INTO 7TH STATE

Mathematics

1. 1 Million = _____ hundred thousand.
   1. 1
   2. 10
   3. 100
   4. 1000

2. Which of the following property is suitable for $368 \times 12 + 18 \times 368$ is
   1. Commulative
   2. Associative
   3. Closure
   4. Distributive

3. Which of the following numbers can be arranged as triangles
   1. 1, 2, 4, 9
   2. 2, 4, 9, 16
   3. 3, 6, 10, 15
   4. 4, 9, 16, 25

4. Sum of additive inverse of 25 and predecessor of 14 is
   1. 12
   2. 38
   3. −12
   4. 40

5. Division by zero is
   1. 0
   2. Undefined
   3. 1
   4. Defined

6. 65×99999 is
   1. 6499935
   2. 6500000
   3. 6499936
   4. 6399935

7. If a number is divisible by both 2 and 3 then it is also divisible by
   1. 4
   2. 6
   3. 8
   4. 7

8. Write 12345 in reverse order and which of the following divide it exactly?
   1. 2, 3, 4
   2. 2, 5
   3. 3
   4. 3, 2, 4, 5

9. Which of the following is prime factorisation of 80
   1. $2^4 \times 5^1$
   2. $2^3 \times 5^1$
   3. $2^3 \times 3^1 \times 5$
   4. $2^2 \times 3^1 \times 5$

10. Write two prime numbers whose difference is 10?
    1. 17, 7
    2. 47, 17
    3. 23, 13
    4. Both (1) and (3)

11. The product of two co-prime numbers is xy and their LCM is
    1. xy
    2. $x + y$
    3. x / y
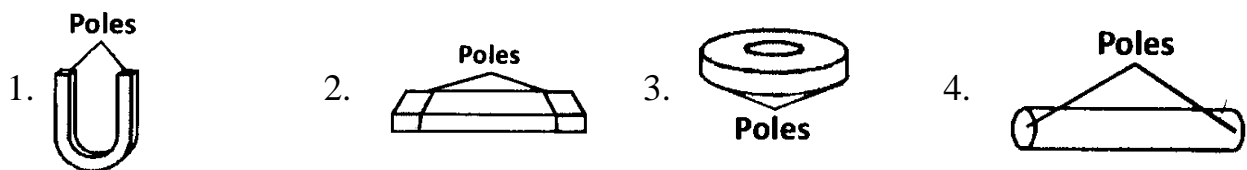   4. $x - y$

12. How many extra zero's are there in one billion as compared to ten crores?

1. 1   2. 3   3. 4   4. 2

13. Which of the following is kaprekar's constant

1. 6124   2. 1729   3. 6174   4. 6184

14. Which term of geometry would you associated with an edge of your book?

1. A point   2. A line segment   3. A plane   4. A ray

15. The simplified value of $7 + 2 \times 6 \div 4 - 12 \div 6$ is

1. 0   2. 4   3. 10   4. 8

16. If 34 * 68 is to be divisible by 9, then what is the value of missing digit?

1. 4   2. 5   3. 6   4. 7

17. The interior of the figure together with its boundary is called its _____

1. Sector   2. Segment   3. Region   4. Chord

18. Which of the following letter is example for parallel and perpendicular lines

1. H   2. Y   3. L   4. Both (1) and (3)

19. Simplication of $(-80) + (+40) + (-30) + (+ 6)$ is

1. 64   2. −64   3. 156   4. −156

20. If the numerator and denominator of a proper fraction are increased by the same quantity then the resulting fraction

1. Always greater than the original fraction   2. Always less than the original fraction

3. Always equal to the original fraction   4. None of the above

21. The difference of $1\dfrac{3}{16}$ and its reciprocal is equal to?

1. $\dfrac{15}{16}$ 2. $\dfrac{16}{15}$ 3. $\dfrac{104}{203}$ 4. $\dfrac{105}{304}$

22. The number of even multiples of 17 that are less than 100 is

1. 2   2. 3   3. 4   4. 5

23. The LCM of $2^2 \times 3 \times 5^2$, $2 \times 3 \times 5^2$ and $2 \times 3 \times 5^2$ is

1. $2 \times 3 \times 5$ 2. $2^2 \times 3^2 \times 5^2$ 3. $2^2 \times 3 \times 5^2$ 4. $2 \times 3^2 \times 5^2$

