

Roll No. :

NMMS(E)

ENGLISH

B

SI No. :

162966

MENTAL ABILITY AND
SCHOLASTIC APTITUDE TEST

NMMS - DECEMBER, 2024

Time : Part - I : 90 Minutes

Max. Marks : 90

Time : Part - II : 90 Minutes

Max. Marks : 90

Instructions to the Candidates

Read the following instructions carefully before you answer the questions. Answers are to be SHADED on a SEPARATE OMR Answer Sheet given, with a Blue or Black Ball Point Pen Only. Read the Instructions printed on the OMR Sheet carefully before answering the questions.

1. Please write your Centre Code No. and Roll No. very clearly (only one digit in one block) on the OMR Sheet as given in your Admission Card. Please see that no block is left unfilled and even Zeros appearing in the Centre Code No. are correctly transferred to the appropriate blocks on the OMR Sheet as shown in the example given in the OMR Sheet. For all subsequent purposes, your Centre Code No. and Roll No. shall remain the same as given on the Admission Card.
2. The Test is in TWO Parts. Part-I consists of 90 questions and Part-II also consists of 90 questions.
3. All questions in Part-I and Part-II carry one mark each.
4. Since all questions are compulsory, do not try to read through the whole question paper before beginning to answer it.
5. Begin with the first question and keep trying one question after another till you finish both the Parts.

V24-201

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6. If you do not know the answer to any question, do not spend much time on it and pass on to the next one. If time permits, you can come back to the questions which you have left out in the first instance and try them again.
7. Since the time allotted to the two parts of this question paper is very limited, you should make the best use of it by not spending too much time on any question.
8. A blank page is provided for rough work at the end of each part.
9. **Remember, you have to shade answers on a separate OMR sheet provided.**
10. **Answer to each question is to be indicated by SHADING the circle having the number of the correct alternative in the OMR Sheet from among the ones given for the corresponding question in the booklet.**
11. Now turn to the next page and start answering the questions.
12. After the examination, you should hand over the OMR Sheet to the Invigilator of the room.
13. **The candidate need not return this Question Paper Booklet and can take it after the completion of the examination. No candidate should leave the examination hall before the end of the examination.**

**This Booklet consists of 28 Pages for 180 Questions +
02 Pages of Rough Work + 02 Title Pages i.e. Total 32 Pages**

Part - I : MENTAL ABILITY TEST

Time : 90 Minutes

Max. Marks : 90

Note : SHADE the correct alternatives in the OMR Answer Sheet provided, from amongst the ones given against the corresponding questions in the Question Paper Booklet. For shading the circles, use a **Blue or Black Ball Point Pen.**

Directions: Questions (1 to 10):

In these questions, there are equations that have become wrong due to incorrect order of signs. From the four alternatives given below, find out the correct order of signs, so that the equations become correct.

1. $125 = 25 \div 54 + 59$

- (1) $+, -, =$ (2) $\div, -, =$ (3) $\div, =, +$ (4) $\div, +, =$

2. $52 = 20 - 13 + 80$

- (1) $\times, =, \times$ (2) $\times, -, =$ (3) $=, +, -$ (4) $-, +, =$

3. $25 = 25 \div 25 - 26$

- (1) $=, \div, -$ (2) $\times, \div, =$ (3) $-, \div, =$ (4) $\div, +, =$

4. $43 - 38 = 27 \div 3$

- (1) $+, -, =$ (2) $\times, =, \div$ (3) $+, =, \times$ (4) $+, =, +$

5. $24 \times 15 + 40 = 25$

- (1) $-, \times, =$ (2) $+, +, =$ (3) $=, \times, \div$ (4) $+, -, =$

6. $37 \times 73 = 56 \times 54$

- (1) $+, -, =$ (2) $\times, -, =$ (3) $+, \div, =$ (4) $+, \times, =$

7. $56 - 28 \div 14 = 28$

- (1) $=, \times, \div$ (2) $+, \times, =$ (3) $\times, \div, =$ (4) $\div, \times, =$

8. $63 \div 9 = 21 - 28$

- (1) $\div, =, -$ (2) $-, +, =$ (3) $\div, +, =$ (4) $\times, =, \times$

9. $18 + 18 = 18 \times 18$

- (1) $\times, =, +$ (2) $-, +, =$ (3) $\div, =, -$ (4) $\div, =, +$

10. $120 + 100 = 85 + 105$

- (1) $-, -, =$ (2) $-, +, =$ (3) $-, =, \div$ (4) $\times, =, \times$

NMMS(E)**B****Directions: Questions (11 to 20):**

In each of the following questions, there is a certain relationship between two given words on one side of :: and one word is given on the another side of :: while another word is to be found from the given 4 alternatives, having the same relation with this word of the given pair. Choose the correct alternative.

11. Filter : Purify :: ? : Magnify

- (1) Glass (2) Water (3) Microscope (4) Prism

12. Energy : ? :: Volume : Litre

- (1) Pascal (2) Joule (3) Volt (4) Ampere

13. India : ? :: U.S.A. : Base ball

- (1) Cricket (2) Football (3) Hockey (4) Volley ball

14. Man : Biography :: Nation : ?

- (1) History (2) Demography (3) People (4) Geography

15. Anemia : Iron :: ? : Iodine

- (1) Diphtheria (2) Influenza (3) Amnesia (4) Goitre

16. Ramanujan number : 1729 :: Kaprekar number : ?

- (1) 7856 (2) 6174 (3) 1894 (4) 1927

17. ? : Fungi :: Entomology : Insects

- (1) Cardiology (2) Mycology (3) Virology (4) Psychology

18. Odometer : ? :: Balance : Mass

- (1) Distance (2) Temperature (3) Altitude (4) Thickness

19. Gateway of India : ? :: Vivekananda Rock memorial : Kanyakumari

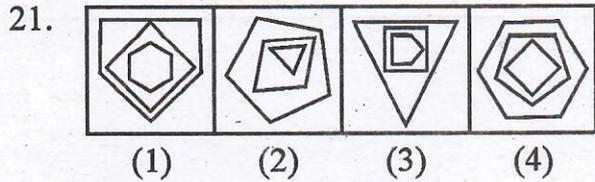
- (1) Ahmedabad (2) Delhi (3) Mumbai (4) Kargil

20. Sodium : Metal :: ? : Nonmetal

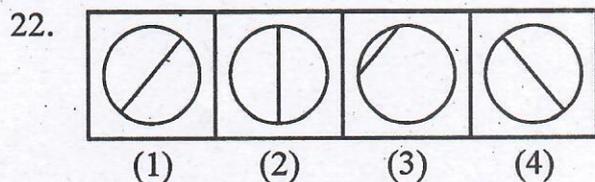
- (1) Mercury (2) Calcium (3) Potassium (4) Carbon

Directions: Questions (21 to 30):

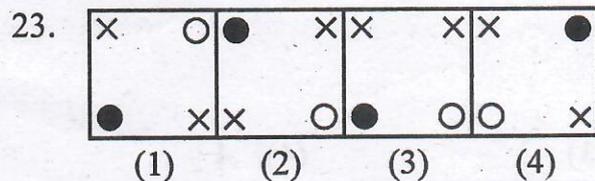
In each question, out of four alternatives figures marked (1), (2), (3) and (4), three are similar in a certain manner. However, one figure is not like the other three. Choose the figure which is different from the rest.



