JEE Main 2025 Paper 2B (B.Planning) Jan 30 Shift 2 Question Paper

Conducted by the National Testing Agency (NTA)

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

General Instructions

(i) This is **Paper 2B (B.Planning)** of **JEE (Main) 2025**, conducted by the National Testing Agency on **30 Jan 2025**.

(ii) The paper contains **100 questions**; attempt **100** 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 **−1 marks** for an incorrect answer. Unanswered questions carry **0 marks**.

(v) All Planning and Aptitude Test questions are compulsory.

(vi) All questions are compulsory.

Section	Questions	To attempt	Marks
Mathematics Section A	20	20	80
Mathematics Section B	5	5	20
Aptitude Test	50	50	200
Planning	25	25	100

Mathematics Section A

1. 4 marks

Let A = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}. Let R be a relation on A defined by xRy if and only if $2x=3y$. Let l and m be the minimum number of elements required to be added in R to make it reflexive and symmetric relations, respectively. Then $l+$m is equal to :

(1) 13 (2) 14

(3) 15 (4) 16

2. 4 marks

If the domain of the function $f(x)=\frac{1}{\log_{10}(1-2x)}+\sqrt{2x+1}$ is $[\alpha, \beta)-\{0\}$, then $20\,(\alpha^2+\beta^2)$ equals :

(1) 8 (2) 10

(3) 12 (4) 13

3. 4 marks

If $\sqrt{-24-10i}=\alpha+i\beta$, $i=\sqrt{-1}$, $\alpha, \beta \in \mathbf{R}$, then $\alpha^2+\beta^2$ is equal to :

(1) 22 (2) 24

(3) 26 (4) 29

4. 4 marks

The product of all real solutions of the equation $\left(3+2\sqrt{2}\right)^{x^4-15}+\left(3-2\sqrt{2}\right)^{x^4-15}=6$ is :

(1) $4\sqrt{14}$ (2) 14

(3) $2\sqrt{14}$ (4) 18

5. 4 marks

If the system of equations $x+2y+3az=4$, $2x+3y+4z=1$, $3x+7y+2z=$b has infinitely many solutions, then b-40a is equals to :

(1) 4 (2) 1

(3) 2 (4) 3

6. 4 marks

Let a, b, c be positive real numbers such that a, 7, c, b are in an arithmetic progression. If $ab=3(a+b)$, then the largest value of b is :

(1) $9-\sqrt{2}$ (2) $9-3\sqrt{2}$

(3) $9+3\sqrt{2}$ (4) $9+6\sqrt{2}$

7. 4 marks

If there are 19 and 16 points on two distinct parallel lines L_1 and L_2, respectively, then the total number of triangles that can be formed using these points as vertices, is :

(1) 4983 (2) 4997

(3) 5016 (4) 5049

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8. 4 marks

If the mean of the frequency distribution

Variable (x_i)	1	3	4	7	9	Total
Frequency (f_i)	1	a	b	3	1	10

is 5, then its variance is :

(1) 5 (2) 5.1

(3) 5.2 (4) 5.3

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9. 4 marks

In a question paper containing 10 quesions, A can solve 70% of the questions and B can solve 50% of the questions. The probability, that none of A and B will be able to solve the question, selected at random from the paper, is :

(1) $\frac{3}{10}$ (2) $\frac{3}{20}$

(3) $\frac{1}{5}$ (4) $\frac{2}{5}$

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10. 4 marks

Let the line $y=x+3$ intersect the parabola $x^2=4y$ at the points A and B. If F is the focus of the parabola, then the area of triangle AFB is :

(1) 4 (2) 6

(3) 8 (4) 12

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11. 4 marks

Let A $(3, 3\sqrt{3})$, B (6, 0) and C (α, β) be the vertices of an equilateral triangle. Let its incentre be D, and P and Q be the feet of perpendiculars drawn from the point D on AC and BC, respectively. Then the area of quadrilateral CPDQ is :

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

(3) $6\sqrt{3}$ (4) $8\sqrt{3}$

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12. 4 marks

Let $E: \frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$, $a > b$ be an ellipse of eccentricity $\frac{1}{\sqrt{3}}$. If the distance between the foci of E is 4, then the length of its latus rectum is :

(1) $\frac{4\sqrt{3}}{3}$

(2) $\frac{6\sqrt{3}}{3}$

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

(4) $\frac{10\sqrt{3}}{3}$

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13. 4 marks

Let a circle of radius 3 pass through the origin O and meet the coordinate axes at the points A and B. Then the locus of the centroid of the triangle AOB is :

(1) $x^2 + y^2 = 1$

(2) $x^2 + y^2 = 4$

(3) $3x^2 + 3y^2 = 4$

(4) $x^2 + y^2 = 12$

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14. 4 marks

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

(1) 5

(2) 6

(3) 4

(4) 7

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15. 4 marks

Let L_1 be the line that passes through the point (1, 2, -4) and be perpendicular to the two lines $\frac{x-8}{3} = \frac{y+19}{-16} = \frac{z-10}{7}$ and $\frac{x-15}{3} = \frac{y-29}{8} = \frac{z-5}{-5}$. If L_2 is the line $\vec{r} = 7\hat{i} - 6\hat{k} + \lambda\left(\hat{i} + 2\hat{j} + 2\hat{k}\right)$, $\lambda \in \mathbf{R}$, then an angle between L_1 and L_2 is equal to :

