JEE Main 2021 Paper 2A (B.Arch) Sep 2 Single sitting Question Paper

Conducted by the National Testing Agency (NTA)

Time Allowed: 3 Hours **B.Arch** **Maximum Marks: 400**

General Instructions

(i) This is **Paper 2A (B.Arch)** of **JEE (Main) 2021**, conducted by the National Testing Agency on **2 Sep 2021**.

(ii) The paper contains **82 questions**; attempt **77** as specified in the section table. The maximum score is **400 marks**.

(iii) Multiple choice questions have four options. Select one answer. Each correct answer carries **4 marks**; an incorrect answer carries **−1 mark**.

(iv) Numerical value questions carry **4 marks** for a correct answer and **0 marks** for an incorrect answer. Unanswered questions carry **0 marks**.

(v) The Drawing section contains **two questions of 50 marks each**. Follow the alternatives and instructions printed within each question.

(vi) In Mathematics Section B, attempt **any five of the ten** numerical value questions.

Section	Questions	To attempt	Marks
Mathematics Section A	20	20	80
Mathematics Section B	10	5	20
Aptitude Test	50	50	200
Drawing	2	2	100

Mathematics Section A

1. 4 marks

The domain of the function, $f(x) = \sqrt{\frac{\log_{0.6}|x-2|}{|x|}}$ is :

(1) $[1, 2) \cup [3, \infty)$

(2) $[1, 2) \cup (2, 3]$

(3) $(0, 1) \cup (2, 3]$

(4) $(-\infty, 0) \cup [1, 2)$

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2. 4 marks

Let α and β be the roots of the quadratic equation $x^2 + \sqrt{3}\,x + 1 = 0$.
Then $\alpha^{2022} + \beta^{2022}$ is equal to :

(1) 2

(2) -2

(3) 0

(4) $-\sqrt{3}$

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3. 4 marks

If $A = \begin{pmatrix} 0 & 0 & 2 \\ 1 & 0 & 0 \\ 0 & -1 & 0 \end{pmatrix}$, then :

(1) $A^6 = 2\,A^3$

(2) $2A^6 = A^3$

(3) $A^{12} = 4\,A^6$

(4) $A^{12} = 2\,A^6$

---

4. 4 marks

The sum of all values of λ, for which the system of equations

$x+y+z=1$

$x+2y+4z=\lambda$

$x+4y+10z=\lambda^2$

has infinitely many solutions, is :

(1) 2

(2) -2

(3) 3

(4) -3

---

5. 4 marks

Let $f(x)=\max\{x^2, x^3\}$ for all $x \in \mathbf{R}$. Then which of the following is **NOT** true ?

(1) f is continuous for all x.

(2) f is not differentiable exactly at one point in $\mathbf{R}$.

(3) f is not differentiable exactly at two points in $\mathbf{R}$.

(4) $f'\left(-\frac{1}{2}\right)+f'\left(\frac{1}{8}\right)+f'\left(\frac{3}{2}\right)=6$

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6. 4 marks

The sum of the series

$$\frac{1}{6}+\frac{5}{6^2}+\frac{19}{6^3}+\ldots+\frac{3^{10}-2^{10}}{3^{10}\cdot 2^{10}} \text{ is :}$$

(1) $\frac{511}{2^{10}}$

(2) $1+\frac{2^9-3^{10}}{6^{10}}$

(3) $\frac{(255)\cdot 3^{10}+2^9}{6^{10}}$

(4) $\frac{(511)\cdot 3^{10}+2^9}{6^{10}}$

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7. 4 marks

$$\lim_{x\to 0} \frac{1}{x^2}\left(e^{x^2} - \cos\frac{x}{2}\right) \text{ is equal to :}$$

(1) $\frac{3}{2}$

(2) $\frac{5}{8}$

(3) $\frac{9}{8}$

(4) $\frac{9}{4}$

---

8. 4 marks

If $\int\sqrt{\frac{\cos(x-\theta)}{\cos(x+\theta)}}\,dx = \alpha \sin^{-1}\left(\frac{\sin x}{\cos\theta}\right) + \beta \log_e\left|\cos x + \sqrt{\cos^2 x - \sin^2\theta}\right| + C,$

where C is a constant of integration and $\frac{\pi}{6} < \theta < \frac{\pi}{4}$, then $\alpha\sin\theta + \beta\cos\theta$ is equal to :

(1) 0

(2) 1

(3) $\cos 2\theta$

(4) $\sin 2\theta$

---

9. 4 marks

If $I = \int_0^1 \tan^{-1}(\sqrt{x}+1)\,dx$, $J = \int_0^1 \frac{\sqrt{x}\,dx}{x + 2\sqrt{x} + 2}$, then the value of $2I + J$ is equal to :

(1) $2\tan^{-1}\left(\frac{1}{2}\right)$

(2) $2\tan^{-1}(2) - \frac{\pi}{2}$

(3) $2\tan^{-1}(2)$

(4) $\tan^{-1}(2)$

---

10. 4 marks

Let $y=y(x)$ be the solution of the differential equation $x\frac{dy}{dx} = (2x + 3)e^x + xy, x > 0$.

If $y(e) = (2e+3)e^e$, then $\frac{d^2y}{dx^2} - \frac{dy}{dx}$ at $x=1$ is equal to :

(1) $3e$ (2) e

(3) 0 (4) $2e$

---

11. 4 marks

Let f be a non-zero polynomial function such that $f(3x) = f'(x)f''(x)$.
Then the value of $f(6)$ is :

(1) 648 (2) 324

(3) 136 (4) 108

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12. 4 marks

A rod AB of length 4 units rests against a vertical wall with A on the horizontal floor. P is a point on AB such that AP : PB = 2 : 1. If the rod slides down along the wall in a vertical plane, then the point P(x, y) moves on the curve :

(1) $36x^2 + 9y^2 = 64$ (2) $36x^2 + 9y^2 = 16$

(3) $9x^2 + 36y^2 = 64$ (4) $9x^2 + 36y^2 = 16$

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13. 4 marks

Let A(1, 2) and B(3, 6) are two points on a circle of radius R, whose one of the diameters is along the line $2x-y+4=0$. Then R^2 is equal to :

(1) 17

(2) $\frac{37}{3}$

(3) $\frac{31}{5}$

(4) $\frac{41}{5}$

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14. 4 marks

A line perpendicular to the line $4x=3y$ is a tangent to the parabola $y^2=3x+1$ at a point P on it. If S is the focus of the parabola, then the equation of the line SP is :

