INTO 8TH CBSE/ICSE

INSTRUCTIONS **NUMBER OF QUESTIONS : 100** **TIME : 2 Hrs**

1. ATTEMPT ALL QUESTIONS WITHIN THE TIME.
2. EACH QUESTION CARRIES 1 MARK
3. NO NEGATIVE MARKS.
4. DON'T DO ROUGH WORK ON QUESTION PAPER AND OMR.
5. USE BLACK (OR) BLUE PEN FOR BUBBLING ON OMR.

CORRECT METHOD OF BUBBLING

WRONG METHOD OF BUBBLING

MATHEMATICS

1. A picture was marked at `90. It was sold at $\frac{3}{4}$ of its market price what was the sale price?

   1. `77.50 2. `67.50 3. `47.50 4. `57.50

2. The value of $10\frac{1}{2}-\left[8\frac{1}{2}+\left\{6-\left(7-\overline{6-4}\right)\right\}\right]$ is _____

   1. -2 2. -1 3. 0 4. 1

3. The L.C.M of 18, 24 and 60 is _____

   1. 360 2. 260 3. 60 4. 24

4. If cost of 4 articles is `72 then cost of 7 articles is _____rupees

   1. 146 2. 136 3. 126 4. 156

5. If 30% of a number is 240 then the number is _____

   1. 800 2. 1000 3. 700 4. 600

6. If S.P = `200 and loss = `50 then % of loss is _____

   1. 30% 2. 20% 3. 40% 4. 50%

7. Additive inverse of -2017 is _____

   1. 0 2. -1 3. 1 4. 2017

8. A shopkeeper earns a profit of `2 by selling one pen incurs loss of `1 per pencil while selling pencils of her old stock. In particular month she incurs a loss of `5. In this period she sold 45 pens How many pencils did she sell in this period