(1) $\frac{\pi}{6}$

(2) $\frac{\pi}{12}$

(3) $\cos^{-1}\left(\frac{4}{5}\right)$

(4) $\cos^{-1}\left(\frac{20}{21}\right)$

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16. 4 marks

Let f be a differentiable non-zero function and $3\int_0^x f(t)\,dt = 2(f(x))^3$. Then $\int_0^1 \frac{3(f(x))^4}{\sqrt{1+(f(x))^{12}}}\,dx$ is equal to :

(1) $\log_e(\sqrt{2}+2)$ (2) $\log_e(\sqrt{2}-1)$

(3) $\log_e(1+\sqrt{2})$ (4) $\log_e(3-\sqrt{2})$

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17. 4 marks

Let $f(x) = \sum_{r=1}^{10} \cot^{-1}\left(1-(x+r)+(x+r)^2\right)$, $x \geq 0$. Then $\lim_{x\to\infty}\left(\tan(f(x)) + \sec^2(f(x))\right)$ is :

(1) 0 (2) 1

(3) 2 (4) not defined

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18. 4 marks

The area of the region, enclosed between the curves $y = \cos x$ and $y = |\cos x|$ for $0 \leq x \leq 3\pi$, is :

(1) 3 (2) 5

(3) 6 (4) 12

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19. 4 marks

If $\int_4^9 \frac{x-\sqrt{x}}{x(x-1)}\,dx = \alpha$, then e^α is equal to :

(1) 9/4 (2) 16/9

(3) 4/9 (4) 4/3

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20. 4 marks

If the function $f(x)$ defined by $f(x) = \begin{cases} \frac{\log_e(1+5x)-\log_e(1-2x)}{x}, & x \neq 0 \\ l, & x = 0 \end{cases}$

is continuous at $x = 0$, then the value of l is :

(1) 3 (2) 2

(3) 5 (4) 7

Mathematics Section B

21. Numerical value · 4 marks

Let $A=\begin{bmatrix}1 & 2 & 3\\ 0 & 2 & 3\\ 0 & 0 & 1\end{bmatrix}$ and let P be a 3×3 matrix. If $AP=\begin{bmatrix}1 & 0 & 1\\ 1 & 1 & 0\\ 0 & 1 & 1\end{bmatrix}$ and $\begin{bmatrix}1 & 0 & 2\end{bmatrix} P \begin{bmatrix}1\\ 0\\ 2\end{bmatrix} = [k]_{1\times 1}$, then k is equal to _____.

22. Numerical value · 4 marks

If $\left({}^{10}C_1\right)^2 + 2\left({}^{10}C_2\right)^2 + \ldots + 10\left({}^{10}C_{10}\right)^2 = m\left({}^{n}C_m\right)$, then $m+n$ equals _____.

23. Numerical value · 4 marks

If $\sum_{x=1}^{n^2} \sqrt{\left(\left(x\cos\left(\cot^{-1}x\right)+\sin\left(\cot^{-1}x\right)\right)^2-1\right)} = An^4+Bn^2$, then $2(A+B)$ equals _____.

24. Numerical value · 4 marks

Let $\vec{a}=2\hat{i}+\hat{j}-\hat{k}$ and $\vec{b}=3\hat{i}+2\hat{j}+4\hat{k}$. Let for some $\lambda, \mu \in \mathbf{R}$, a vector $\vec{c}=\lambda\vec{a}+\mu\vec{b}$. If $\vec{a}\cdot\vec{c}=16$ and $\vec{b}\times\vec{c}=-12\hat{i}+22\hat{j}-2\hat{k}$, then $|\vec{c}|^2$ equals _____.

25. Numerical value · 4 marks

If the differential equation for the family of circles passing through the points (19, 0) and (−19, 0) is $2xy\,dx+(\alpha x^2+\beta y^2+\gamma)dy=0$, then $\alpha+\beta+\gamma$ is equal to _____.

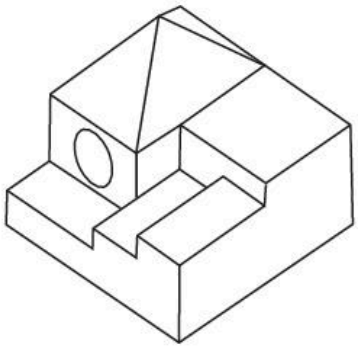
26. 4 marks

Structure which is designed to look impressive and wonderful from a far distance, has a :

(1) Micro scale
(2) Human scale
(3) Monumental scale
(4) Nano scale

27. 4 marks

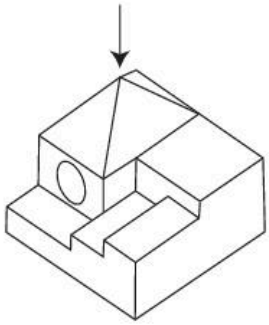
The question fig. shows the 3D view of an object. Identify the correct number of visible surfaces.