(1) $24x+5y=10$

(2) $24x-y=26$

(3) $24x+7y=10$

(4) $8x+y=6$

---

15. 4 marks

If a line $px+qy=12$ is a tangent to the ellipse $4x^2+9y^2=16$, then pq can **NOT** be equal to :

(1) 29

(2) 26

(3) 23

(4) 21

---

16. 4 marks

If the angle between the line $\frac{x+1}{1}=\frac{y-1}{2}=\frac{z+2}{-1}$ and the plane P : $2x-y-\lambda z+4=0$, $\lambda > 0$, is $\sin^{-1}\left(\frac{1}{9\sqrt{6}}\right)$, then the distance of the point $(-1, 1, -2)$ from the plane P is :

(1) $\frac{2}{3}$

(2) 1

(3) $\frac{3}{2}$

(4) $\frac{2}{9}$

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17. 4 marks

Let the distinct numbers a, b, c be the p^{th}, q^{th} and r^{th} terms of a geometric progression of positive terms. Then the angle between the vectors $\vec{u} = (\log_e a^2)\hat{i} + (\log_e b^2)\hat{j} + (\log_e c^2)\hat{k}$ and $\vec{v} = (q-r)\hat{i} + (r-p)\hat{j} + (p-q)\hat{k}$ is :

(1) 0

(2) $\frac{\pi}{4}$

(3) $\frac{\pi}{3}$

(4) $\frac{\pi}{2}$

18. 4 marks

For $0 < x < \pi$, the sum of the solutions of the equation $4^{\left(\frac{1}{2}\sin x + \frac{1}{4}\sin^2 x + \frac{1}{8}\sin^3 x + \cdots\right)} = 2^{\frac{2}{3}}$ is :

(1) $\frac{\pi}{3}$

(2) $\frac{2\pi}{3}$

(3) π

(4) $\frac{\pi}{2}$

19. 4 marks

The domain of the function

$$f(x) = \tan^{-1}\left(\sqrt{x^2 + x - 2}\right) + \sec^{-1}(x^2 - 5x + 3) \text{ is :}$$

(1) $(-\infty, -2] \cup [1, \infty)$

(2) $[1, 4] \cup \left[\frac{5 + \sqrt{17}}{2}, \infty\right)$

(3) $\left(-\infty, \frac{5 - \sqrt{17}}{2}\right] \cup [1, 4] \cup \left[\frac{5 + \sqrt{17}}{2}, \infty\right)$

(4) $(-\infty, -2] \cup [1, 4] \cup \left[\frac{5 + \sqrt{17}}{2}, \infty\right)$

20. 4 marks

Which of the following is equivalent to $p \leftrightarrow q$?

(1) $(\sim p \wedge \sim q) \vee (p \vee q)$

(2) $(p \wedge q) \vee (\sim p \wedge \sim q)$

(3) $(p \vee q) \wedge (\sim p \vee \sim q)$

(4) $(p \wedge q) \vee (p \vee q)$

Mathematics Section B

21. Numerical value · 4 marks

Three fair dice are thrown. The number of ways to obtain a total of 11 is _____.

22. Numerical value · 4 marks

If a plane, that contains the line $\vec{r} = (1, -1, 1) + \lambda(2, 3, -6)$, $\lambda \in \mathbf{R}$, passes through the point (2, 0, 2) and is at a distance d from the origin, then the value of 73 d^2 is _____.

23. Numerical value · 4 marks

Number of real roots of the equation

$$\sqrt{x+2} - \sqrt{x-2} = \sqrt{4x-1} \text{ is } _____.$$

24. Numerical value · 4 marks

Between 1 and 31, n numbers have been inserted in such a way that the resulting sequence is an A.P. If the ratio of $(n-1)^{th}$ and 7^{th} inserted numbers is 9 : 5, then n is equal to _____.

25. Numerical value · 4 marks

The sum of absolute maximum and absolute minimum values of the function $f(x) = |4x^2+3x-10| + x^2 - 2x + 5$, $x \in [-3, 1]$ is _____.

26. Numerical value · 4 marks

If the area (in sq. units) of the region bounded by the curve $y = |x-2| + |2x-3| + |3x-4|$ and the line $y = 3$ is A, then 12 A is equal to _____.

27. Numerical value · 4 marks

The coefficient of $a^4b^6c^6$ in the expansion of $(ab+bc+ca)^8$ is _____.

28. Numerical value · 4 marks

The number of ordered pairs (a, b), such that the function $f(x)=4x^3-(3a+2b)x^2+2abx$ is decreasing in $\left[\frac{3}{2},\frac{5}{3}\right]$ and increasing in $\mathbf{R}-\left[\frac{3}{2},\frac{5}{3}\right]$, is _____.

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29. Numerical value · 4 marks

Three numbers are randomly picked from the set {0, 1, 2, 3, 4, 5, 6, 7, 8, 9} one after another without replacement. If p be the probability that the smallest of these three numbers is less than 4, then 18p is equal to _____.

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30. Numerical value · 4 marks

If the mean of the numbers 3, 4, a, b, 10 is 6 and their standard deviation is $\sqrt{6.8}$, then a^3+b^3 is equal to _____.

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31. 4 marks

Match **List - I** with **List - II** :

	List - I		List - II
(A)	Jaisalmer	(I)	Pink city
(B)	Jodhpur	(II)	Golden city
(C)	Jaipur	(III)	Lake city
(D)	Udaipur	(IV)	Blue city

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

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

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

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

32. 4 marks

Match **List - I** with **List - II** :

	List - I		List - II
(A)	Jod Gumbaz	(I)	Mahabalipuram
(B)	Cave temples	(II)	Madhurai
(C)	Rangnatha temple	(III)	Bijapur
(D)	Minakshi temple	(IV)	Srirangam

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

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

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

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

33. 4 marks

Which is the largest monestry in India ?

(1) Tawang

(2) Leh

(3) Dharamshala

(4) Labrang

34. 4 marks

Where is 'Junagadh fort' choose the correct option amongst the following ?

(1) Udaipur
(2) Jodhpur
(3) Bikaner
(4) Jaisalmer

35. 4 marks

'Kyoto protocol' summit was held in which country ?

(1) Japan
(2) Korea
(3) Malyasia
(4) China

36. 4 marks

What was Delhi's old name ?

(1) Old Delhi
(2) Shahjahanpur
(3) Shahpur Jat
(4) Shahajahanabad

37. 4 marks

Match **List - I** with **List - II** :
List - I : Name of the cities/towns where traditional Ghats are situated.
List - II : Name of the river on which traditional Ghats are constructed.

List - I		**List - II**	
(A)	Maheshwar, MP	(I)	Ganga
(B)	Kolhapur, Maharashtra	(II)	Shipra
(C)	Ujjain, MP	(III)	Narmada
(D)	Varanasi, UP	(IV)	Panchganga

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
(3) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)
(4) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

38. 4 marks

'Rani Ki Vav' is an example of :

(1) Haveli
(2) Stepwell
(3) Temple
(4) Fort

39. 4 marks

'Al-Khazneh' the treasury is located in :

(1) Jordan
(2) Turkey
(3) UAE
(4) Saudi-Arabia

40. 4 marks

Proposed 'Central Vista' project is located in which city ?

(1) New Delhi
(2) Lucknow
(3) Mumbai
(4) Varanasi

41. 4 marks

Originally there were five 'Jantar Mantars' (Architectural Observatories) constructed by 'Raja Jai Singh'. Which out of those got destroyed in the 19^{th} century ?

(1) Jantar Mantar at Ujjain.
(2) Jantar Mantar at Mathura.
(3) Jantar Mantar at Varanasi.
(4) Jantar Mantar at Delhi.

42. 4 marks

The local term 'Barsati' in a building mean.

(1) Mumty
(2) Balcony
(3) Canopy
(4) Parapet

43. 4 marks

Lingraj temple is situated in :

(1) Cuttack
(2) Puri
(3) Bhubaneshwar
(4) Konark

44. 4 marks

Porcelain is a product made up of :

(1) Steel
(2) Stone
(3) Clay
(4) Timber

45. 4 marks

Bhagalpur is known for :

(1) Cotton
(2) Silk
(3) Tea
(4) Rice

46. 4 marks

Which one of the following terms is used to describe trade between two or more countries ?

(1) Internal trade
(2) External trade
(3) International trade
(4) Local trade

47. 4 marks

Who has designed the 'India Habitat Center' building situated at New Delhi ?

(1) B.V. Doshi
(2) Joseph Allein Stein
(3) Charles Correa
(4) I.M. Pei

48. 4 marks

X SUCCESS Y

Mirror the words along X-Y axis and choose the correct option amongst the following.

(1) SUCCESS

(2) SUCCESS

(3) SUCCESS

(4) SSECCUS

49. 4 marks

Match **List - I** with **List - II** :

List - I		List - II
(A) Dubai	(I)	
(B) London	(II)	
(C) New York	(III)	
(D) Kuala Lumpur	(IV)	

Choose **correct** answer.

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

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

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

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

50. 4 marks

Match **List - I** with **List - II** :

List - I		**List - II**
(A) Empire state building	(I)	
(B) Opera House	(II)	
(C) Hagia Sophia	(III)	
(D) Guggenheim Museum	(IV)	

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

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

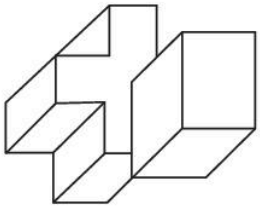
(2) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

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

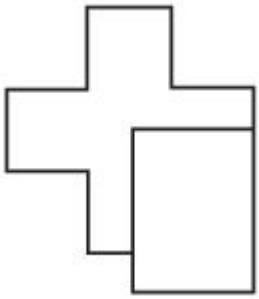
(4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

51. 4 marks

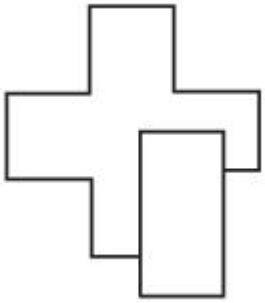
The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figure's.



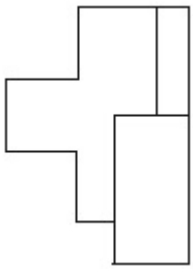
(1)



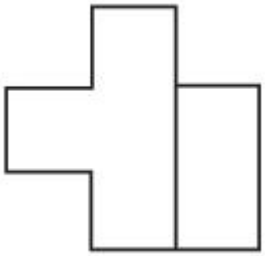
(2)



(3)

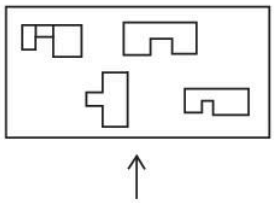


(4)

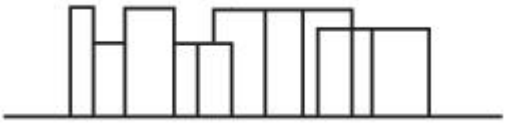


52. 4 marks

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



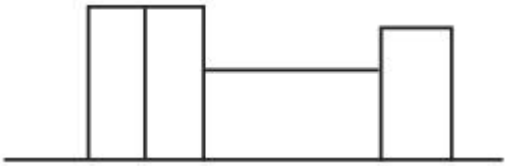
(1)



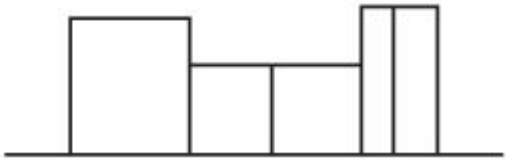
(2)



(3)



(4)



53. 4 marks

A tennis ball is cut according to the pattern of the grooves of a screw. Which of the following is the correct output :

(1)



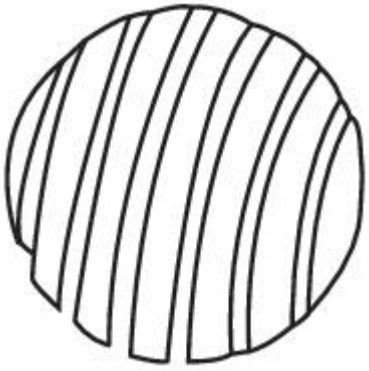
(2)



(3)

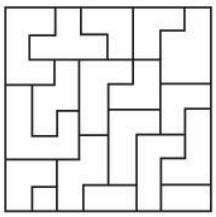


(4)



54. 4 marks

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



(1) 

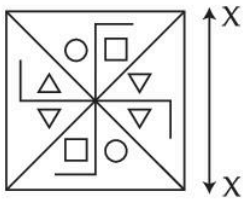
(2) 

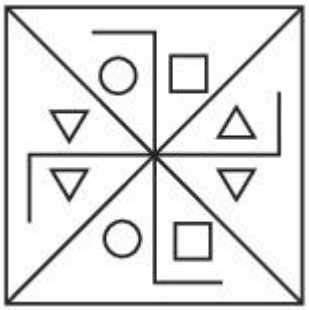
(3) 

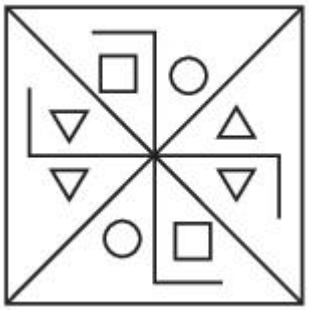
(4) 

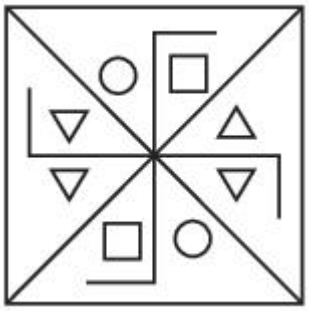
55. 4 marks

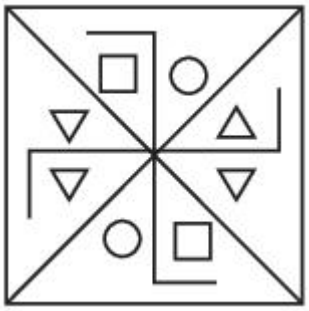
Which of the answer figure is correct mirror image of the problem figure with respect to X-X ?



(1) 

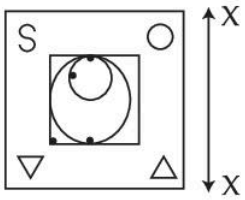
(2) 

(3) 

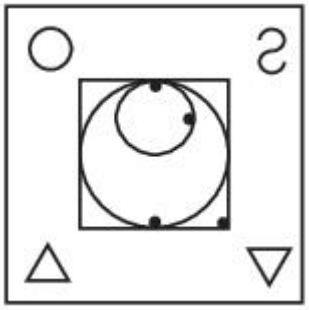
(4) 

56. 4 marks

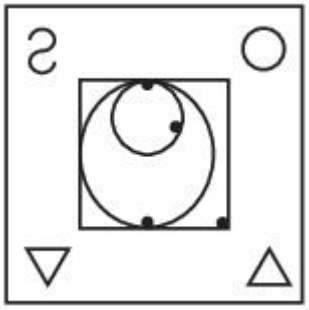
Which one of the answer figure is correct mirror image of problem figure with respect to X-X ?



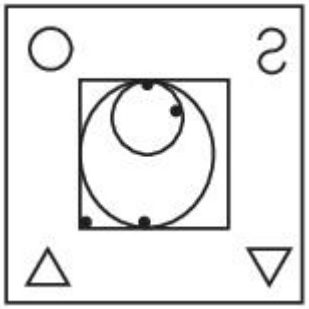
(1)



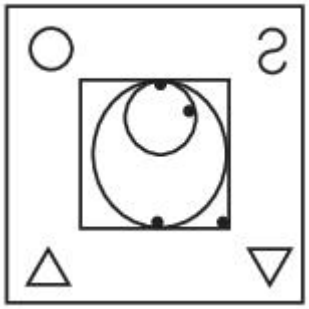
(2)



(3)

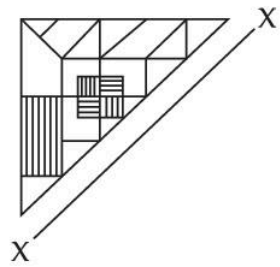


(4)

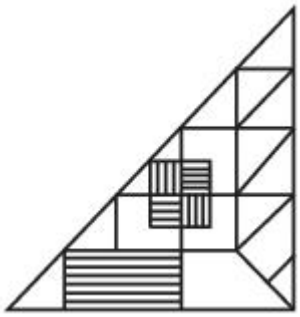


57. 4 marks

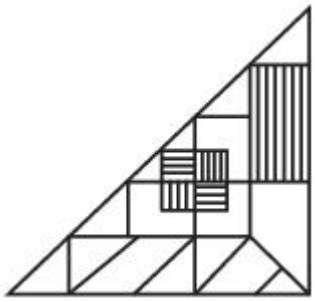
Which one of the answer figure is correct mirror image of problem figure with respect to X-X ?



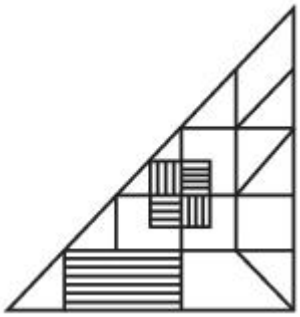
(1)



(2)



(3)

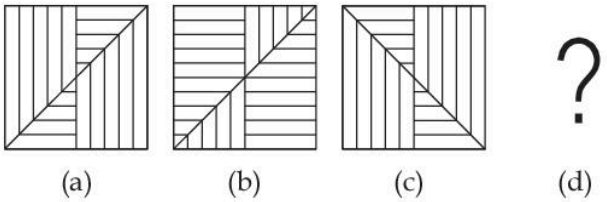


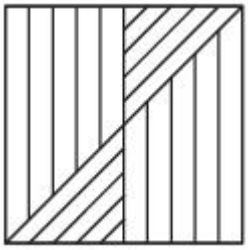
(4)

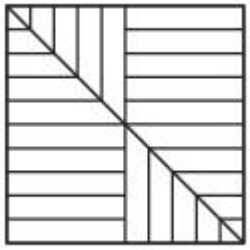


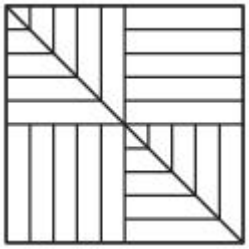
58. 4 marks

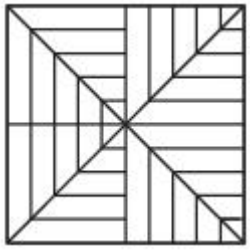
Which one of the answer figure will complete the sequence of the problem figure ? Choose correct one.



(1) 

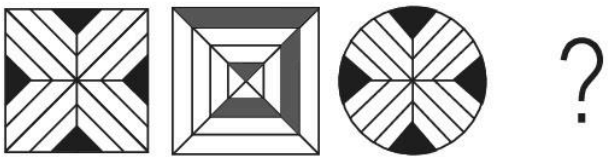
(2) 

(3) 

(4) 

59. 4 marks

Which one of the answer figure will complete the sequence of the problem figure ? Choose the correct one.



(a) (b) (c) (d)

(1) 

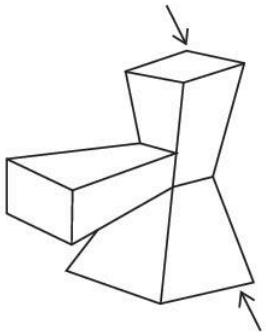
(2) 

(3) 

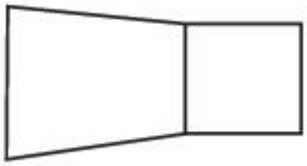
(4) 

60. 4 marks

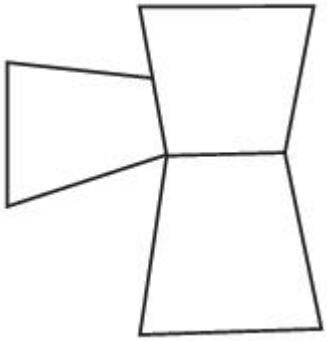
The 3D figure shows the view of an object. Find out the odd shape from the answer figures which is not related to 3D figure.



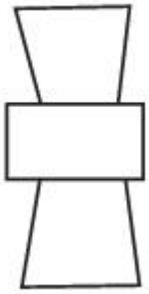
(1)



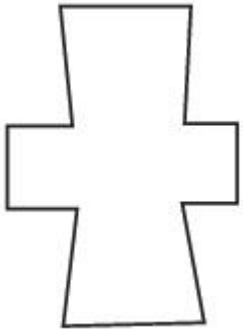
(2)



(3)

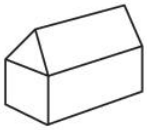


(4)

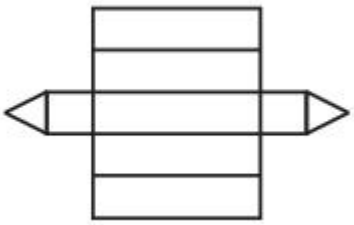


61. 4 marks

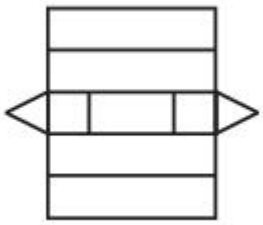
The 3D figure shows the view of an object. Identify the correct view when figure opened up amongst the answer figures.



(1)



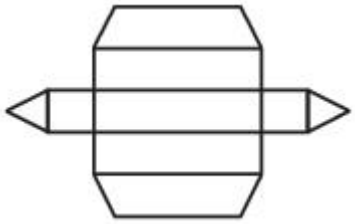
(2)



(3)

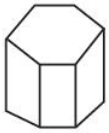


(4)

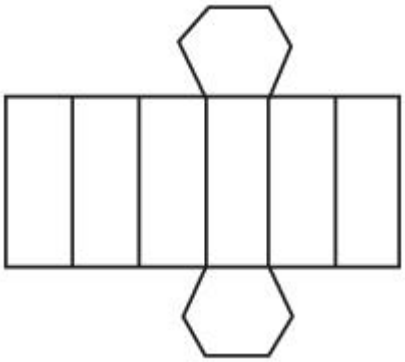


62. 4 marks

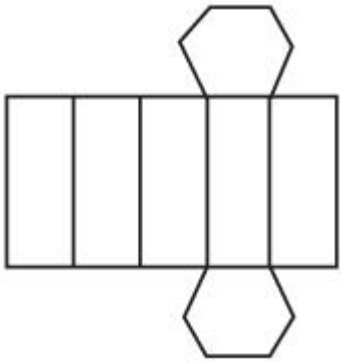
The 3D figure shows the view of an object. Identify the correct view when the figure opened up from amongst the answer figures.



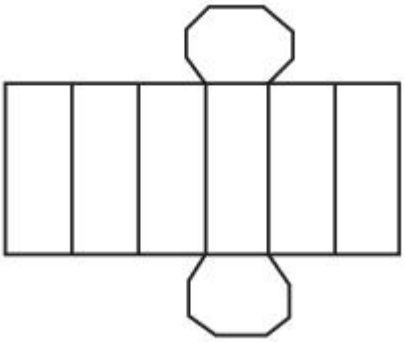
(1)



(2)



(3)

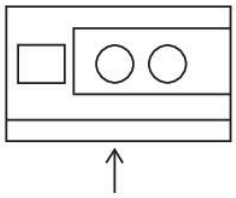


(4)

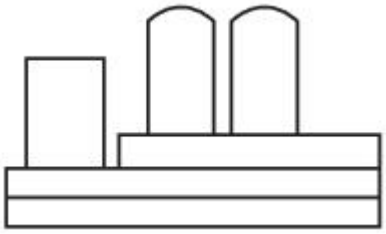


63. 4 marks

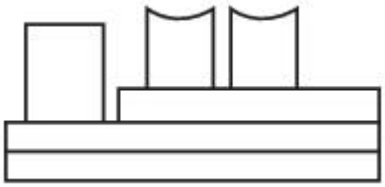
The problem figure shows the top view of an object. Identify the correct elevation amongst the answer figure looking in the direction of the arrow.



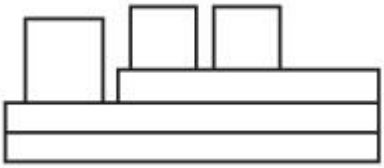
(1)



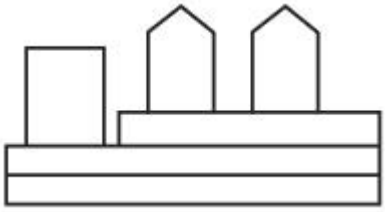
(2)



(3)

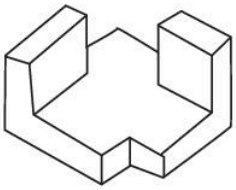


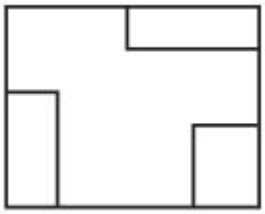
(4)

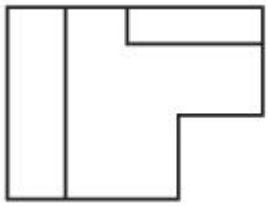


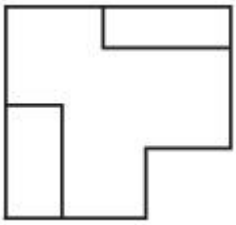
64. 4 marks

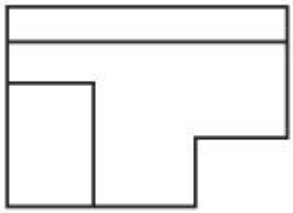
The 3D figure shows the view of an object. Identify the correct top view, from amongst the answer figure.



(1) 

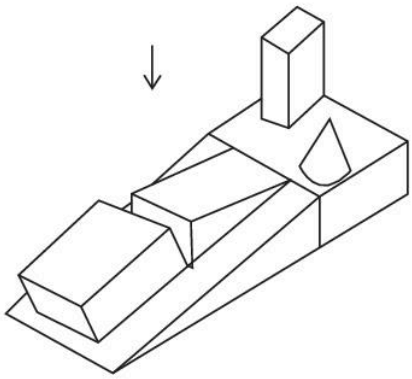
(2) 

(3) 

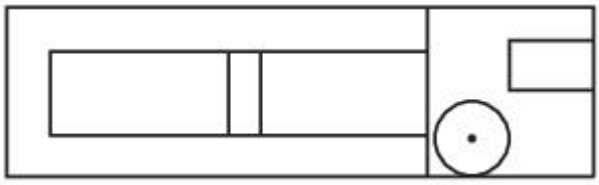
(4) 

65. 4 marks

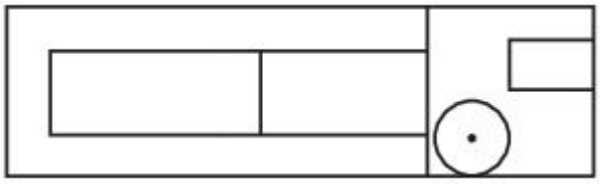
The 3D figure shows the view of an object. Identify the correct view in the direction of the arrow, from the answer figure's.



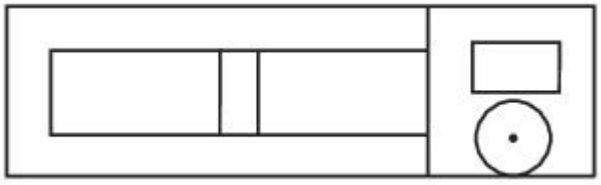
(1)



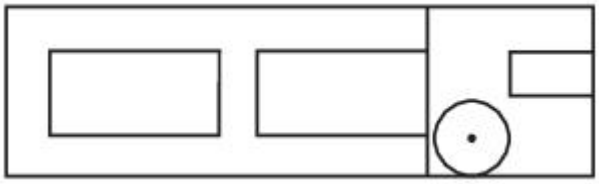
(2)



(3)

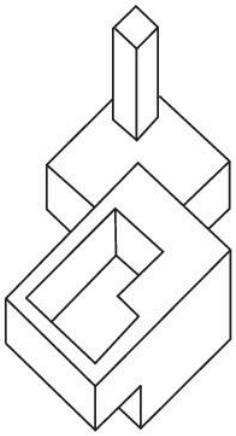


(4)

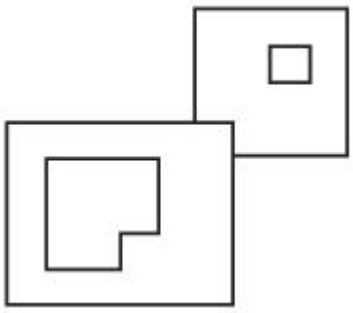


66. 4 marks

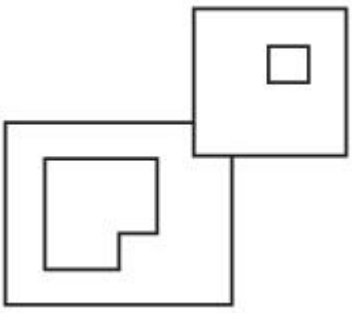
The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figures.



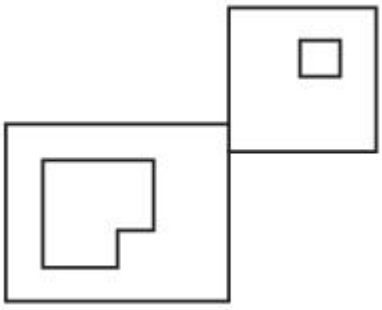
(1)



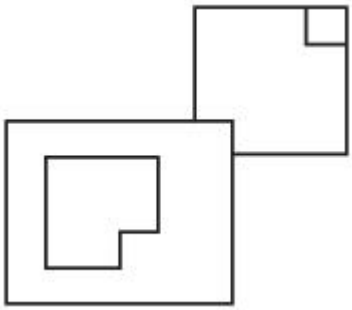
(2)



(3)

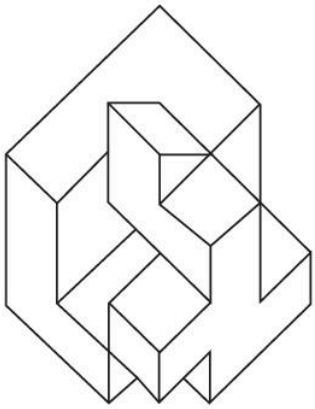


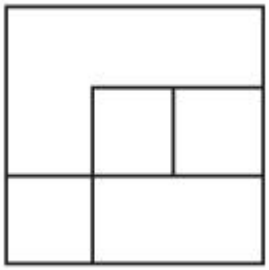
(4)

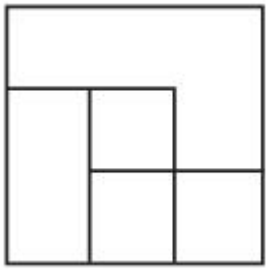


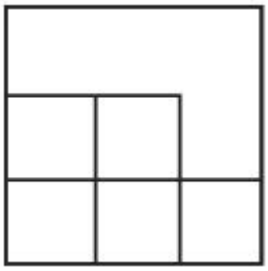
67. 4 marks

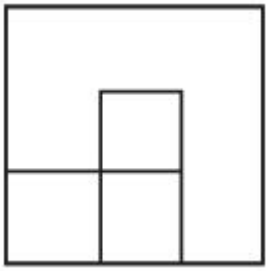
The 3D figure shows the view of an object. Identify the correct top view, amongst the answer figure's.