24. By what decimal should we increase 0.047 to get 0.162?

1. 0.115   2. 0.105   3. 1.115   4. 0.125

25. Given $\sqrt{2} = 1.414$ them the value of $\sqrt{8}$ is

1. 2.424   2. 2.808   3. 2.828   4. 1.828

26. Express 4259cm in metres.

1. 4.259 m   2. 42.59 m   3. 425.9 m   4. 0.4259 m

27. If $3 : 8 : : 12 : x$ then $x = $ _____

    1. 12   2. 32   3. 42   4. 16

28. The ratio of a son's age to father's age is $1 : 8$. Their total age is 45 years. What will be their age after 2 years

    1. 7, 42   2. 8, 48   3. 5, 30   4. 4, 24

29. 15% of 180 + x% of 250 = 11% 700. Then the value of x is

    1. 25   2. 20   3. 18   4. 16

30. Number of right angles turned if you are facing south and turn anticlock wise to face west is?

    1. 1 right angle   2. 2 right angles   3. 3 right angles   4. 4 right angles

31. Krish coloured $\dfrac{1}{3}$ of a drawing. His sister Arushi helped him and coloured $\dfrac{2}{3}$ of the drawing. How much did they coloured together?

    1. 1   2. Whole   3. 1/2   4. Both (1) and (2)

32. In a pictograph if the symbol represents 50 students. Then the picture is

    1. 100 students   2. 125 students   3. 120 students   4. 150 students

33. Write the equation for a open costs twice that of a pencil costing ` $x$. The pen and pencil together cost ` 48.

    1. $x + 2x = 48$ 2. $\dfrac{x}{2x} > 28$ 3. $x - 2x = 48$ 4. $x \times 2x = 48$

34. The sum of congruent angle of 85^0 and bisecting angle of 30^0 is

    1. 100^0 2. 90^0 3. 75^0 4. 180^0

35. Geometrical figure and its corresponding mirror image are

    1. Congruent   2. Similar   3. Laterally interval 4. All the above

36. The ratio of income and expenditure of a family $10 : 9$. Then What is the savings it the income of family is ` 60, 000.

    1. ` 3000          2. ` 4000   3. ` 6000          4. ` 7000

37. Which of the following numbers are in proportion?

    1. 1, 2, 3, 4   2. 1, 4, 3, 2   3. 8, 4, 2, 1   4. 1, 8, 2, 4

38. The sum of three consecutive even positive integers is 90. Then what is the smallest integer.

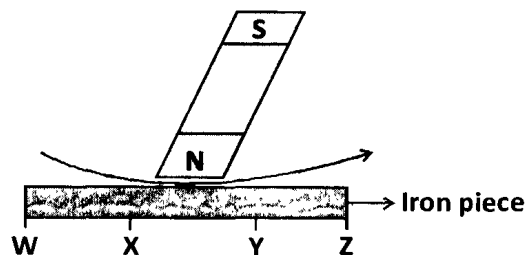   1. 26   2. 28   3. 30   4. 32

39. A wire is in the form of a square of side 18 m. It is bent in the form of rectangle. Whose length and breadth are in the ratio 3 : 1. What is the area of the rectangle?

1. 81 m²   2. 243 m²   3. 144 m²   4. 324 m²

40. What is the perimeter of a square whose area is 225 m²

1. 15   2. 225   3. 60   4. 100

41. The value of x% of y + y% of x is _____

1. $\dfrac{xy}{200}$ 2.   3. $\dfrac{xy}{50}$ 4. $\dfrac{xy}{100}$

42. If points A, B, C, D are collinear them which of the following is true?

1. A, B, C are collinear   2. A, C, D are collinear

3. A, B, D are collinear   4. All the above are true

43. The constant term in the expression $2x^2 - 9$ is

1. 7   2. −9   3. 0   4. 1

44. The value of $36x^2 + 49y^2 + 84xy$ when $x = 3$, $y = 6$ is

1. 3500   2. 3600   3. 3450   4. 3700

45. There are 20 coins in a bag. They are of denomination `. 1 and `. 2 only. If the value of all the coins is `. 28. Then number of `. 1 coins are there

1. 12   2. 14   3. 15   4. 16

46. the value of expression $4\dfrac{2}{5} \div 3\dfrac{2}{5}$ is

1. $\dfrac{22}{17}$ 2. $\dfrac{17}{22}$ 3. $\dfrac{4}{3}$ 4. $\dfrac{3}{4}$

47. If 90% of x is 315 km then the value of x is

1. 340   2. 350   3. 360   4. 370

48. The average of 11 results is 60. If the average of six results is 58 and of the last six is 63. Then the six result

1. 60   2. 62   3. 66   4. 64

49. What must be the least number of soldiers in each group such that they can be arranged in lines of 12, 16 and 18 each also in a square?