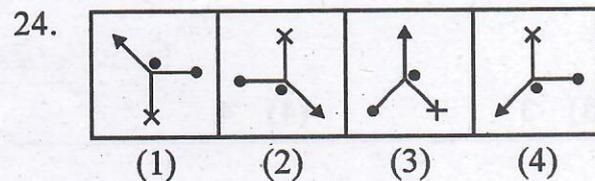
- (1) 1 (2) 2 (3) 3 (4) 4



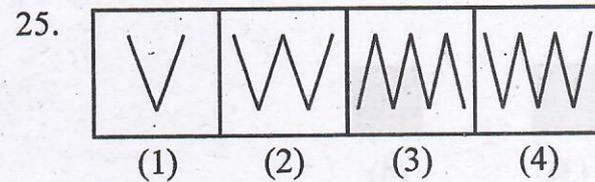
- (1) 1 (2) 2 (3) 3 (4) 4



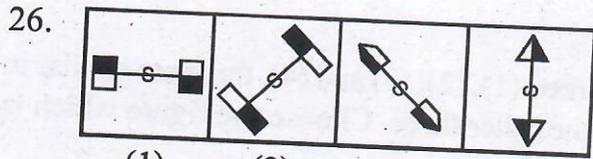
- (1) 1 (2) 2 (3) 3 (4) 4



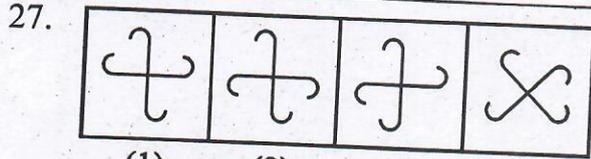
- (1) 1 (2) 2 (3) 3 (4) 4



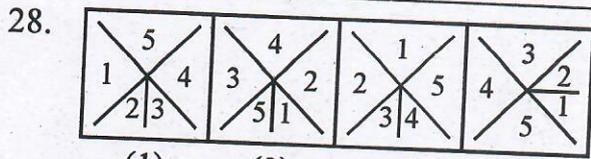
- (1) 1 (2) 2 (3) 3 (4) 4



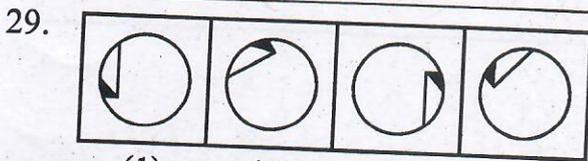
- (1) (1) 1 (2) (2) 2 (3) (3) 3 (4) (4) 4



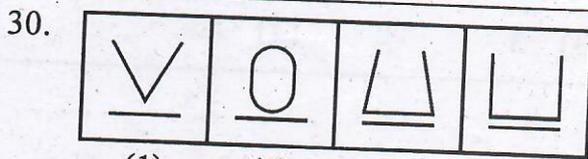
- (1) (1) 1 (2) (2) 2 (3) (3) 3 (4) (4) 4



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



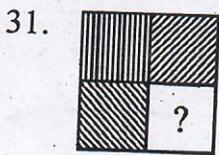
- (1) (1) 1 (2) (2) 2 (3) (3) 3 (4) (4) 4



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

Directions: Questions (31 to 40):

In each of the following questions, select a figure from amongst the four alternatives, which when placed in the blank space (?) of the figure (X) would complete the pattern.



(X)



(1)



(2)



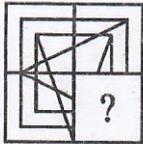
(3)



(4)

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

32.



(X)

(1) 1



(1)

(2) 2



(2)



(3)

(3) 3



(4)

(4) 4

33.



(X)

(1) 1



(1)

(2) 2



(2)



(3)

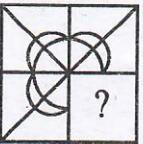
(3) 3



(4)

(4) 4

34.



(X)

(1) 1



(1)

(2) 2



(2)



(3)

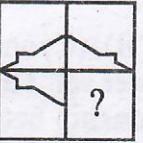
(3) 3



(4)

(4) 4

35.



(X)

(1) 1



(1)

(2) 2



(2)



(3)

(3) 3



(4)

(4) 4

36.



(X)

(1) 1



(1)

(2) 2



(2)



(3)

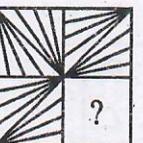
(3) 3



(4)

(4) 4

37.



(X)

(1) 1



(1)

(2) 2



(2)



(3)

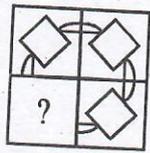
(3) 3



(4)

(4) 4

38.



(X)
(1) 1



(1)
(2) 2

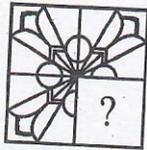


(2)
(3) 3



(4)
(4) 4

39.



(X)
(1) 1



(1)
(2) 2

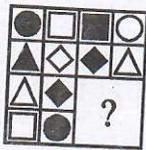


(2)
(3) 3



(4)
(4) 4

40.



(X)
(1) 1



(1)
(2) 2



(2)
(3) 3

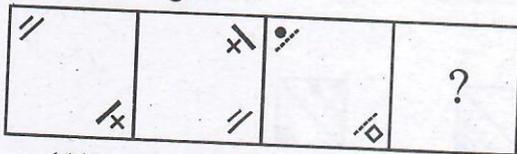


(4)
(4) 4

Directions: Questions (41 to 50):

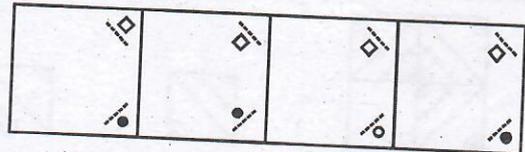
In each of the following questions consists of two sets of figures. Figures (A), (B), (C) and (D) constitute the Problem set while figures (1), (2), (3) and (4) constitute the Answer set. There is a definite relationship between figures (A) and (B). Establish a similar relationship between figure (C) and (D) by selecting a suitable figure from the Answer set that would replace the question mark (?) in figure (D).