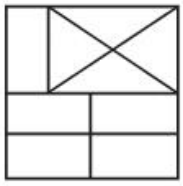
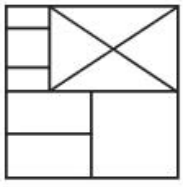
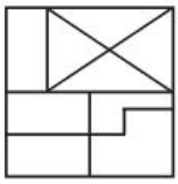
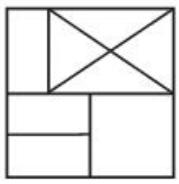


(1) 11
(2) 14
(3) 12
(4) 13

28. 4 marks

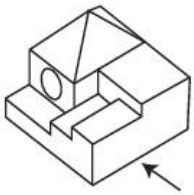
The question figure shows the 3D view of an object. Identify the correct view looking in the direction of arrow.

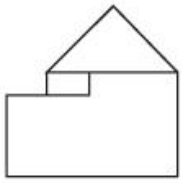


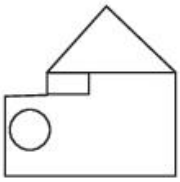
(1) 
(2) 
(3) 
(4) 

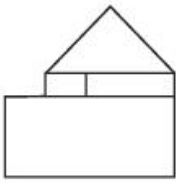
29. 4 marks

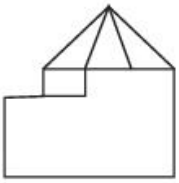
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(1) 

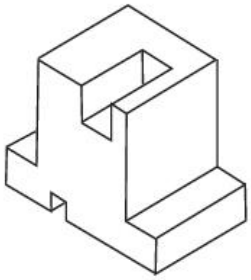
(2) 

(3) 

(4) 

30. 4 marks

The question figure shows the 3D view of an object. Identify the correct Number of visible surfaces.



(1) 9

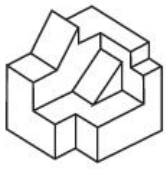
(2) 10

(3) 11

(4) 12

31. 4 marks

The question figure shows the 3D view of an object. Identify the correct number of visible surfaces.



(1) 13

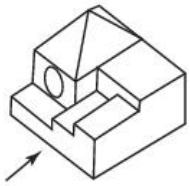
(2) 14

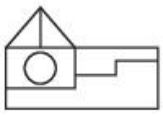
(3) 15

(4) 18

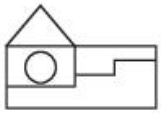
32. 4 marks

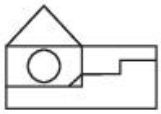
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(1) 

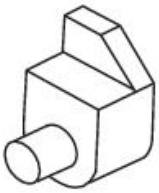
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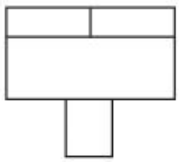
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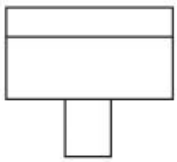
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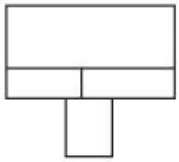
33. 4 marks

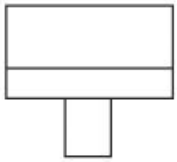
The question figure shows the 3D view of an object. Identify the correct top view.



(1) 

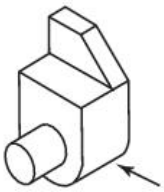
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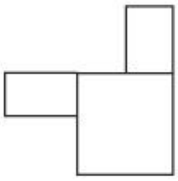
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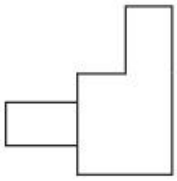
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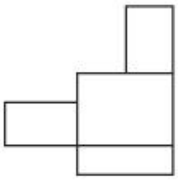
34. 4 marks

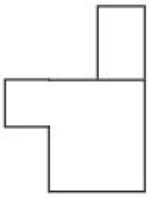
The question figure shows the 3D view of an object. Identify the correct view looking in the direction of arrow.



(1) 

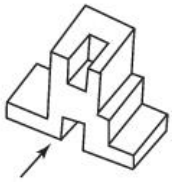
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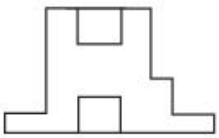
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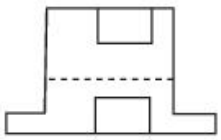
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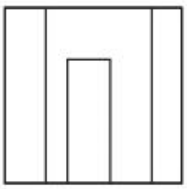
35. 4 marks

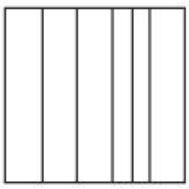
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(1) 

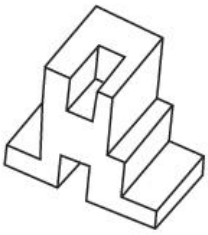
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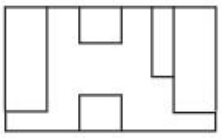
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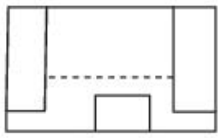
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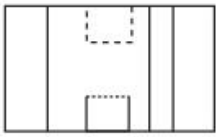
36. 4 marks

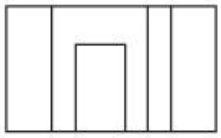
In a question figure a 3D object is given. Identify the correct top view of the object amongst the answer figures.



(1) 

(2) 

(3) 

(4) 

---

37. 4 marks

How many edges does a cube have ?

