MCQ
Question:	<p>Question figure shows top view/plan, front elevation & right side elevation of the same object. Identify most appropriate 3 D view of the object from given answer figures.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>TOP</p> </div> <div style="text-align: center;">  <p>FRONT</p> </div> <div style="text-align: center;">  <p>RIGHT SIDE</p> </div> </div>

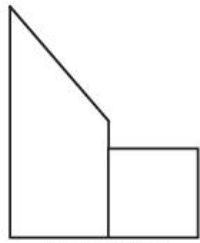
A:	
B:	
C:	
D:	

Topic:	Aptitude Test – Part II
Item No:	79
Question ID:	101279
Question Type:	MCQ

Question figure shows top view/plan, front elevation & right side elevation of the same object. Identify most appropriate 3 D view of the object from given answer figures.



TOP



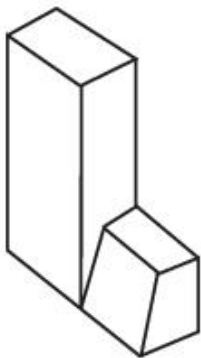
FRONT



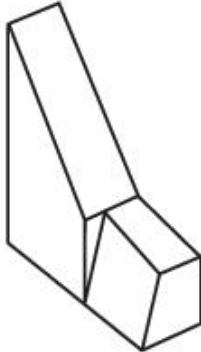
RIGHT
SIDE

Question:

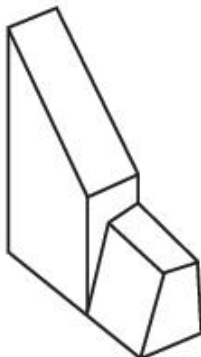
A:



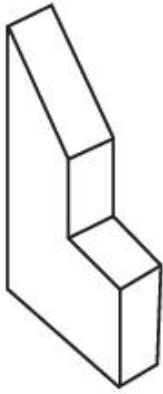
B:



C:



D:



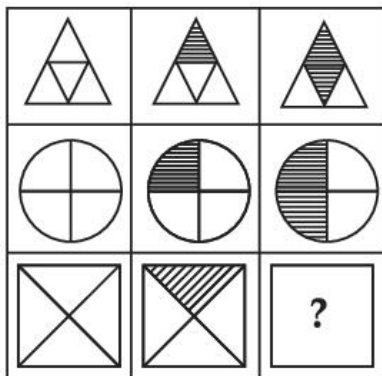
Topic: Aptitude Test – Part II

Item No: 80

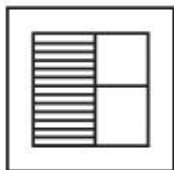
Question ID: 101280

Question Type: MCQ

Question: Find out which of the answer figure completes the figure matrix sequence from given answer figures.



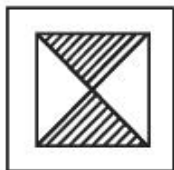
A:




B:



C:



D:	
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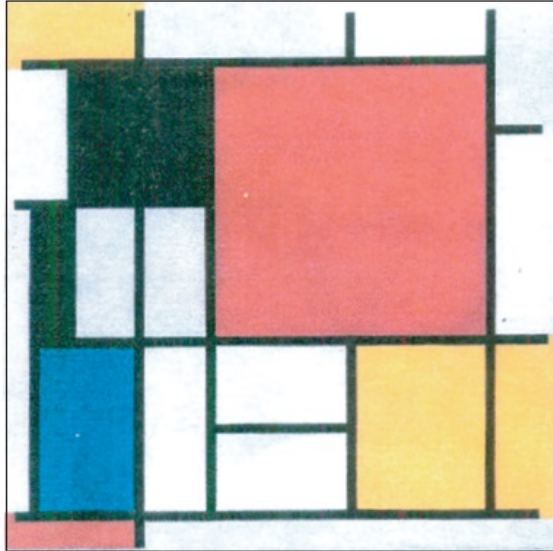
Topic:	Drawing Test – Part III
Item No:	81
Question ID:	101281
Question Type:	Drawing Question
Question:	<p>(A) Draw a proportionate sketch of given Reference Image. Use black and white Pencil rendering technique for shading.</p> <p style="text-align: center;">OR</p> <p>(B) Decode the given reference image and create balance composition. Use black and white rendering technique.</p> 

Topic:	Drawing Test – Part III
Item No:	82
Question ID:	101282
Question Type:	Drawing Question

(A) Draw a picture of a food street of any Town you have visited. Use colours of your choice to Render the view.

OR

(B) Given image shows painting by an Artist. Consider it as a plan of an object. Keeping same proportion of the rectangles shown in the image, give them height and develop interesting 3D composition. Use warm colour scheme to render the composition.



Question: