GETMYUNI

NATA 2025 APTITUDE SECTION

SAMPLE PAPER

Student Name :	
Center Name :	
Total Marks: 80	Total Time: 50 mins

Note: There are 40 questions. Each Question carries 2 marks. There is no negative marking

#	Question and Answer Options

1. In a library there are books that teach one or more of 4 subjects : History, Geography, Politics and Economics. All the History books also teach Politics.
None of the books that teach Economics also teach History or Geography. All the books that teach Politics also teach Geography. If the number of books that teach Economics is half of those which teach Geography. If the total number of books in the library is 1500, how many books teach Geography?

a) 500	b) 750	c) 1000	d) Cannot be determined.

2. Find the odd one out from the following numbers :
1341 , 6211, 322, 413 , 261 , 31212, 11621, 3511

a) 1314	b) 322	c) 11621	d) 3511

3. Covered entrance with a roof supported by column and usually with pediment above is called as _____.

a) Reval	b) Gable	c) Portico	d) Vault

4. What is the standard size and weight of brick in India?

a) 210 x 150 x 75 mm, 3.5 kg	b) 230 x 150 x 75 mm, 3.0 kg
c) 230 x 150 x 75 mm, 3.5 kg	d) 230 x 150 x 100 mm, 3.5 kg

5. Find the missing number in the series:
13, 42, 129, 390, ?

a) 1173	b) 642	c) 784	d) 1170

6. Some fans are electric
All bulbs are electric
Some electric are dangerous
Based on the above statements, which of the following options is definitely true or false?

a) Some bulbs are fans	b) Some fans are bulbs.
c) Some bulbs are dangerous.	d) Some electric are fans.

7. Minimum width of a landing should be _____.

a) equal to width of stairs	b) half the width of stairs
c) one fourth the width of stairs	d) None of the above

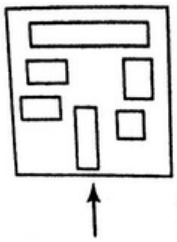
8. The wedge shaped stone at the top centre of an arch is called _____.

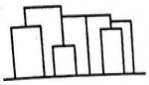
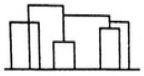
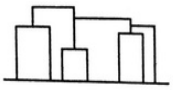
a) Lintel	b) Plinth	c) Keystone	d) Dentile

9. The surface area of a solid cube is 150 sq.cm. A cylinder of diameter and height equal to the side of the cube is cut out from the centre of this cube. What is the remaining volume of the cube in cu. cm?

a) 26.81	b) 125	c) 267.5	d) 32.51

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

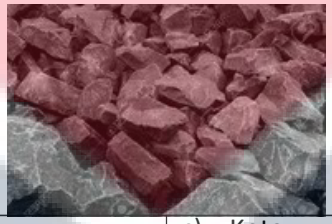


a) 	b) 	c) 	d) 

11. Who is the winner of Pritzker Architecture Prize 2017?

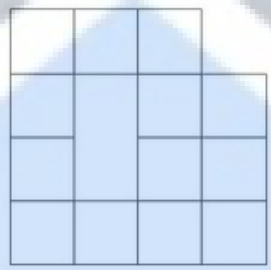
a) B.V. Doshi	b) Ramon Vilalta
c) Charles Correa	d) Alejandro Aravena

12. Identify the following stone type.



a) Kadappa	b) Basalt	c) Kota	d) Granite

13. Count the number of squares in the figure given below.



a) 17	b) 20	c) 15	d) 18

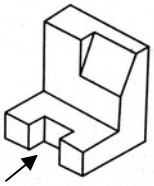
14. Identify the following logo of the architecture organization.

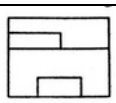
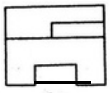
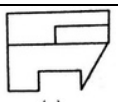
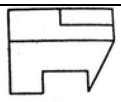
a) School of Planning and Architecture	b) Council of Architecture
c) Indian Institute of Architecture	d) PEATA India

15. Which one of the following is a wrong statement?

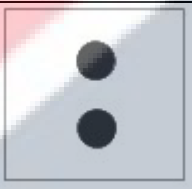
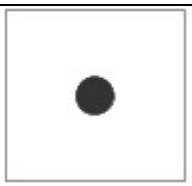
a) Greenhouse effect is a natural phenomenon
b) Eutrophication is a natural phenomenon in freshwater bodies
c) Most of the forests have been lost in tropical areas
d) Ozone in upper part of atmosphere is harmful to animals

16. 3D problem figure shows the view of an object. Identify the correct top view from amongst the answer figures.



a)	b)	c)	d)
			

17. A square piece of paper is folded along the dotted lines as shown and then the black portion is cut as shown. Choose the option that shows the correct cut when the paper is unfolded.

a)	b)	c)	d)
			