(1) 8

(2) 10

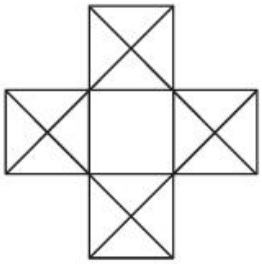
(3) 6

(4) 12

---

38. 4 marks

How many squares are there in the given figure ?



(1) 5

(2) 8

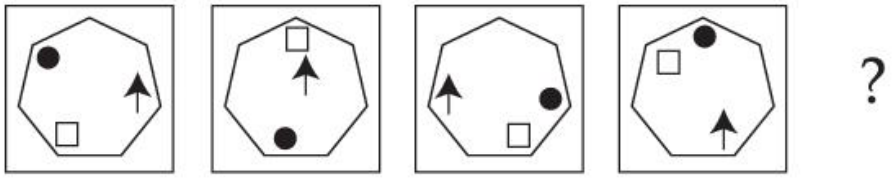
(3) 6

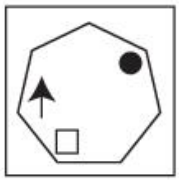
(4) 7

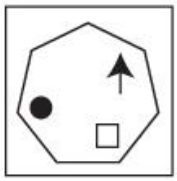
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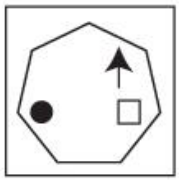
39. 4 marks

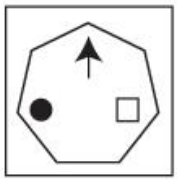
Which of the given shapes would complete the sequence ?



(1) 

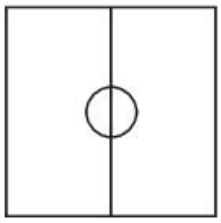
(2) 

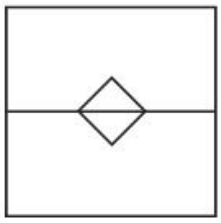
(3) 

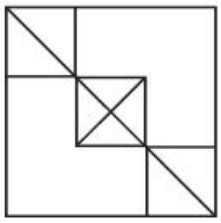
(4) 

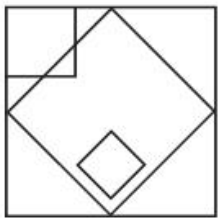
40. 4 marks

Identify the figure which is odd from rest :

(1) 

(2) 

(3) 

(4) 

41. 4 marks

Identify the mirror image of the given word along X-X' axis :



(1) GNITHGILYAD

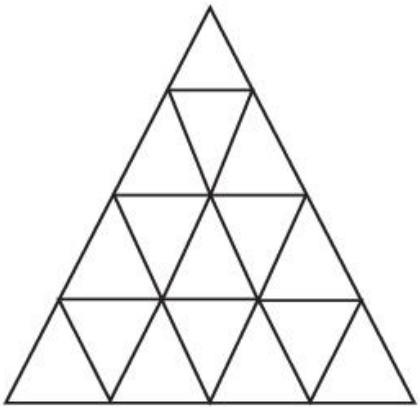
(2) DAYLIGHTING

(3) GNITHGILYAD

(4) DAYLIGHTING

42. 4 marks

What is the total number of triangles in the given diagram ?



(1) 27
(2) 26
(3) 23
(4) 22

43. 4 marks

Choose the appropriate option which most closely resembles the water image of the given word 'FROG' :

(1) GORF
(2) ꟻꓤOꓒ
(3) ꟻꓤOꓒ
(4) ꓒOꓤꟻ

44. 4 marks

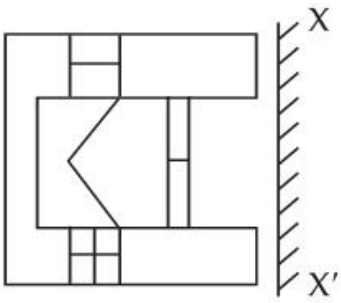
Identify the mirror image of the given word along X-X' axis :

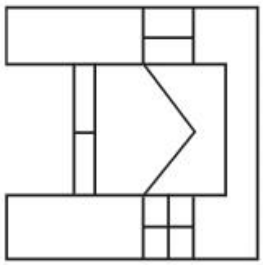
ENTABLATURE X X'

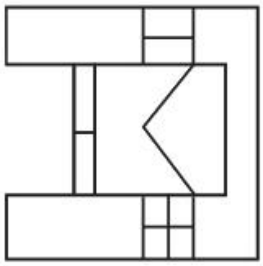
(1) ENTABLATURE
(2) ƎꓤUTAꓶBATИƎ
(3) EꓤUTALBATИƎ
(4) ƎꓤUTALBATИƎ

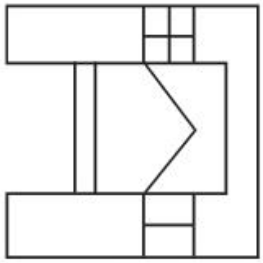
45. 4 marks

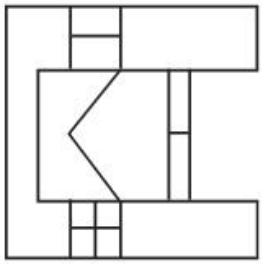
Identify the correct mirror image of the given figure along X-X′ axis :



(1) 

(2) 

(3) 

(4) 

46. 4 marks

Which among the following is an excellent hardwood (timber) for furniture ?