41. Problem Figures :



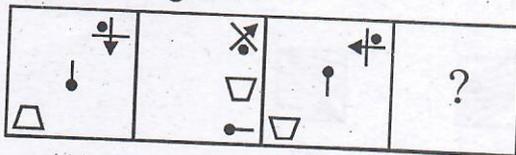
(A) (B) (C) (D)
(1) 1 (2) 2

Answer Figures :



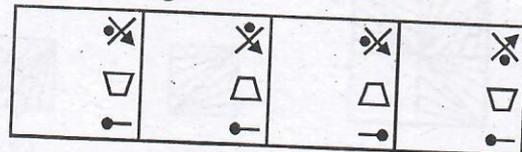
(1) (2) (3) (4)
(3) 3 (4) 4

42. Problem Figures :



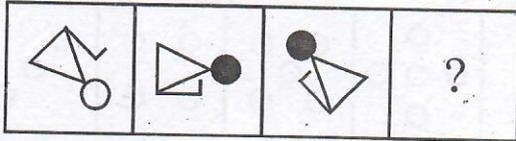
(A) (B) (C) (D)
(1) 1 (2) 2

Answer Figures :



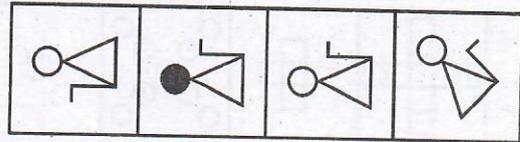
(1) (2) (3) (4)
(3) 3 (4) 4

43. Problem Figures :



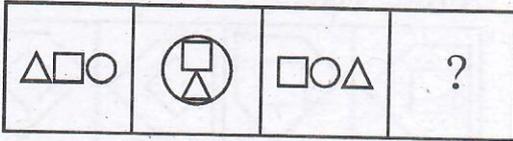
- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :



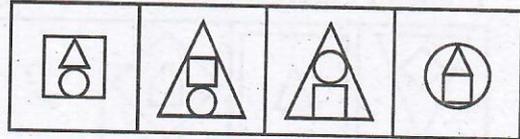
- (1) (2) (3) (4)
 (3) 3 (4) 4

44. Problem Figures :



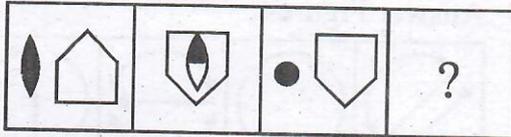
- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :



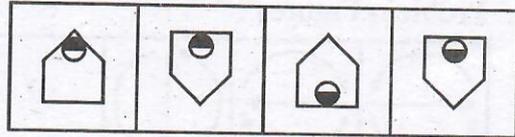
- (1) (2) (3) (4)
 (3) 3 (4) 4

45. Problem Figures :



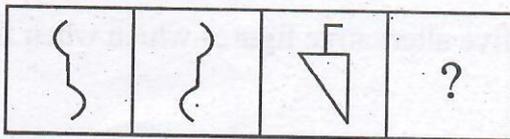
- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :



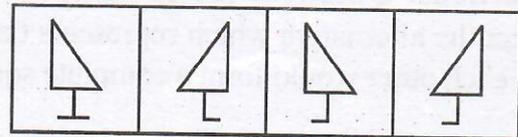
- (1) (2) (3) (4)
 (3) 3 (4) 4

46. Problem Figures :



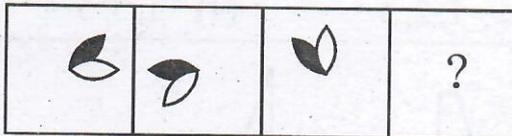
- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :



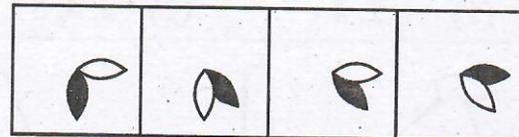
- (1) (2) (3) (4)
 (3) 3 (4) 4

47. Problem Figures :



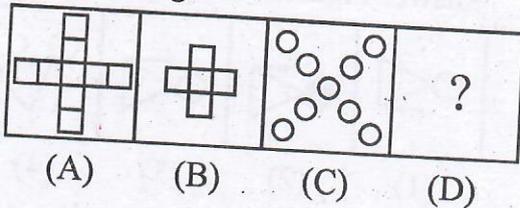
- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :



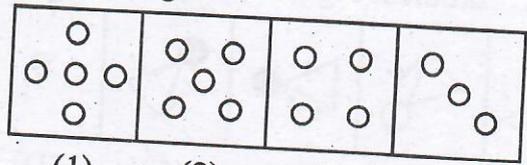
- (1) (2) (3) (4)
 (3) 3 (4) 4

48. Problem Figures :



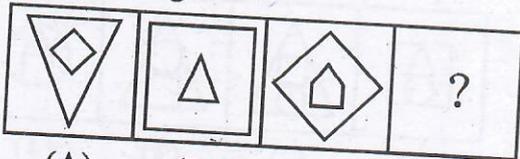
- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :



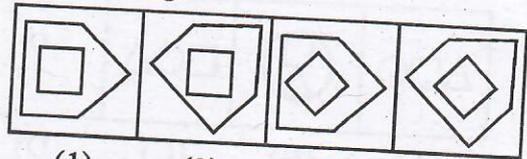
- (1) (2) (3) (4)
 (3) 3 (4) 4

49. Problem Figures :



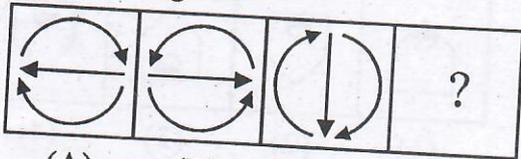
- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :



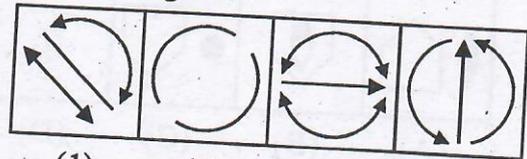
- (1) (2) (3) (4)
 (3) 3 (4) 4

50. Problem Figures :



- (A) (B) (C) (D)
 (1) 1 (2) 2

Answer Figures :

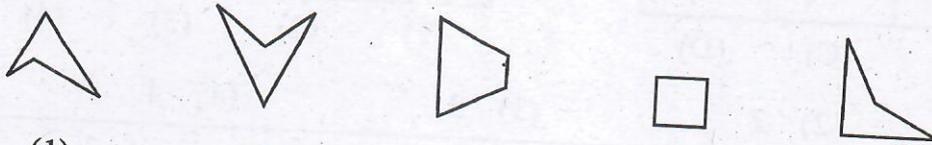


- (1) (2) (3) (4)
 (3) 3 (4) 4

Directions: Questions (51 to 60):

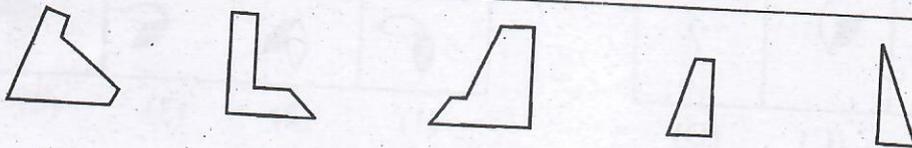
Select the alternative which represents three out of five alternative figures which when fitted into each other would form a complete square.