(1) 

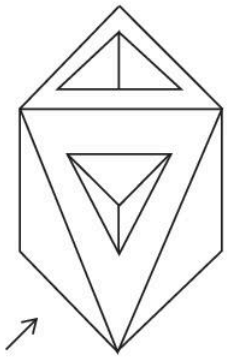
(2) 

(3) 

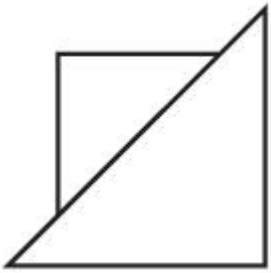
(4) 

68. 4 marks

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from answer figure's.



(1) 

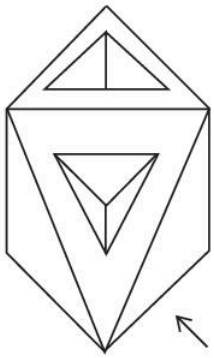
(2) 

(3) 

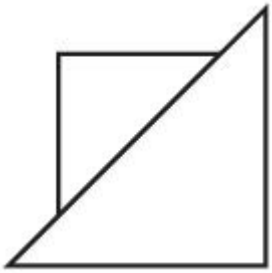
(4) 

69. 4 marks

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



(1) 

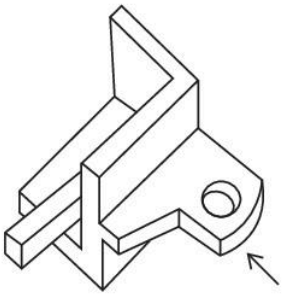
(2) 

(3) 

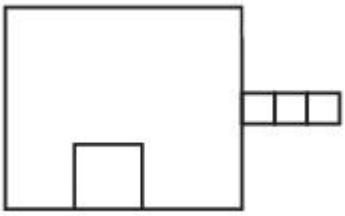
(4) 

70. 4 marks

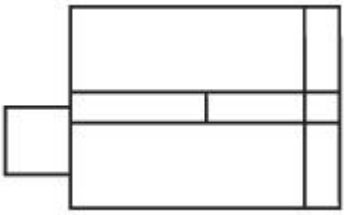
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow amongst the answer figures.



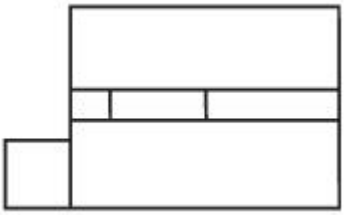
(1)



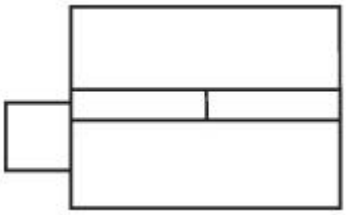
(2)



(3)

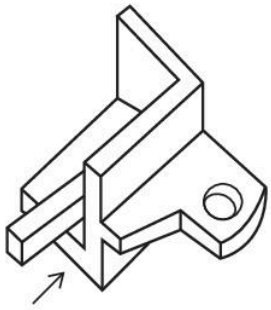


(4)

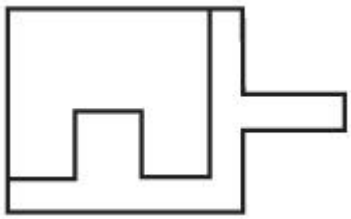


71. 4 marks

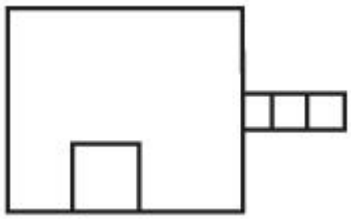
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from answer figure's.



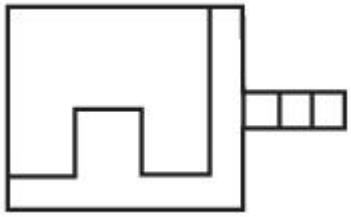
(1)



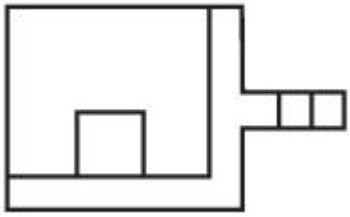
(2)



(3)

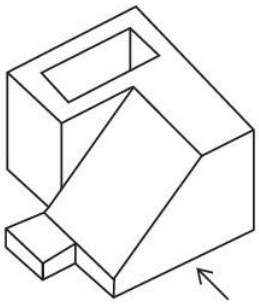


(4)

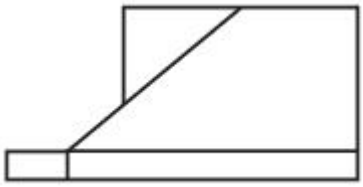


72. 4 marks

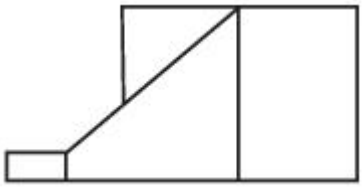
The 3D figure shows view of an object. Identify the correct view looking in the direction of arrow, from the answer figure's.



(1)



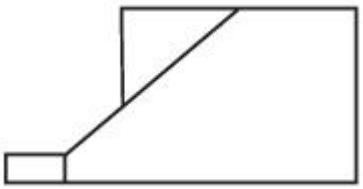
(2)



(3)

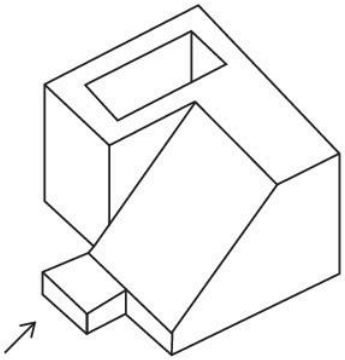


(4)

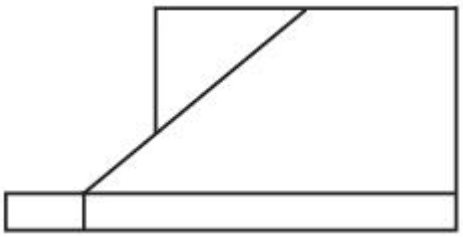


73. 4 marks

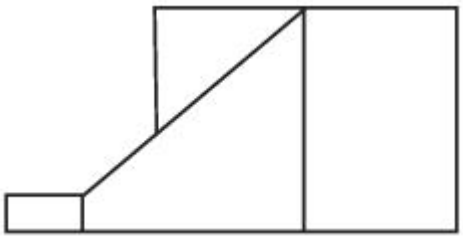
The 3D figure shows view of an object, looking in the direction of arrow, identify the correct elevation from the answer figures.