   1. 100 2. 95 3. 90 4. 105

9. Which of the following is a proper fraction?

   1. $\frac{1}{2}$ 2. $\frac{3}{2}$ 3. $1\frac{1}{3}$ 4. 0

10. The value of $\frac{2}{3} \times 5\frac{2}{5}$ is _____

1. $3\frac{1}{5}$ 2. $3\frac{2}{5}$ 3. $3\frac{3}{5}$ 4. $3\frac{4}{5}$

11. If $5(x+4)=35$ then x^2 = _____

1. 18 2. 9 3. 3 4. 27

12. If we subtract 22 from 3 times a number we get 68. Then number is _____

1. 50 2. 40 3. 20 4. 30

13. The supplementary angle of 95^0 is _____

1. 75^0 2. 85^0 3. 65^0 4. 95^0

14. A line which intersects two or more lines at distinct points is called a _____

1. Transversal 2. Parallel 3. Perpendicular 4. Coplanar

15. A triangle in which two sides are equal is called an _____triangle

1. A cute 2. Obtuse 3. Equilateral 4. Isosceles

16. Point of concurrence of medians of a triangle is called _____

1. Orthocenter 2. Circum centre 3. Centroid 4. Incentre

17. If one angle of ΔABC is 40^0 and the other two angles are equal then value of each equal angle is _____

1. 70^0 2. 40^0 3. 80^0 4. 100^0

18. What is the cost of 9 bananas, if the cost of a dozen bananas is `20

1. `30 2. `25 3. `15 4. `35

19. If 16: 20 = $x:35$ then x = _____

1. 48 2. 18 3. 38 4. 28

20. The interest on a sum of `8250 for 3 years at the rate of 8% per annum

1. `1880 2. `1980 3. `1780 4. `1680

21. The mean of the first ten natural numbers is _____

1. 5.5 2. 6.5 3. 7.5 4. 4.5

22. The mode of the data 2, 3, 5, 3, 4,7, 3, 2, 1, 7,3

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

23. Number of independent measurements are required to construct a triangle

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

24. What is the literal coefficients of -3Z?

1. -1 2. -3 3. Z 4. 3Z

25. Which of the following are like terms?

1. 100*x*, *x* 2. 3*y*, 6*z* 3. 4p, 4q 4. x, y

26. The degree of the monomial x^2y^2z is _____

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

27. If $450 = 2^p \times 3^q \times 5^r$ then $(p+q-r)^2$ =_____

1. 0 2. 1 3. 25 4. 9

28. If $(-a)^m = -a^m$ then m is _____

1. Even 2. Even prime 3. Odd 4. Even composite

29. If $5^6 \times 5^{2x} = 5^{10}$ then x^x =_____

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

30. The angles of a quadrilateral are in the ratio 3 : 4 : 5 : 6 then the greatest angle

1. 130^0 2. 120^0 3. 110^0 4. 80^0

31. The measures of two adjacent angles of a parallelogram are in the ratio 3 : 2 then the smallest angle is _____

1. 98^0 2. 108^0 3. 72^0 4. 62^0

32. The base of a triangle whose area is $220cm^2$ and height 11cm

1. 30cm 2. 50cm 3. 60cm 4. 40cm

33. Area of a rhombus is _____ sq. units

1. $\frac{1}{2}d_1d_2$ 2. $\frac{1}{2}(a+b)h$ 3. $\frac{1}{2}d(h_1+h_2)$ 4. $\frac{1}{2}bh$

34. Circumference of a circle whose radius 14cm is _____cm

1. 99 2. 44 3. 88 4. 66

35. If a plot is 60m long and 40m wide a path 3m wide is to be constructed around outside the plot then the area of the path is _____ square metres

1. 536 2. 636 3. 436 4. 736

36. Horizontal cross section of a cylinder is _____

1. Circle 2. Rectangle 3. Square 4. Semicircle

37. Number of axes of symmetry for a regular pentagon

1. 0 2. 1 3. 5 4. 3

38. The sum of the reciprocals of all the divisors of 6 is _____

1. 1 2. 0 3. 2 4. 3

39. If $x^2 - 4x + 1 = 0$ then $x^5 + \frac{1}{x^5}$ =_____

1. 724 2. 734 3. 728 4. 732

40. If $\frac{4^7+4^7+4^7+4^7}{2^7+2^7} = 2^x$ then $(x+2)^3$ =_____

1. 100 2. 1000 3. 10, 000 4. 10

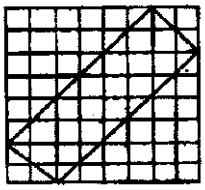
41. The value of $\cfrac{1}{2+\cfrac{1}{3+\cfrac{1}{4+\frac{1}{5}}}}$ =_____

1. $\frac{77}{60}$ 2. $\frac{68}{157}$ 3. $\frac{2007}{2008}$ 4. $\frac{48}{99}$

42. The digits of a three digit number are 3, 7, and x in tat order and 37x= 3^3+7^3 - the value of x is _____

1. 1 or 2 2. 0 or 2 3. 1 or 0 4. 0, 1 or 2

43. A plank is placed on a tiled floor. What fraction of the floor is not covered by the plank?



1. $\frac{5}{8}$ 2. $\frac{3}{8}$ 3. $\frac{17}{64}$ 4. $\frac{1}{4}$

44. If $a+b+c=10$ and $a^2+b^2+c^2=64$ then $ab+bc+ca=$_____

1. 36 2. 64 3. 9 4. 18

45. $(a-b)^2-(a+b)^2=$_____

1. $4ab$ 2. $-4ab$ 3. $2(a^2+b^2)$ 4. $2(a^2-b^2)$

46 If $2^{x-1}+2^{x+1}=320$ then x = _____

1. 6 2. 8 3. 5 4. 7

47. $\sqrt{248+\sqrt{52+\sqrt{144}}}$ = _____

1. 14 2. 16 3. 24 4. 26

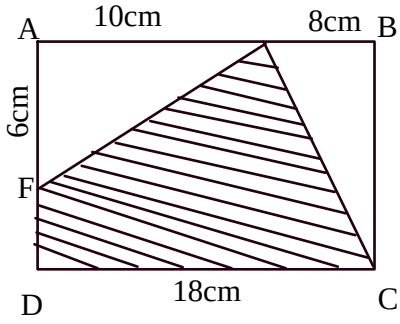
48. The largest number that divides 210, 315, 147 and 168 exactly is _____

1. 3 2. 7 3. 21 4. 4

49. What least number must be subtracted from 13601 to get a number exactly divisible by 87?

1. 49 2. 23 3. 29 4. 31

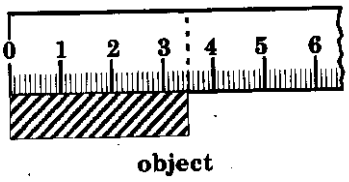
50. The area of the shaded part of adjacent figure is _____sq.cm