51.

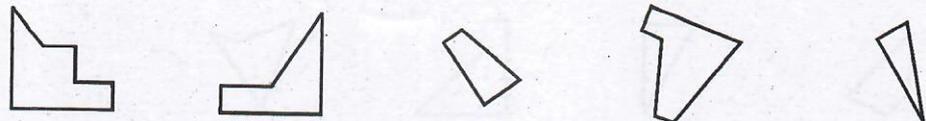


- (1) (2) (3) (4) (5)
 (1) 1, 2, 4 (2) 3, 4, 5 (3) 1, 2, 3 (4) 1, 3, 5

52.



- (1) (2) (3) (4) (5)
 (1) 1, 2, 3 (2) 1, 2, 4 (3) 1, 3, 5 (4) 1, 4, 5

53. 

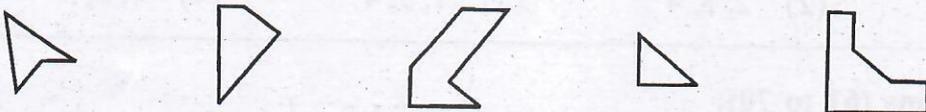
(1) (2) (3) (4) (5)

(1) 1, 2, 3 (2) 2, 3, 4 (3) 3, 4, 5 (4) 2, 4, 5

54. 

(1) (2) (3) (4) (5)

(1) 1, 2, 3 (2) 2, 3, 4 (3) 1, 3, 4 (4) 2, 3, 5

55. 

(1) (2) (3) (4) (5)

(1) 1, 4, 5 (2) 1, 3, 5 (3) 2, 3, 5 (4) 2, 3, 4

56. 

(1) (2) (3) (4) (5)

(1) 1, 4, 5 (2) 2, 3, 4 (3) 2, 4, 5 (4) 1, 3, 5

57. 

(1) (2) (3) (4) (5)

(1) 2, 3, 4 (2) 1, 2, 5 (3) 1, 2, 3 (4) 2, 4, 5

58. 

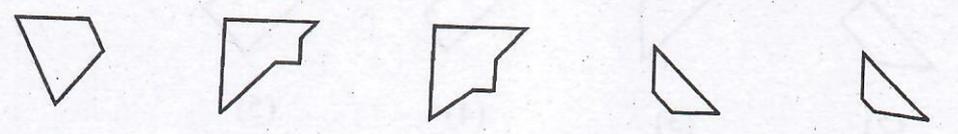
(1) (2) (3) (4) (5)

(1) 1, 2, 4 (2) 1, 2, 3 (3) 1, 2, 5 (4) 2, 3, 5

59. 

(1) (2) (3) (4) (5)

(1) 2, 3, 5 (2) 1, 2, 3 (3) 1, 2, 5 (4) 2, 3, 4

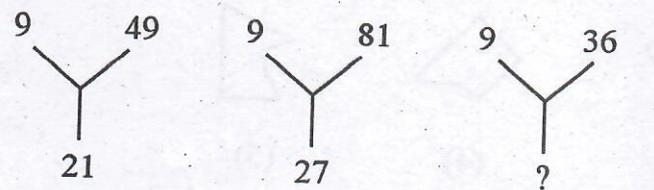
60. 

(1) (2) (3) (4) (5)

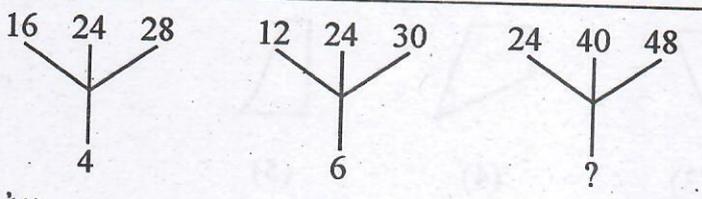
(1) 3, 4, 5 (2) 2, 3, 4 (3) 1, 3, 4 (4) 1, 2, 3

Directions: Questions (61 to 70):

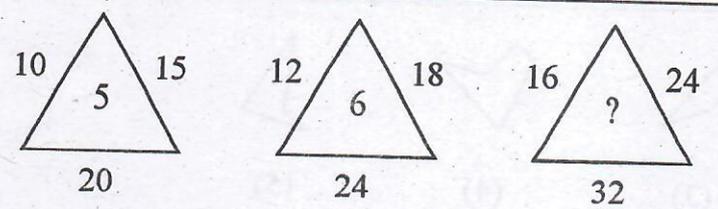
In each of the following questions, a set of figures carrying certain characters given. Assuming that the characters in each set follows similar pattern, find the missing character in each case from the given four alternatives.

61. 

(1) 26 (2) 18 (3) 25 (4) 28

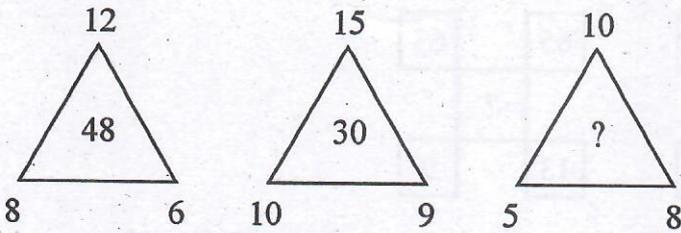
62. 

(1) 8 (2) 7 (3) 5 (4) 9

63. 

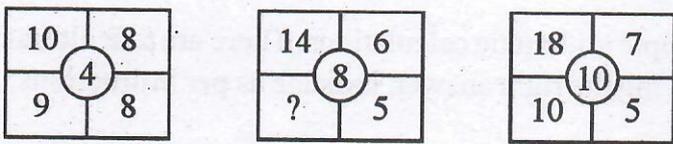
(1) 9 (2) 8 (3) 4 (4) 2

64.



- (1) 40 (2) 45 (3) 50 (4) 30

65.