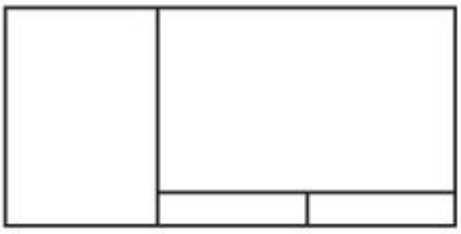
(1)



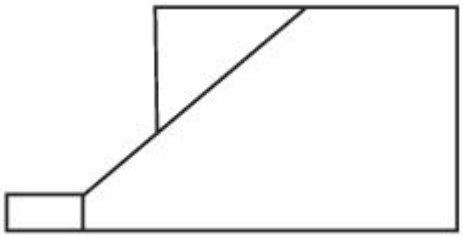
(2)



(3)

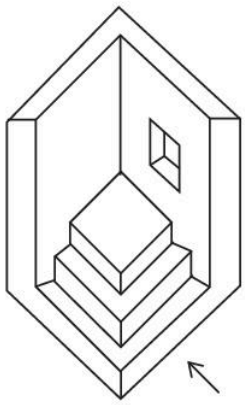


(4)

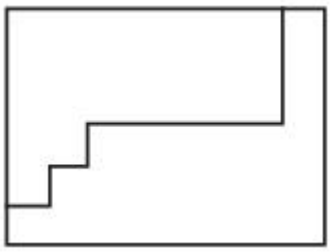


74. 4 marks

The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from the answer figure's.



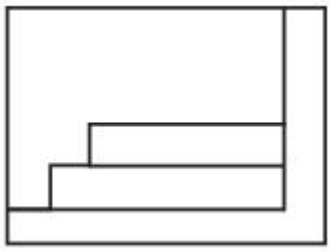
(1)



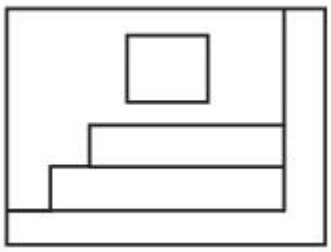
(2)



(3)

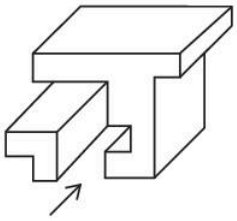


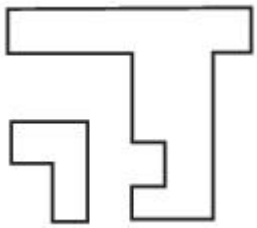
(4)

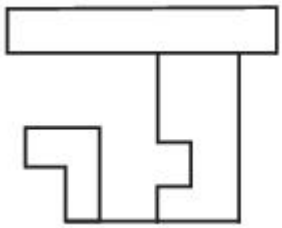


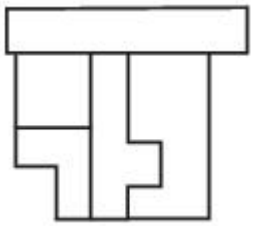
75. 4 marks

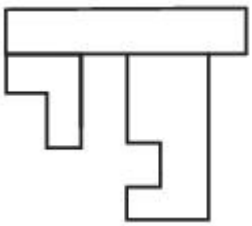
The 3D figures shows the view of an object. Identify the correct view looking in the direction of arrow, from the given answer figures.



(1) 

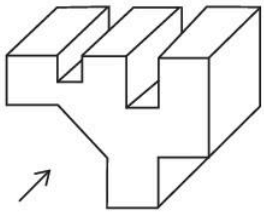
(2) 

(3) 

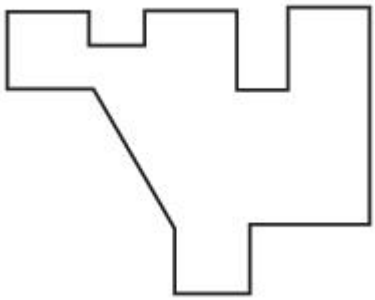
(4) 

76. 4 marks

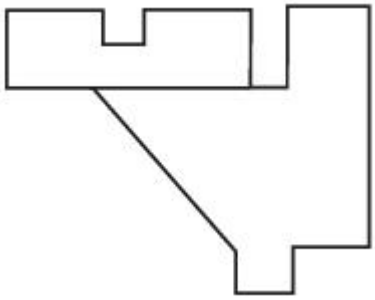
The 3D figure shows the view of an object. Identify the correct view looking in the direction of arrow, from the given answer figure's.



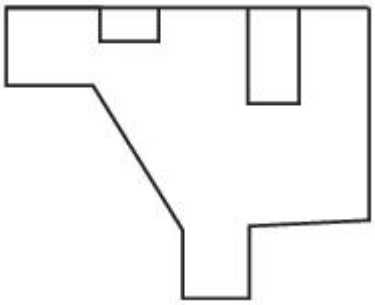
(1)



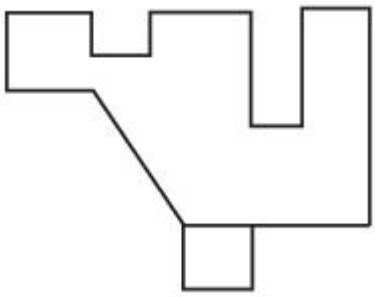
(2)



(3)



(4)



77. 4 marks

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



(1) 

(2) 

(3) 

(4) 

78. 4 marks

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



(1) 

(2) 

(3) 

(4) 

79. 4 marks

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



(1) 

(2) 

(3) 

(4) 

80. 4 marks

Monsoon first reach to which state of India ?

(1) Gujarat

(2) Maharashtra

(3) Kerala

(4) Karnataka

Drawing

81. 50 marks

Draw a proportionate sketch of given reference image with black and white rendering techniques of your choice. Picture should fit in given space for this answer.



OR

Create a wall magic for a metro station using triangles of any size and overall panel size of your choice. The theme of magic is 'Environment' use colours to make the mozaic attractive and meaningful.

82. 50 marks

Consider yourself a fish in the aquarium that is in a room and a girl is standing near the aquarium and playing with the fish. Create the view of the room according the eye of fish.

OR

Create picture with fish/fishes, a girl, boat, farmers, tractor, trees and plants.