(1) Royal Palm

(2) Rose

(3) Shisham

(4) Accacia

47. 4 marks

Which colour scheme is typically considered to be calming and is often used in bedrooms and bathrooms ?

(1) Warm colours (red, orange)

(2) Cool colours (blue, green)

(3) Triadic colours (green, orange and purple)

(4) Primary colour (red, blue, yellow)

48. 4 marks

Bharat Mandapam is designed by which architecture firm ?

(1) Archohm
(2) Arcop
(3) C.P. Kukreja
(4) Hafeez Contractor

49. 4 marks

Gable : Roof : : Pier : _____.

(1) Door
(2) Column
(3) Railing
(4) Floor

50. 4 marks

In which architectural style are you most likely to find "chhatris" as decorative elements ?

(1) Gothic
(2) Baroque
(3) Mughal
(4) Renaissance

51. 4 marks

Which of these is a well known proportion that is aesthetically pleasing and used in architecture ?

(1) Golden ratio
(2) Newton's constant
(3) Moore's law
(4) Symmetry ratio

52. 4 marks

The primary function of a 'roof truss' is _____.
Choose the appropriate answer from the following :

(1) To increase the interior space
(2) To act as a wind breaker
(3) To provide thermal comfort
(4) To support the weight of the roof

53. 4 marks

Hawa Mahal located at Jaipur was built by :

(1) Maharaja Jai Singh - II
(2) Ushtad Ahmad Lahouri
(3) Maharaja Sawai Pratap Singh
(4) Ustad Khalil

collegedunia

54. 4 marks

The textural appearance of "exposed aggregate" concrete is created by :

(1) Polishing the surface
(2) Adding artificial pigments
(3) Using high grade cement
(4) Using stones in the mix

55. 4 marks

The term 'International style' is used to describe architecture that :

(1) Is derived from ancient Greek architecture
(2) Focuses on decoration and ornamentation
(3) Focuses on functionality and simple geometric forms
(4) Uses traditional building materials

56. 4 marks

Which of the following finishing materials is known for its textured surface and is commonly used in facades ?

(1) Glass
(2) Stucco
(3) Steel
(4) Timber

57. 4 marks

Central Vista Redevelopment Project was designed by which architect ?

(1) B.V. Doshi
(2) Bimal Patel
(3) Charles Correa
(4) U.C. Jain

58. 4 marks

Guggenheim Museum located in Manhattam, New York city was designed by :

(1) Gustave Eiffel
(2) Frank Llyod Wright
(3) John Russel Pope
(4) Tom Wright

59. 4 marks

Which organisation maintains the registration of Architects in India ?

(1) Indian Institute of Architects
(2) Council of Architecture
(3) Council of Indian Architects
(4) Institute of Architect of India

60. 4 marks

'Fenestration' in architecture refers to :

(1) The layout of columns
(2) Materials used for roofing
(3) Windows and openings
(4) Construction of walls

61. 4 marks

National Gallery of Art was designed by whom ?

(1) I.M. Pie
(2) Louis XII
(3) F.L. Wright
(4) Le Corbusier

62. 4 marks

What does 'ISI' stands for ?

(1) International Standard of Instruments
(2) Indian Standards of Isometrics
(3) International Standards of Isometrics
(4) Indian Standards Institute

63. 4 marks

The famous 'Parthenon' is located in which city ?

(1) Cairo
(2) Athens
(3) Paris
(4) Rome

64. 4 marks

'PRASAD' scheme stands for :

(1) Perception and Rejuvenation And Spiritual Association Drive
(2) Pilgrimage Rejuvenation and Spiritual Augmented Drive
(3) Pilgimage Regeneration and Social Association Drive
(4) Perception and Reform Analysis in social and Demography

65. 4 marks

Match **List - I** with **List - II**.

	List - I		List - II
(A)	B.V. Doshi, India	(I)	Pritzker Award in 2004
(B)	Philip Johnson, United States	(II)	Pritzker Award in 1995
(C)	Tadao Ando, Japan	(III)	Pritzker Award in 2018
(D)	Zaha Hadid, Iraq	(IV)	Pritzker Award in 1979

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

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

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

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

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

66. 4 marks

Match **List - I** with **List - II**.

	List - I		List - II
(A)	Colosseum	(I)	Temple dedicated to the Goddess Athena
(B)	Parthenon	(II)	Church, Italy
(C)	Milan Cathedral	(III)	Roman goddess of freedom
(D)	Statue of Liberty	(IV)	Roman Amphitheatre

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

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

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

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

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

67. 4 marks

Match **List - I** with **List - II**.

	List - I		List - II
(A)	Abacus	(I)	Vertical member of railing
(B)	Bollard	(II)	Top part of column
(C)	Baluster	(III)	Tapered upright structure rising from roof
(D)	Pinnacle	(IV)	Short free standing column

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

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

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

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

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

68. 4 marks

Match **List - I** with **List - II**.