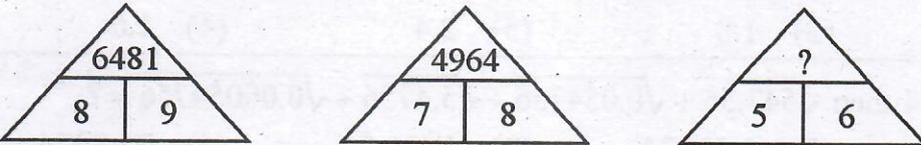
- (1) 8 (2) 7 (3) 9 (4) 11

66.

3	4	2	3
5	7	13	5
8	22	19	?

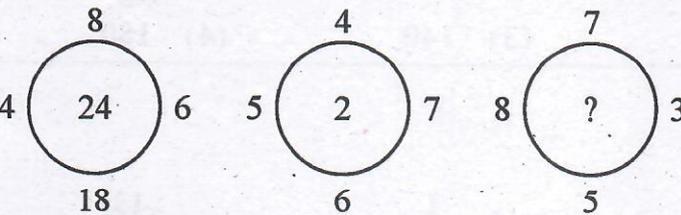
- (1) 12 (2) 6 (3) 7 (4) 9

67.



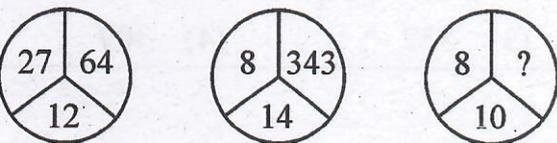
- (1) 2536 (2) 2875 (3) 3264 (4) 2975

68.



- (1) 22 (2) 19 (3) 12 (4) 17

69.



- (1) 86 (2) 225 (3) 164 (4) 125

70.

72		85
	30	
12		17

98		133
	49	
14		19

65		63
	?	
13		9

(1) 38 (2) 54 (3) 35 (4) 45

Directions: Questions (71 to 80):

The following questions are based on simple arithmetic calculations. There are four alternatives given under each question. After identifying the right answer, indicate as per instructions.

71. $4132 - 5387 + ? = 4979$
 (1) 6234 (2) 6334 (3) 5234 (4) 6244

72. $\frac{2}{5} \times ? + 104 \div 4 = 30$
 (1) 15 (2) 12 (3) 10 (4) 9

73. $\frac{(2.2)^3 - 0.064}{(2.2)^2 + 0.88 + 0.16} = ?$
 (1) 1.4 (2) 1.8 (3) 2.4 (4) 1.6

74. If $\sqrt{54756} = 234$ then $\sqrt{547.56} + \sqrt{0.054756} + \sqrt{5.4756} + \sqrt{0.00054756} = ?$
 (1) 259.974 (2) 2.59974 (3) 2599.74 (4) 25.9974

75. $(64)^2 - (36)^2 = 20 \times ?$
 (1) 70 (2) 120 (3) 140 (4) 180

76. $\frac{12+12+12}{13+13+13} - \frac{12+12}{13+13} + \frac{12}{13} = ?$
 (1) $\frac{13}{12}$ (2) $\frac{12}{13}$ (3) $\frac{1}{13}$ (4) $\frac{13}{24}$

77. $287 \times 287 - 574 \times 265 + 265 \times 265 = ?$
 (1) 574 (2) 484 (3) 552 (4) 309

78. $(\sqrt{1296} - \sqrt[3]{64}) \div 2^2 = \sqrt{?}$
 (1) 64 (2) 8 (3) 36 (4) 16

79. $\frac{5}{8}$ of $\frac{4}{15}$ of 372 = ?

- (1) 48 (2) 64 (3) 42 (4) 62

80. $\frac{4^{12} + 8^8 + 16^6}{4^{10} + 2^{20} + 16^5} = ?$

- (1) 20 (2) 32 (3) 16 (4) 24

Directions: Questions (81 to 90):

In the number series given below, one number is missing. Each series is followed by four alternatives (1), (2), (3), (4). One of them is right answer. Indicate as per instructions.

81. 13, 13, 26, 78, 312, ?

- (1) 1390 (2) 1560 (3) 1820 (4) 1460

82. 5, 17, 41, 77, 125, ?, 257

- (1) 215 (2) 206 (3) 167 (4) 185

83. 12, 21, 46, 95, 176, ?

- (1) 282 (2) 289 (3) 297 (4) 345

84. ?, 100, 150, 375, 1312.5

- (1) 200 (2) 25 (3) 50 (4) 75

85. 10, 15, 11, 14, 14, 11, 19, ?

- (1) 12 (2) 6 (3) 13 (4) 10

86. 5, 4, 6, 15, 56, ?

- (1) 112 (2) 298 (3) 105 (4) 275

87. 9, 17, 44, 169, 512, ?

- (1) 1843 (2) 1241 (3) 1684 (4) 1586

88. 78, 77, 74, 67, 52, ?

- (1) 31 (2) 28 (3) 21 (4) 45

89. 8, 8, 16, 24, 40, ?, 104

- (1) 64 (2) 48 (3) 82 (4) 80

90. 956, 476, 234, 111, ?

- (1) 48.2 (2) 47.5 (3) 50.5 (4) 55.5

SPACE FOR ROUGH WORK

Part - II : SCHOLASTIC APTITUDE TEST**Time : 90 Minutes****Max. Marks : 90****Note :**

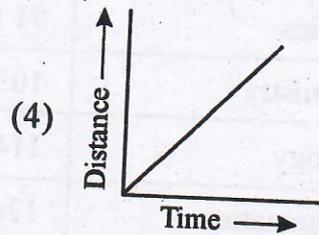
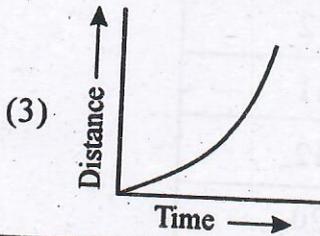
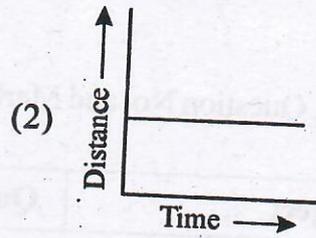
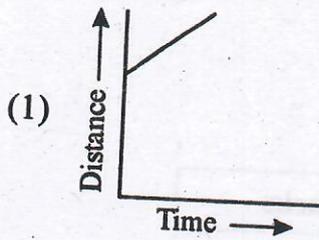
i) Sl. No., Subject, Question No. and Marks allotted:

Sl. No.	Subject	Question No.	Marks
1.	Physics	91 to 102	12
2.	Chemistry	103 to 113	11
3.	Biology	114 to 125	12
4.	Mathematics	126 to 145	20
5.	History	146 to 155	10
6.	Geography	156 to 165	10
7.	Political Science	166 to 175	10
8.	Economics	176 to 180	05

ii) **SHADE** the correct alternatives in the OMR Answer Sheet provided, from amongst the ones given against the corresponding questions in the Question Paper Booklet. For shading the circles, use a **Blue or Black Ball Point Pen**.