1. 144   2. 576   3. 256   4. 196

50. One fifth of a number exceeds its one ninth by 16 than the number is

1. 200   2. 196   3. 180   4. 170

51. Freely suspended bar magnet, always comes to rest in _____ direction
    1. East – west   2. North – east   3. North – south   4. North – west

52. Magnetic strength of bar magnet is maximum at
    1. Poles   2. Middle   3. Only one pole   4. Every point on it

53. The materials does not change their shape are called
    1. Gases   2. Liquids   3. Solids   4. Matter

54. When white light shines on an object it may be
    1. Reflected   2. Absorbed   3. Transmitted   4. All the above

55. A rectangular plate having length 300cm and breadth 1.5m then its area
    1. $450 \, cm^2$ 2. $4.5 cm^2$ 3. $450 m^2$ 4. $4.5 m^2$

56. $1 \, cm^3 = $ _____ ml
    1. 1   2. 10   3. 100   4. 1000

57. $1 \, mm = $ _____ cm
    1. 10   2. 0.10   3. 100   4. 0.010

58. The substance which allow current through them are called _____
    1. Magnets   2. Insulators   3. Conductors   4. All the above

59. Like charges are _____ each other
    1. Repel   2. Attract   3. Sometimes repel   4. Sometimes attract

60. Shadow doesnot formed by
    1. Window glass   2. Air   3. Palm   4. All the above

61. Which of the following are primary colours.
    1. Red   2. Green   3. Blue   4. All the above

62. Which of the following figures does NOT show the poles correctly?

63. Satish magnetized a piece of iron marked W, X, Y and Z using the stroking method as shown in the figure

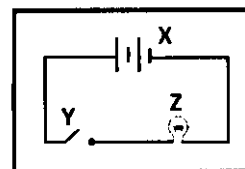   Which of these parts of the iron piece will become the north – seeking pole?
    1. W   2. X   3. Y   4. Z

64. Which one of the following is the correct grouping of different materials according to their electrical conductivity?
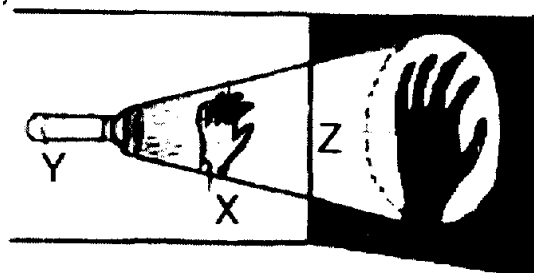
	Electrical insulators	Electrical conductors
(1)	Plastic, wood	Mercury, tungsten
(2)	Carbon, steel	Iron, paper
(3)	Copper, gold	Nickel, clay
(4)	Iron, rubber	Silver, plastic

65. Identify the symbols of electrical components used in the construction of the given electric circuit.

	X	Y	Z
(1)	Switch	Cell	Bulb
(2)	Battery	Cell	Bulb
(3)	Battery	Switch	Bulb
(4)	Switch	Cell	Battery

66. Observe the figure given below.

Identify X, Y and Z

	X	Y	Z
(1)	Opaque body	Light source	Shadow
(2)	Light source	Opaque body	Light source
(3)	Light source	Opaque body	Shadow
(4)	Opaque body	Shadow	Light source

67. We are able to see the objects around us because

1. The objects absorb all the light

2. The light reflected from the eyes reaches the object.

3. The light reflected from the objects enters our eyes

4. Light can be refracted

68. A mirror is

1. Opaque   2. Transparent   3. Translucent   4. Flexible

69. A measuring cylinder has 125cm^3 of water. When 2 pebbles are dropped into the cylinder, the water level rises to 150cm^3. What is the volume of each pebble?