1. 105 2. [illegible] 3. 95 4. 110

SCIENCE

51. In the figure below, the length of the object is :



[illegible] units 4. 3.3 units

52. An object is placed in two different liquids separately. If the density of object is greater than liquid 1 and less than liquid 2 then the object is found to float in :

1. Liquid 1 2. Liquid 2 3. Both (1) and (2) 4. Does not float

53. The total mass of two objects of mass 2130 kg and 16 tones is :

1. 38.3 tones 2. 18.13 tones 3. 16.213 tones 4. 229 kg

54. A body is moving along a circular path of radius 7 m. While it reaches diametrically opposite end in its first rotation, distance and displacement covered by it is:

1. 22m, 7m 2. 22m, 14m 3. 44m, 14m 4. 44 m, 7m

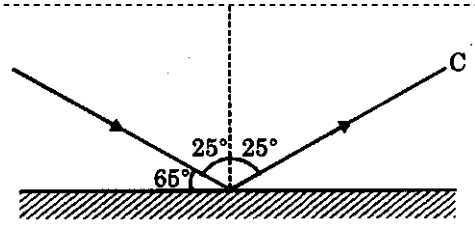
55. A car covers 30 km at a uniform speed of 30 km h^{-1}. What should be its speed for the next 90 km if the average speed for the entire journey is 60 km h^{-1}?

1. 90 km h^{-1} 2. 50 km h^{-1} 3. 120 km h^{-1} 4. 70 km h^{-1}

56. Here are certain positions of a particle which can move in a horizontal plane, identify the identical position to that of 5 m, 30^0 north of east from the following :

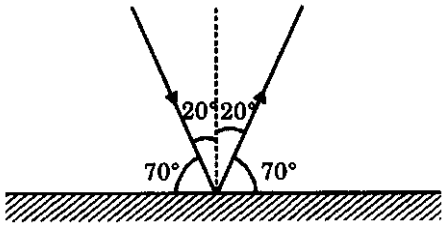
1. 5 m, 30^0 north of west 2. 5 m, 30^0 east of north
3. 5 m, 60^0 south of west 4. 5 m, 60^0 east of north

57. From the diagram below, what is the angle of incidence?



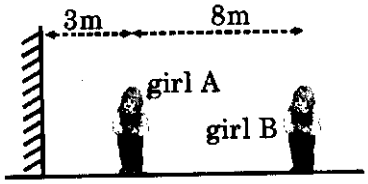
1. 25^0 2. 50^0 3. 65^0 4. 90^0

58. From the diagram below, what is the angle between the incident ray and the reflected ray?



1. 20^0 2. 40^0 3. 70^0 4. 90^0

59. Two girls are standing in front of a plane mirror as shown. When girl A looks into the mirror, how far away from her will image of girl B seem to be?



1. 11m 2. 16m 3. 6m 4. 14m

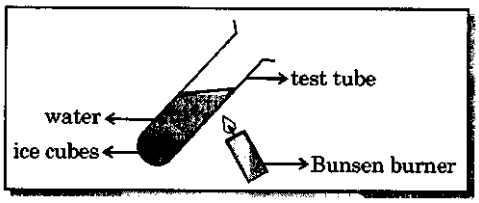
60. Man A is facing a plane mirror while man B is running towards him from behind. If man B is running at a speed of 1 m s^{-1}, how fast does man B seem to be running towards man A?

1. 10 m/s 2. 5 m/s 3. 1 m/s 4. 2 m/s

61. Woolen sweaters keep us warm by:

1. Quickens the loss of heat from our body 2. Trapping a layer of air
3. Trapping a layer of dust 4. Keeping the surrounding air cold

62. Which of the following processes are involved in the experiment as shown in figure?



1. Conduction and melting
2. Insulation and heating
3. Conduction and contraction
4. Expansion and contraction

63. Change 176^{o} F to the Celsius and Kelvin scales

1. 90^{o},370K
2. 80^{o}C,353K
3. 160^{o},300K
4. 80^{o},370K

64. Mechanical waves cannot travel through:

1. Solids
2. Liquids
3. Gases
4. Vacuum

65. Which physical quantity determines the pitch?

1. Amplitude
2. Frequency
3. Wave length
4. Velocity

66. If the speed of sound in steel is taken as x m s^{-1}, then speed of sound in air (in m s^{-1}) will be:

1. $\frac{9x}{5}$
2. $\frac{7x}{12}$
3. $\frac{5x}{3}$
4. $\frac{13x}{6}$

67. Hari is 2.5 km away from a rifle range, sunil is practicing shooting. How long would it take for Hari to hear the sound of a shot fired by him? (Assume speed of sound in air as 340 m s^{-1}).