PHYSICS

91. Which of the following Distance-Time graph shows the body is at rest.

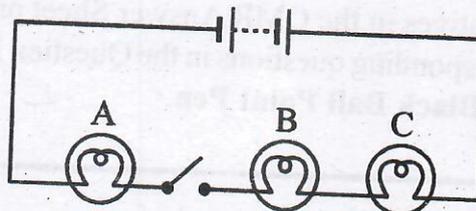


92. How many statements from the following are true?

- a) An electric bell has an electromagnet.
- b) An electromagnet does not attract iron articles.
- c) To make a battery of two cells, the positive terminal of one cell is connected to the negative terminal of the other cell.
- d) Nichrome wire is used as heating element in the circuit.

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

93.



Choose the correct statement from the following about the circuit given above.

- (1) Bulb A only will glow
- (2) Bulb B, C will glow
- (3) Bulb A, B, C will glow
- (4) No bulb will glow

94. Lenses are not used in _____

- (1) Vehicles to see rear view
- (2) Spectacles
- (3) Telescope
- (4) Microscope

95. Image formed by a concave mirror of the Sun is _____

- (1) Real image
- (2) Virtual image
- (3) Magnified image
- (4) Cannot be captured on screen

CHEMISTRY

103. Choose the correct matching from the following

Constituents of petroleum		Uses	
i) Kerosene		a) Vaseline	
ii) Bitumen		b) Fuel for home	
iii) Paraffin Wax		c) Fuel for Jet aircrafts	
iv) LPG		d) Paints	
		e) Motor fuel	
(1) i-(b), ii-(a), iii-(c), iv-(d)		(2) i-(c), ii-(d), iii-(a), iv-(b)	
(3) i-(a), ii-(e), iii-(c), iv-(d)		(4) i-(c), ii-(d), iii-(b), iv-(a)	

104. Acid present in Grapes is _____

- | | |
|-------------------|-----------------|
| (1) Tartaric acid | (2) Oxalic acid |
| (3) Lactic acid | (4) Formic acid |

105. Consider the following statements

- Both acids and bases change colour of all indicators.
- Turmeric is a natural indicator.
- An antacid contains magnesium oxide.
- Lime water is basic in nature.

Which of these statements are correct?

- | | |
|-----------------|----------------------|
| (1) (b) and (d) | (2) (b), (c) and (d) |
| (3) (b) and (c) | (4) only (a) |

106. Which of the following substance turns phenolphthalein indicator in to pink colour.

- | | |
|-------------|-------------------|
| (1) Vinegar | (2) Soap solution |
| (3) Curd | (4) Lemon juice |

107. Solution 'A' is in blue colour. Add few drops of sulphuric acid to 'A' and drop an iron nail in it. After some time a green coloured solution 'B' is formed. What are 'A' and 'B' respectively?

- | | |
|------------------------------------|----------------------------------|
| (1) Iron Sulphate, Copper Sulphate | (2) Copper Sulphate, Baking Soda |
| (3) Copper Sulphate, Iron Sulphate | (4) Vinegar, Baking Soda |

108. How many of the following are chemical changes?

- a) Photosynthesis
- b) Dissolving sugar in water
- c) Burning of coal
- d) Melting of Ice
- e) Rusting of Iron

(1) 1 (2) 3 (3) 4 (4) 5

109. 'A' is a metal burnt in presence of Oxygen to form 'B'. 'B' is dissolved in water to form 'C'. 'C' is a base. Then what are 'A', 'B', 'C' respectively.

- (1) Magnesium Hydroxide, Magnesium oxide, Magnesium
- (2) Magnesium, Magnesium Hydroxide, Magnesium oxide
- (3) Magnesium, Magnesium oxide, Magnesium Hydroxide
- (4) Calcium, Calcium oxide, Calcium Carbonate

110. Coal cannot be prepared in the laboratory because _____

- A) Causes air pollution.
- B) It is a very slow process.
- C) Needs very low pressure and low temperature
- D) Needs very high pressure and high temperature

Choose the correct statement(s) from the given above.

- (1) (A) and (B) (2) (B) and (C)
- (3) (A), (B) and (D) (4) (B) and (D)

111. Expand CNG _____

- (1) Compressed Neutral Gas (2) Composed Natural Gas
- (3) Compressed Nitrogen and Gasoline (4) Compressed Natural Gas

112. We all know that distilled water is a poor conductor of electricity. What would you do to make it a good conductor of electricity?

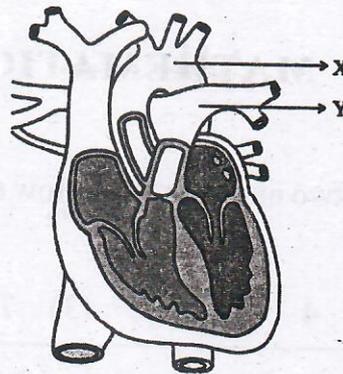
Choose the correct statement from the following.

- (1) Add oil to distilled water (2) Heating
- (3) Add common salt to distilled water (4) Add more distilled water

113. The process of depositing a layer of any desired metal on another material by means of electricity is called _____

- (1) Electro Plating (2) Electrolysis
- (3) Electricity (4) Electrode

120.



Name the 'X' and 'Y'

- (1) X - Aorta, Y - Pulmonary artery (2) X - Pulmonary artery, Y - Aorta
 (3) X - Pulmonary vein, Y - Venacava (4) X - Venacava, Y - Pulmonary vein

121. What is this machine?



- (1) This is a winnowing machine. It separates dust from grains.
 (2) This is a harvester. It helps to pulled out and cut the crops.
 (3) This is a seed drill. It is used for sowing seeds.
 (4) This is a combine. It works as a harvester as well as a thresher.

122. Assertion : Wind dispersed seeds typically have wings or hair.

Reason : These structures reduce seed weight.

- (1) Both correct, Reason explains Assertion.
 (2) Both correct, Reason doesn't explain Assertion.
 (3) Assertion correct, Reason incorrect.
 (4) Both Assertion and Reason are incorrect.

123. Which of the following statements are correct about forests?

- i) Forests produce oxygen through photosynthesis.
 ii) Forests absorb carbon dioxide.
 iii) Forests decreases soil erosion.
 iv) Forests decreases biodiversity.

- (1) (i), (ii), (iii) (2) (i), (iv) (3) (i), (ii) (4) (ii), (iii), (iv)

124. Assertion (A) : Insectivores plants obtain essential nutrients by capturing insects.

Reason (R) : Insectivores plants grow in nutrient rich soil.