	List - I		List - II
(A)	Matt	(I)	Silk like gloss
(B)	Satin	(II)	Highest level of gloss
(C)	Semi-gloss	(III)	More gloss than a satin finish
(D)	Glossy	(IV)	Lowest level of gloss

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

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

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

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

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

---

69. 4 marks

Given below are two statements :

Statement (I) : Human scale in architecture refers to the design dimensions that are comfortable for human interaction.

Statement (II) : Monumental scale is most suitable for intimate and cozy spaces.

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

(1) Both **Statement I** and **Statement II** are correct

(2) Both **Statement I** and **Statement II** are incorrect

(3) **Statement I** is correct but **Statement II** is incorrect

(4) **Statement I** is incorrect but **Statement II** is correct

---

70. 4 marks

Given below are two statements :

Statement (I) : A colour triangle is basically an arrangement of colors within a triangle, based on the additive combination of three primary colours at its corners. Where primary colours are yellow, red and blue.

Statement (II) : Secondary colours on the other hand are created when equal amounts of any two primary colours are mixed together.

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

(1) Both **Statement I** and **Statement II** are correct

(2) Both **Statement I** and **Statement II** are incorrect

(3) **Statement I** is correct but **Statement II** is incorrect

(4) **Statement I** is incorrect but **Statement II** is correct

---

71. 4 marks

Given below are two statements :

Statement (I) : Due to sun, we have day and night, seasons, rains, winds, plants and human life.

Statement (II) : The lattitude of a place is an angle of the place with reference to the plane passing through the equator on earth.

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

(1) Both **Statement I** and **Statement II** are correct

(2) Both **Statement I** and **Statement II** are incorrect

(3) **Statement I** is correct but **Statement II** is incorrect

(4) **Statement I** is incorrect but **Statement II** is correct

---

72. 4 marks

Given below are two statements :

Statement (I) : Precipitation is the collective term that indicates the prevailing humidity conditions.

Statement (II) : Precipitation is measured by rain gauges and expressed in millimetres per time unit.

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

(1) Both **Statement I** and **Statement II** are correct

(2) Both **Statement I** and **Statement II** are incorrect

(3) **Statement I** is correct but **Statement II** is incorrect

(4) **Statement I** is incorrect but **Statement II** is correct

---

73. 4 marks

Identify the temple style of India represented in the given figure :



(1) Nagara style

(2) Dravidian style

(3) Orissan style

(4) Vesara style

---

74. 4 marks

Identify the famous building in the given picture :



(1) Qutub Minar

(2) Jama Masjid

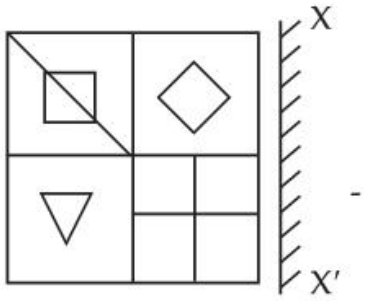
(3) Taj Mahal

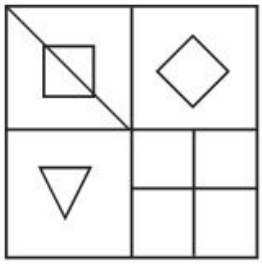
(4) Hagia Sophia

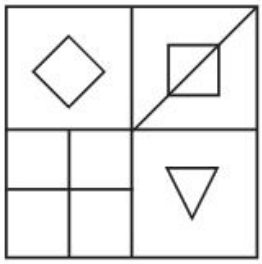
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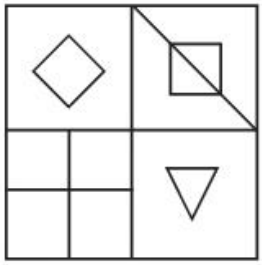
75. 4 marks

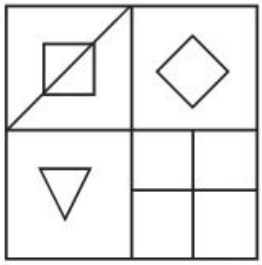
Identify the correct mirror image of the given figure along X-X′ axis :



(1) 

(2) 

(3) 

(4) 

Planning

76. 4 marks

The main focus/goal of "Sustainable Urban Planning" is :

(1) Reducing the density of population

(2) Maximizing land use for development

(3) Increasing automobile dependency

(4) Reducing environmental impact and promoting green spaces

---

77. 4 marks

"_____" is used to visualize and plan land use patterns in the city.

(1) Building code

(2) Master plan

(3) Figure Ground Plan

(4) Site Analysis diagram

---

78. 4 marks

'H.I.G' stands for :

(1) Hierarchy Income Group

(2) Housing Income Group

(3) High Income Group

(4) Homogeneous Income Group

---

79. 4 marks

Following are the population density of 03-different sectors of a city :
Sector-A = 150 persons/Ha.
Sector-B = 230 persons/Ha.
Sector-C = 400 persons/Ha.
Find out the 'Avg. population density' of the city.

(1) 226.66 persons/Ha.

(2) 260 persons/Ha.

(3) 326.66 persons/Ha.

(4) 390 persons/Ha.

---

80. 4 marks

Document published by government for the development of a 'city' for next 20 years is called :

(1) Future Plan

(2) Growth Plan

(3) Master Plan

(4) Site Plan

---

81. 4 marks

Given below are two statements :

Statement (I) : Agora was a part of the towns of 'Indus Valley Civilisation'.