    1. 12.5cm^3 2. 25cm^3 3. 50cm^3 4. 150cm^3

70. The thickness of 50 turns of a wire on the scale was found to be 64cm. What is the thickness of the wire?

    1. 2.75km   2. 1.28km   3. 3.25km   4. 1.35km

71. We use magnets for

    1. Direction purpose   2. Electrical appliances   3. Medical treatment   4. All the above

72. Bamboo chicken is cooked by _____ method.

    1. Boiling   2. Smoking   3. Frying   4. Pickling

73. In the early morning we can observe small dew drops appear on window glass of car this is due to _____

    1. Evaporation   2. Sublimation   3. Condensation   4. Both (1) and (2)

74. Acid rain is the combination of _____ and nitrogen dioxide.

    1. Carbondioxide   2. Ammonium oxide   3. Sulphur dioxide   4. Sodium dioxide

75. Animals are like cow, buffalo are called_____

    1. Herbivores   2. Ruminants   3. Nocturnal   4. Both (1) and (2)

76. The word candle is derived from the _____word candere.

    1. Greek   2. French   3. Latin   4. English

77. Some kinds of _____ move away from coasts of west Bengal and Orissa to the coasts of Visakhapatnam.

    1. Fish   2. Pelicans   3. Turtle   4. Battameka pitta

78. How can you separate Naphthalene crystals from sugar crystals?

    1. Evaporation   2. Crystallization   3. Sublimation   4. Decantation

79. _____is named as white gold.

    1. Sugar   2. Salt   3. Camphor   4. Baking soda

80. Due to _____, a place gets heated and pressure gets lowered.

    1. Coolness   2. Humidness   3. Hotness   4. Both (2) and (4)

81. World water day is on _____

    1. Feb 22   2. April 22   3. March 22   4. May 22

82. The foot is divided into _____inches.

    1. 11   2. 12   3. 21   4. 10

83. In the wrist _____joints are present.

    1. Pivot   2. Fixed   3. Gliding   4. Hinge

84. Locomotory organ in snail is _____

    1. Scales   2. Muscular foot   3. Fins   4. Cilia

85. The cells in the body that live for long time are _____

    1. Nereve cells   2. R.B.C cells   3. Brain cells   4. Bone cells

86. The full form of Isro.
    1. International satellite research organisation
    2. Indian satellite research organisation
    3. Indian space research organisation
    4. International space robot organisation

87. How many trees should be cut to make 1 tonne of papers?
    1. 21   2. 71   3. 17   4. 12

88. In _____ district, 'there is a traditional cottage industry.
    1. Warangal   2. Chittor   3. Nalgonda   4. Prakasham

89. Smallest bone in the human body.
    1. Humurus   2. Stapes   3. Ulna   4. Radius

90. In the milk which acid is present?
    1. Citric acid   2. Oxalic acid   3. Lactic   4. Acetic acid

ENGLISH

91. He works <u>very</u> hard.
    1. Adverb of manner 2. Adverb of degree 3. Adverb of place 4. Adverb of time

92. Ramu runs _____ than Somu.
    1. Fast   2. Faster   3. The faster   4. More faster.

93. He is about _____ make a speech.
    1. On   2. To   3. None   4. In

94. Mohan, with his friends, _____ to Delhi recently.
    1. Have been   2. Has been   3. Was to   4. Have gone.

95. He is _____ young teacher.
    1. An   2. A   3. The   4. None

96. He <u>is meeting</u> his friends tomorrow.
    1. Present simple   2. Present continuous
    3. Future continuous   4. Future simple

97. They prefer coffee _____ tea.
    1. For   2. Then   3. By   4. To

98. She saw <u>herself</u> in the mirror.
    1. Interrogative pronoun   2. Reflective pronoun
    3. Reciprocal pronoun   4. Emphatic pronoun

99. Pavani said, "Delhi is the capital of India".
    1. Pavani said Delhi was the capital of India.
    2. Pavani told me that Delhi is the capital of India.
    3. Pavani said that Delhi is the capital of India.
    4. Pavani asked me that Delhi was the capital of India.

100. Write the antonym of " savage".
    1. Cruel   2. Uncivilized   3. Wild   4. Tame

THE END