- (1) (R) is correct explanation for (A). (2) (R) is not correct explanation for (A).
 (3) (A) is not correct. (4) Both (A) and (R) are not correct.

125. Number of piercing and tearing teeth present in the lower jaw of a human?

- (1) 8 (2) 4 (3) 2 (4) 6

MATHEMATICS

126. The sum of reciprocals of two numbers is $\frac{1}{4}$. How many times their sum is equal to their product?

- (1) 5 (2) 4 (3) 7 (4) 10

127. How many edges does the cube having 6 faces and 8 vertices?

- (1) 6 (2) 8 (3) 12 (4) 14

128. The simplified value of $\left(\frac{x^7}{x^9}\right)^{\frac{1}{63}} \times \left(\frac{x^9}{x^3}\right)^{\frac{1}{27}} \times \left(\frac{x^3}{x^7}\right)^{\frac{1}{21}}$ is

- (1) 0 (2) 35721 (3) 9 (4) 1

129. If two cubes each of edge 4 cm are placed end to end then the dimensions of resulting solid are

- (1) 8 cm, 4 cm, 4 cm (2) 4 cm, 4 cm, 4 cm
 (3) 6 cm, 4 cm, 4 cm (4) 8 cm, 8 cm, 4 cm

130. A cricketer scores the following runs in eight innings

28, 59, 30, 100, 45, 0, 76, 99

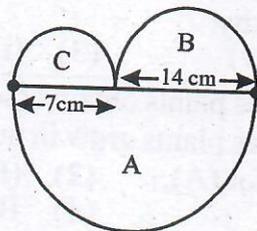
Find the range of his scores.

- (1) 99 (2) 0 (3) 100 (4) 59

131. The diagonals of a Rhombus measures 16 cm and 30 cm. Find it's perimeter?

- (1) 68 cm (2) 60 cm (3) 480 cm (4) 46 cm

132. If A, B, C represents 3 semicircles then the circumference of whole diagram is



- (1) 22 cm (2) 66 cm (3) 132 cm (4) 44 cm

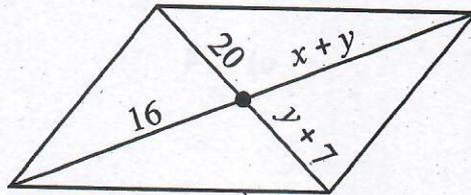
133. What is the probability of 'M' in the word MATHEMATICS?

- (1) $\frac{1}{11}$ (2) $\frac{4}{11}$ (3) $\frac{7}{11}$ (4) $\frac{2}{11}$

134. Which of the following measurements are not the sides of triangle?

- (1) 8 cm, 9 cm, 10 cm (2) 3 cm, 4 cm, 5 cm
 (3) 1 cm, 2 cm, 3 cm (4) 5 cm, 4 cm, 6 cm

135. In the given parallelogram what is the value of 'x'?



- (1) 13 (2) 3 (3) 16 (4) 7

136. If the multiplicative inverse of a number is the number itself, then the number is/are

- (1) 1 and -1 (2) 1 only (3) -1 only (4) 0

137. The value of $\frac{\sqrt[3]{8}}{\sqrt{16}} \div \sqrt{\frac{100}{49}} \times \sqrt[3]{125}$ is

- (1) $\frac{7}{100}$ (2) $\frac{7}{4}$ (3) $\frac{4}{7}$ (4) 1

138. Each side of square is 10 mtrs long. A rectangle of the same perimeter as this has sides in the ratio 2:3. What is the area of the rectangle in square meters?

- (1) 96 sq.mt. (2) 106 sq.mt.
 (3) 86 sq.mt. (4) 384 sq.mt.

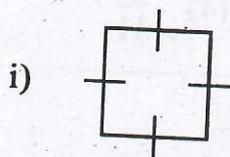
139. A car covers a distance of 76.5 km in 1.7 hours. What is the average distance covered by it in 1 hour?

- (1) 17 km (2) 35 km (3) 48 km (4) 45 km

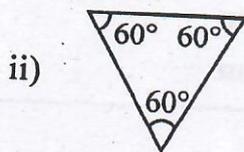
140. Match the following

Group - A
Figure

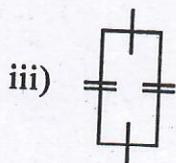
Group - B
Number of line symmetries



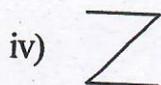
a) 3



b) 0



c) 4



d) 2

(1) i-(a), ii-(b), iii-(c), iv-(d)

(2) i-(c), ii-(a), iii-(d), iv-(b)

(3) i-(a), ii-(d), iii-(b), iv-(c)

(4) i-(a), ii-(d), iii-(c), iv-(b)

141. If $3 \times 3 \times 3 \times 3 \times \dots n \text{ times} = 2187$ then what is the value of 'n'?

(1) 7

(2) 6

(3) 2

(4) 3

142. The number of girls in class are 20, which are equal to 40% of the class then the total number of students in class

(1) 80

(2) 40

(3) 60

(4) 50

143. If $(525)^2 = 275625$, then what is the value of $\sqrt{27.5625}$

(1) 0.525

(2) 52.5

(3) 5.25

(4) 0.0525

144. Rani has 3 times as many two-rupee coins as she has five rupee coins. If she has in all a sum of Rs. 77, how many coins of Rs. 5 and Rs. 2 denomination does she has?

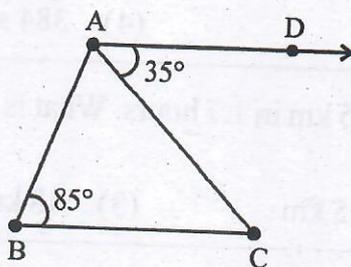
(1) 5, 15

(2) 8, 21

(3) 4, 12

(4) 7, 21

145. In the figure $AD \parallel BC$ then find $\angle BAC$



(1) 50°

(2) 60°

(3) 70°

(4) 80°

HISTORY

146. Individual soul is part of the entity. This is the principle of

- (1) Dwaitha (2) Vishishtadwaitha
(3) Adwaitha (4) Dwaithadwaitha
-

147. East India Company began its trade in which state in India?

- (1) Tamil Nadu (2) Gujarat
(3) Bengal (4) Andhra Pradesh
-

148. Who among the following was/were associated to Ryotwari System?

- (1) Captain Alexander Read
(2) Thomas Munro
(3) Both (1) and (2)
(4) None of the two
-