Statement (II) : Towns of 'Indus Valley Civilisation' are laid with road network and sewer lines.

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

(1) Both **Statement I** and **Statement II** are true

(2) Both **Statement I** and **Statement II** are false

(3) **Statement I** is true but **Statement II** is false

(4) **Statement I** is false but **Statement II** is true

---

82. 4 marks

Given below are two statements :

Statement (I) : Without control over development and use of land and building, no planning will be successful.

Statement (II) : Development controls are statutory in nature and the planning/development authority has the power to punish the defaulters.

In the light of the above statements, choose the **correct** answer from the options given below :

(1) Both **Statement I** and **Statement II** are true

(2) Both **Statement I** and **Statement II** are false

(3) **Statement I** is true but **Statement II** is false

(4) **Statement I** is false but **Statement II** is true

---

83. 4 marks

Given below are two statements :

Statement (I) : The urban climate will have deviations from the regional macro climate.

Statement (II) : The manmade environment impacts the micro climate of a particular area which deviates from the macro climate of the region.

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

(1) Both **Statement I** and **Statement II** are true

(2) Both **Statement I** and **Statement II** are false

(3) **Statement I** is true but **Statement II** is false

(4) **Statement I** is false but **Statement II** is true

---

84. 4 marks

Name the 'Administrative Capital' of Punjab and Haryana :

(1) New Delhi

(2) Chandigarh

(3) Amritsar

(4) Gurugram

---

85. 4 marks

The “green belt” in urban planning is _____.

(1) An area of urban sprawl

(2) A highway running through the city

(3) An area of protected green space to prevent urban sprawl

(4) A zone of industrial development

---

86. 4 marks

Name the person responsible for ‘Green Revolution’ in India :

(1) Lal Bahadur Shastri

(2) A.P.J. Abdul Kalam

(3) M.S. Swaminathan

(4) Subramaniyam Swamy

---

87. 4 marks

Who stated “Man needs his difficulties because they are necessary to enjoy success.”

(1) Swami Vivekananda

(2) Mother Teresa

(3) A.P.J. Abdul kalam

(4) Mahatma Gandhi

---

88. 4 marks

Match the correct term for ‘Sthapati’ :

(1) Geographer

(2) Engineer

(3) Doctor

(4) Planner

---

89. 4 marks

Identify the full form of 'WHO' :

(1) World Health Organisation

(2) World Health Opinion

(3) World Human Organisation

(4) World Human Orientation

---

90. 4 marks

A person starts moving from point 'A' towards 'East' direction for 100 meters. Then he moves in 'South' direction for 50 meters. Again he changes the direction and moves 100 meters towards 'West' direction. At last he moves 50 meters further in 'North' direction. Identify the 2D shape he has formed after finishing this journey :

(1) A triangle

(2) A square

(3) A rectangle

(4) A circle

---

91. 4 marks

Match **List - I** with **List - II**.

List - I		**List - II**	
(A)	Radial City	(I)	Chandigarh
(B)	Linear City	(II)	Kolkata
(C)	Organic City	(III)	New Delhi
(D)	Grid Iron Pattern City	(IV)	Varanasi

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

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

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

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

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

---

92. 4 marks

Match **List - I** with **List - II**.

List - I (States)		**List - II (Reserve forest)**	
(A)	Kerala	(I)	Kaziranga
(B)	Assam	(II)	Pench
(C)	Rajasthan	(III)	Periyar
(D)	Madhya Pradesh	(IV)	RanthamBor

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

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

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

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

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

---

93. 4 marks

Match **List - I** with **List - II**.

List - I		**List - II**	
(A)	Jordan	(I)	Burj-Al-Arab
(B)	Cairo	(II)	Hanging Gardens
(C)	Babylon	(III)	Pyramids
(D)	UAE	(IV)	Dead Sea

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

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

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

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

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

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94. 4 marks

Match **List - I** with **List - II**.

List - I		**List - II**	
(A)	Housing area	(I)	Ecological zone
(B)	Shopping mall/area	(II)	Industrial zone
(C)	Urban forest	(III)	Residential zone
(D)	Factory/workshop	(IV)	Commercial zone

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

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

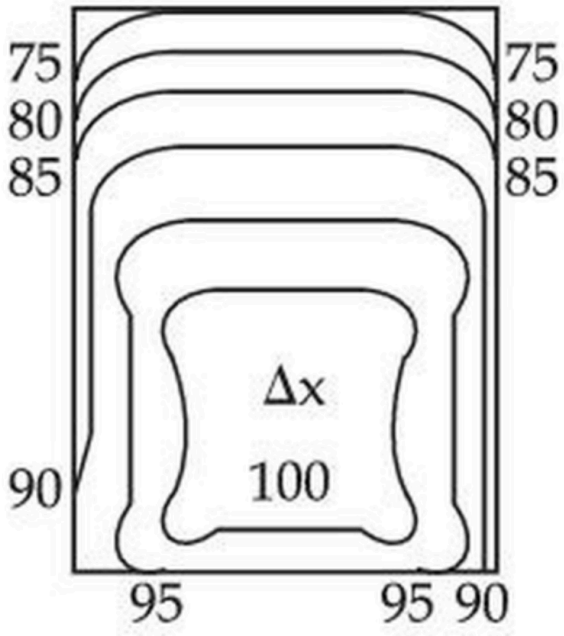
(2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

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

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

95. 4 marks

In the given diagram the 'Δx' is located in a _____.