18. Identify the following monument.

a) Gol Gumbaz b) c) Chota Imambara d)	Tomb of Safdarjung
19. Identify the following motif of the structure.	Qutb Shahi Tomb

a) Abacus	b) Architrave	c) Shaft	d) Capital

20. Orange can be used as a symbol of_____.

a) Fear	b) Wealth	c) Peace	d) Creativity

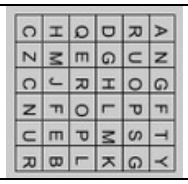
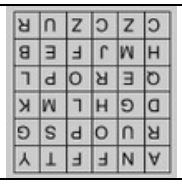
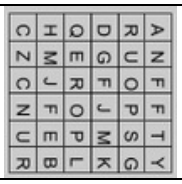
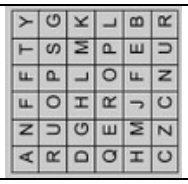
21. Buckingham Palace is located in _____.

a) Singapore	b) Paris	c) London	d) Geneva

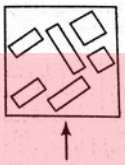
22. Tungabhadra and Bhima are the tributaries of _____.

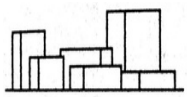
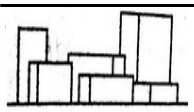
a) Yamuna	b) Godavari	c) Brahmaputra	d) Krishna

23. Which of the options is simple rotation of the given figure?

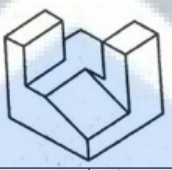
a)	b)	c)	d)
			

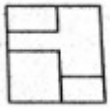
24. The problem figure shows the top view of the object looking from the direction of arrow. Identify the correct elevation amongst the answer figures.



a)	b)	c)	d)
			

25. 3D problem figure shows the view of an object. Identify the correct top view from amongst the answer figure.

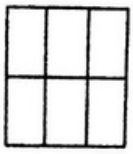


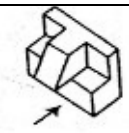
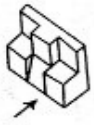
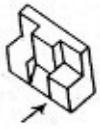
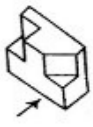
a)	b)	c)	d)
			

26. Identify the correctly matched pair

a) Basal Convention – Biodiversity Conservation	b) Montreal Protocol - Global warming
c) Kyoto protocol – Climatic change	d) Ramsar Convention – Ground water pollution

27. Identify the correct 3D figure from amongst the answer figures, which has the same elevation as given in the problem figure on the left looking in the direction of arrow.



a)	b)	c)	d)
			

28. Identify the flooring type in the following image.

a) Sandstone	b) Terrazzo	c) Slate	d) Porcelain

29. A number has 5 digits. The sum of the digits is 15. The product of the digits is 120. The number is divisible by 5. It has more odd digits than even and none of the digits are repeated. Identify the number from the options given.

a) 35421	b) 31245	c) 61215	d) 31254

30. Read the three statements below and the conclusions deduced from these statements.

Statements :
All tables are furniture.
Some sofas are tables.
All sofas are flowerpots.
Conclusions :
1. Some tables are flowerpots.
2. Some flowerpots are furniture.
3. All sofas are furniture.

Based only on the above statements, which of the conclusions definitely follows?

a) Only 1 follows	b) Only 1 & 3 follow	c) Only 2 follows	d) Only 1 & 2 follow

31. Find the odd one out from the options given.

a) June: January	b) April : May	c) September : October	d) March : July

32. Common indicator organism of water pollution is:

a) Entamoeba histolytica	b) Escherichia coli
c) Eichhornia crassipes	d) Lemna paucicostata

33. Gopuram belongs to _____ style of architecture.

e) Victorian	f) Gothic	g) Dravidian	h) Greek

34. Identify the following city from the image.

a) New York	b) London
c) Sydney	d) Berlin

35. Which is the largest of the peninsular rivers?

a) Mahanadi	b) Yamuna	c) Godavari	d) Brahmaputra

Q.1.	One late afternoon, you along with your family members were enjoying a boat ride along a river and viewed a spectacular sunset. You noticed that the boat was moving from south to north and all of you were facing north. Suddenly, your youngest brother shouted and told everybody to see the river bank on your right side. You saw a series of high-rise apartment buildings interspersed with trees. But, in the middle, there was a beautiful river ghat, a garden and small white mosque adjacent to it. Lots of birds were flying around and sitting on its golden dome. In the concrete jungle, the small structure seemed to be a nice relief. Develop a coloured sketch (use dry colour) of what you experienced.	Marks: 55	Time: 65 mins
Q.2.	Make a visually pleasing 2d composition using 2 circles, 4 squares and 3 triangles. the shapes can vary in size. however they should not overlap. Use an interesting color scheme using 4 colors. Size 10 cm x 10 cm.	Marks: 35	Time: 35 mins
Q.3.	Create a balanced structure using 6 cylinders and 1 cone. Render with relevant light shade and shadow if light is coming from the right side.	Marks: 35	Time: 35 mins

1. $\begin{vmatrix} a & b & c \\ b & c & a \\ c & a & b \end{vmatrix} = 0$, then

a) $a^3 + b^3 + c^3 = 3abc$	b) $a^3 + b^3 + c^3 = 0$	c) $a^2 + b^2 + c^2 = 0$	d) $a + b + c = 0$

2. If α + β + γ = 2θ, then cos θ + cos(θ – α) + cos(θ – β) + cos(θ – γ) is equal to

a) $4\sin\frac{\alpha}{2}\cdot\cos\frac{\beta}{2}\cdot\sin\frac{\gamma}{2}$	b) $4\cos\frac{\alpha}{2}\cdot\cos\frac{\beta}{2}\cdot\cos\frac{\gamma}{2}$	c) $4\sin\frac{\alpha}{2}\cdot\sin\frac{\beta}{2}\cdot\sin\frac{\gamma}{2}$	d) $4\sin\alpha\cdot\sin\beta\cdot\sin\gamma$

3. In ΔABC, $(a+b+c)\left(\tan\frac{A}{2}+\tan\frac{B}{2}\right)$ is equal to

a) $2c\cot\frac{C}{2}$	b) $2a\cot\frac{A}{2}$	c) $2b\cot\frac{B}{2}$	d) $\tan\frac{C}{2}$

4. If $y = \sin(\log_e x)$, then $x^2\frac{d^2y}{dx^2}+\frac{dy}{dx}$ is equal to

a) $\sin(\log_e x)$	b) $\cos(\log_e x)$	c) y^2	d) $-y$

5. The area bounded by $y = x^2 + 2$, x-axis, $x = 1$ and $x = 2$ is

a) $\frac{16}{3}\,sq.units$	b) $\frac{17}{3}\,sq.units$	c) $\frac{13}{3}\,sq.units$	d) $\frac{20}{3}\,sq.units$

6. The mass of 11.2 L of ammonia gas at S.T.P. is

a) 8.5 g	b) 85 g	c) 18 g	d) 4.25 g

7. The empirical formula of C2H2 is A

a) C2H4	b) CH	c) CH4	d) atomic mass

8. Percentage of oxygen present in water is

a) 30%	b) 20%	c) 63.5 %	d) 88.9 %

9. According to Bohr's model of atom

a)	b)	c)	d)
$mvr = \frac{nh}{2\pi}$	$mvr = \frac{2\pi}{nh}$	$mvr = \frac{nh}{2\pi^2}$	$mvr^2 = \frac{nh}{2\pi}$

$\begin{vmatrix} a & b & c \\ b & c & a \\ c & a & b \end{vmatrix} = 0$, then

10. Which of the following expression gives the de Broglie relationship?

a)	b)	c)	d)
$\lambda = \frac{h}{mp}$	$\frac{h}{mv} = p$	$\lambda m = \frac{v}{p}$	$\lambda = \frac{h}{mv}$

11. The surface charge density of an irregular shaped conductor is

$4\sin\frac{\alpha}{2}\cdot\cos\frac{\beta}{2}\cdot\sin\frac{\gamma}{2}$ $\quad 4\cos\frac{\alpha}{2}\cdot\cos\frac{\beta}{2}\cdot\cos\frac{\gamma}{2}$ $\quad 4\sin\frac{\alpha}{2}\cdot\sin\frac{\beta}{2}\cdot\sin\frac{\gamma}{2}$ $\quad 4\sin\alpha\cdot\sin\beta\cdot\sin\gamma$

e) zero	f) infinity
g) constant $(a+b+c)\left(\tan\frac{A}{2}+\tan\frac{B}{2}\right)$	h) different at different points

12. An electric charge Q is placed at one of the corners of a cube of side A. The electric flux through all the six faces of the cube is

$2c\cot\frac{C}{2}$ $\quad 2a\cot\frac{A}{2}$ $\quad 2b\cot\frac{B}{2}$ $\quad \tan\frac{C}{2}$

a)	b)	c)	d)
$\frac{Q}{\varepsilon_0}$	$x^2\frac{d^2y}{dx^2}+\frac{Q}{3\varepsilon_0}$	$\frac{Q}{6\varepsilon_0}$	$\frac{Q}{8\varepsilon_0}$

13. The SI unit of surface integral of electric field is

a) V	b) N/C	c) Vm	d) C/m^2

14. An electric dipole is put in south-direction in a sphere filled with water. Which is the correct statement ?

$\frac{16}{3}sq.units$ $\quad \frac{17}{3}sq.units$ $\quad \frac{13}{3}sq.units$ $\quad \frac{20}{3}sq.units$

a) Electric flux is coming towards the sphere	b) Electric flux is coming out of the sphere
c) Electric flux entering into the sphere and leaving the sphere have the same magnitude	d) Water does not permit the electric flux to enter into the sphere

15. A condenser of capacity 40μF is charged to a potential 1 KV. What is the work done in raising the potential ?

a) 5 J	b) 10 J	c) 20 J	d) 30 J