149. Correct chronological order of Dynasties

- (1) Mamluk - Tughlaq - Khilji - Sayyid - Lodi
(2) Tughlaq - Mamluk - Sayyid - Khilji - Lodi
(3) Mamluk - Khilji - Tughlaq - Sayyid - Lodi
(4) Lodi - Sayyid - Mamluk - Khilji - Tughlaq
-

150. The tillers had to pay _____ of their produce as land revenue in the reign of Delhi Sultanate.

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

151. The founder of Kalyani Chalukyas

- (1) Bhillama (2) Tailapa II
(3) Bettiga Vishnuvardhan (4) Kulasekhara
-

152. Identify the wrongly matched pair.

- (1) Prola II - The first independent ruler of Kakatiyas.
 - (2) Mahadeva - Died while besieging the Devagiri fort.
 - (3) Pratapa Rudra - Constructed Rudreswara temple at Hanumakonda.
 - (4) Ganapathi Deva - His period is called the Golden era.
-

153. 'Nrutta Ratnavali' was written by

- (1) Jayapa Senani
 - (2) Palkuriki Somanatha
 - (3) Nannechoda
 - (4) Vidhyanadha
-

154. Which of the following aspects is not related to Sri Krishna Deva Raya?

- (1) Scholars known as Ashtadiggajas
 - (2) Telugu work named 'Amuktamalyada'
 - (3) Title of 'Andhra Bhoja'
 - (4) Friendly relations with the French and the British
-

155. It is said that even if he was the emperor of India, he would cover his own expenses with the money, he earned by sewing hats

- (1) Akbar
 - (2) Shajahan
 - (3) Aurangzeb
 - (4) Sher Shah
-

GEOGRAPHY

156. In Physical maps, violet colour shows the height
- | | |
|-------------------|-------------------|
| (1) 0-100 MSL | (2) 1000-3000 MSL |
| (3) 7000-8000 MSL | (4) 3000-7000 MSL |
-
157. India lies in the Northern Hemisphere between the latitudes of
- | | |
|---|--|
| (1) $68^{\circ} 7'$ to $97^{\circ} 25'$ | (2) $8^{\circ} 4'$ to $37^{\circ} 6'$ |
| (3) $8^{\circ} 25'$ to $68^{\circ} 7'$ | (4) $14^{\circ} 27'$ to $19^{\circ} 07'$ |
-
158. Balancing the need to use resources and also conserve them for the future is called
- | | |
|-------------------------|-----------------------------|
| (1) Development | (2) Resource conservation |
| (3) Resource management | (4) Sustainable development |
-
159. The bare ground between plants is covered with straw. This is known as
- | | |
|-------------------|----------------------|
| (1) Shelter belts | (2) Mulching |
| (3) Organic layer | (4) Contour barriers |
-
160. The Big Bang Theory about the origin of the universe was first proposed by
- | | |
|-------------|----------------------|
| (1) Galileo | (2) Georges Lemaitre |
| (3) Ptolemy | (4) Copernicus |
-
161. Raju says that the world celebrates environmental day on his birthday. His birthday is
- | | |
|---------------|--------------|
| (1) April 22 | (2) March 22 |
| (3) August 29 | (4) June 5 |
-
162. The correct order of the three layers of the earth.
- | | |
|---------------------------|---------------------------|
| (1) Crust - Mantle - Core | (2) Crust - Core - Mantle |
| (3) Core - Crust - Mantle | (4) Mantle - Crust - Core |
-
163. Identify the wrongly matched pair.
- | |
|---|
| (1) Equatorial region - 5° - 10° N, S |
| (2) Savannas - 10° - 20° N, S |
| (3) Desert region - 15° - 30° N, S |
| (4) Steppes - 55° - 70° N, S |
-
164. Andhra Pradesh does not possess this type of forests
- | | |
|-----------------------|-----------------------|
| (1) Evergreen forests | (2) Deciduous forests |
| (3) Thorny forests | (4) Mangrove forests |
-
165. Forest Rights Act was passed in the year
- | | | | |
|----------|----------|----------|----------|
| (1) 1980 | (2) 1952 | (3) 1894 | (4) 2006 |
|----------|----------|----------|----------|

POLITICAL SCIENCE

166. Who appoints the governor of a State?

- (1) Chief Minister (2) President
(3) Prime Minister (4) Supreme Court

167. The term of office for the members of Legislative Council is

- (1) 4 years (2) 5 years
(3) 6 years (4) 2 years

168. The President of the Indian Constituent Assembly

- (1) B. R. Ambedkar (2) Jawaharlal Nehru
(3) Gandhiji (4) Babu Rajendra Prasad

169. The number of Union territories in India now is

- (1) 6 (2) 7 (3) 8 (4) 9

170. The Constitutional Article related to Right to Life

- (1) 21 (2) 17 (3) 32 (4) 56

171. The Chief Justice of India at present is

- (1) Justice N. V. Ramana (2) Justice D. Y. Chandrachud
(3) Justice U. U. Lalith (4) Justice S. A. Bobde

172. Which of the following statement(s) is/are true?

- i) The Rajya Sabha functions primarily as the representative of the States.
ii) Legislation can also be initiated in Rajya Sabha.
(1) (i) only (2) (ii) only
(3) (i) and (ii) (4) None of the two

173. The State does not take away the religious freedom of individuals. This is mainly known as

- (1) Socialism (2) Secularism
(3) Feudalism (4) Capitalism

174. The Fundamental Right that prohibits forced labour

- (1) Right against exploitation (2) Cultural and educational right
(3) Right to Equality (4) Right to Constitutional remedies

175. The Education Minister of Andhra Pradesh is

- (1) Konidela Pawan Kalyan (2) Nara Lokesh
(3) Vangalapudi Anitha (4) Kollu Ravindra

ECONOMICS

176. The Consumer Protection Act was approved on

- | | |
|----------------|----------------|
| (1) 09.08.2019 | (2) 08.08.1988 |
| (3) 24.12.2022 | (4) 10.04.2000 |

177. Who is the Finance Minister of Andhra Pradesh now?

- | | |
|----------------------|-----------------------------|
| (1) Kollu Ravindra | (2) Gottipati Ravi Kumar |
| (3) Payyavula Keshav | (4) Anam Ramanarayana Reddy |

178. Shifting cultivation is known as 'Milpa' in

- | | |
|----------------------|--------------|
| (1) North-East India | (2) Mexico |
| (3) Brazil | (4) Malaysia |

179. By growing these crops, we can conserve water resources

- | | |
|-----------|---------------|
| (1) Rice | (2) Sugarcane |
| (3) Wheat | (4) Millets |

180. This traffic sign is

- | | |
|---------------------|----------------------|
| (1) Mandatory sign | (2) Information sign |
| (3) Cautionary sign | (4) Prohibition sign |



SPACE FOR ROUGH WORK

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