(1) Plain land

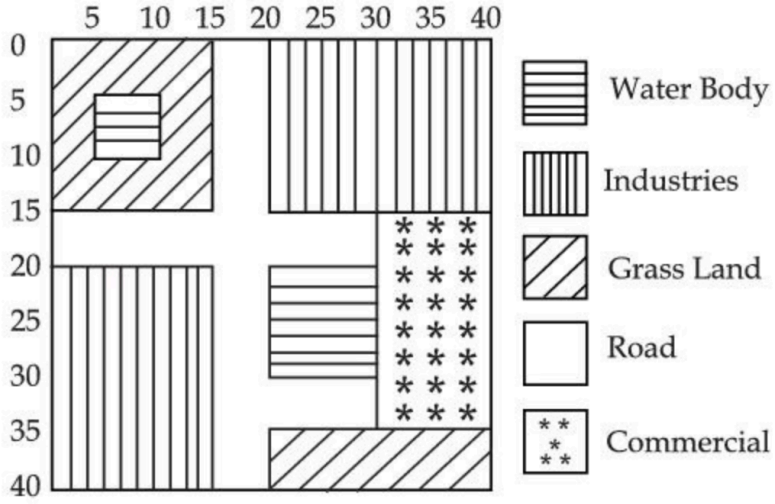
(2) Ridge

(3) River Valley

(4) Steep slope

96. 4 marks

What is the percentage area covered by water bodies in the given plan ?



(1) 7.81%

(2) 7.25%

(3) 5.10%

(4) 9.15%

97. 4 marks

What is the full form of 'D.R.D.O.' ?

(1) Defence Redevelopment Design Office

(2) Defence Research & Development Organisation

(3) Development of Research of Defence Objects

(4) Defence Research Design Organisation

98. 4 marks

Which of the following cities started as a port during the colonial period and is presently the financial capital of India ?

(1) Kolkata

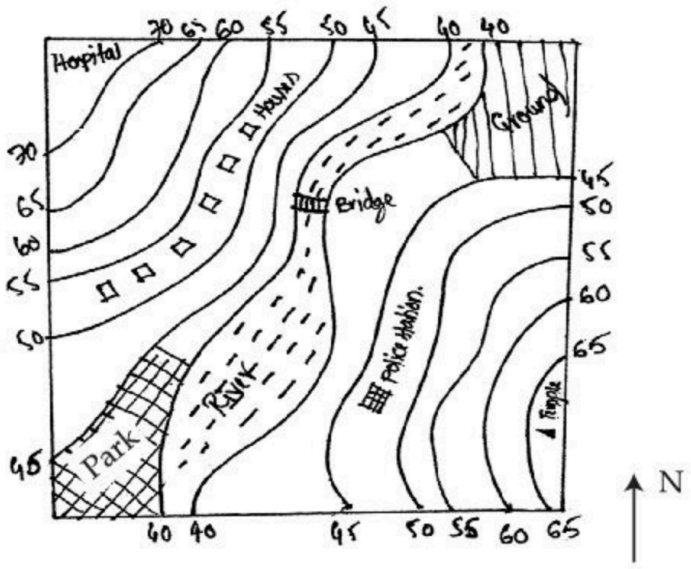
(2) Chennai

(3) Mumbai

(4) Goa

99. 4 marks

In the given diagram hospital was planned to be built on the contour level 65 and the ground was proposed at the contour level 45, houses were planned on the eastern part of the river on the contour level 40, where the existing ground is located. If a person plans to travel from ground to temple and return to the house, what is the level of the existing park ?



(1) 40-45

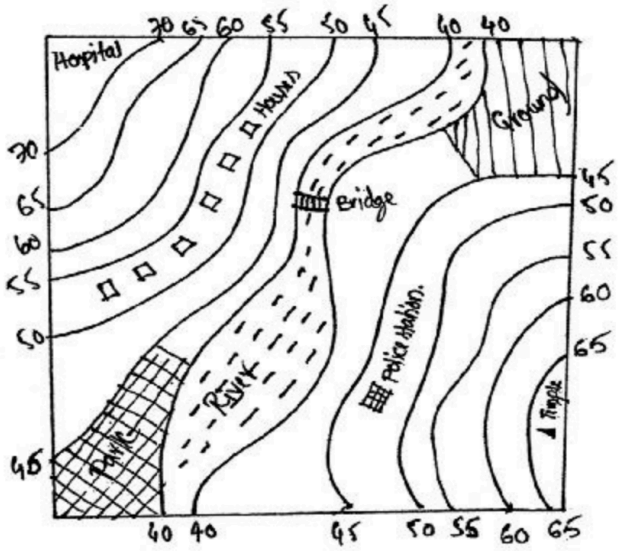
(2) 50-55

(3) 65-70

(4) 45-50

100. 4 marks

In the given diagram if a person has to travel from hospital to ground crossing the bridge how many contour intervals have to be crossed ?



(1) 7

(2) 8

(3) 9

(4) 6