1. 1.36 s
2. 7.35 s
3. 8.5 s
4. 0.34 s

68. Charge flows from a charged body to an uncharged one:

1. Until the entire the charge from one flows into the other
2. Until they both carry the same charge
3. Until they both become uncharged
4. Continuously

69. The mathematical form of Coulomb's law of electrostatic force is

1. $F = \frac{Kq_1q_2}{r^2}$
2. $F = \frac{Kq_1q_2}{r}$
3. $F = \frac{Kq_1q_2}{r^3}$
4. $F = \frac{Kq_1^2q_2^2}{r^2}$

70. The force between two point chargers when separated by a distance of 10cm is 20N. if the distance be changed to 5cm, what will be the force between them?

1. 40N
2. 80N
3. 20N
4. 60N

71. Which of the following elements is named after scientist name?

1. Gold
2. Tungsten
3. Nobelium
4. Beryllium

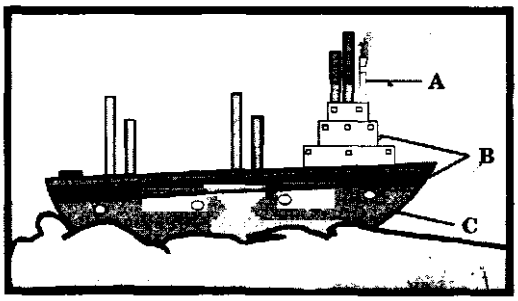
72. Which of the following radicals is bivalent?

1. Sulphate
2. Bicarbonate
3. Nitrate
4. Phosphate

73. Which of the following is a physical change?

1. Grinding of wheat
2. Photosynthesis
3. Curdling milk
4. Burning of a candle

74. Which is portion of a ship will rust the fastest?



1. A
2. B and **C**
3. **C**
4. A, B and ***C*** will get rust equally

75. What could be the substance *X*?

Substance/Litmus	*X*	*Y*	***Z***
Red Litmus	turns blue	no change	no change
Blue Litmus	no change	turns red	no change

1. An acid
2. A base
3. Water
4. Salt

76. Carbon dioxide gas turns lime water
1. milky
2. Colour less
3. yellow
4. orange

77. The gas used in weather observation balloons in
1. Nitrogen
2. Oxygen
3. Carbon dioxide
4. Helium

78. When magnesium reacts with dilute hydrochloric acid (HCl), the gas formed is:
1. Chlorine
2. Hydrogen
3. Hydrogen chloride
4. None of these

79. Which of the following is a neutralization reaction?
1. $Na_2O + H_2O \rightarrow 2NaOH$
2. $4Na + O_2 \rightarrow 2Na_2O$
3. $NaOH + HCl \rightarrow NaCl + H_2O$
4. $2Ca + O_2 \rightarrow 2CaO$

80. Water is a/an _____oxide.
1. Acidic
2. Neutral
3. Basic
4. Amphoteric

81. Centrally located spherical structure in the cell is _____
1. Cytoplasm
2. Chloroplast
3. Vacuole
4. Nucleus

82. The faecal matter is removed from the body time to time is called _____
1. Assimilation
2. Egestion
3. Digestion
4. Absorption

83. _____ involves the movement of the diaphragm and the rib cage
1. Digestion
2. Excretion
3. Reproduction
4. Respiration

84. The _____join up to form veins which empty into the heart
1. Arteries
2. Arota
3. Capillaries
4. Ventricles

85. Dahlia can also give rise to new plant from its_____
1. Root
2. Stem
3. Leaf
4. Flowers

86. Sprouted grains are rich in _____vitamin
1. A
2. D
3. E
4. K

87. The growth towards the response localized physical contact is called _____
1. Phototropism
2. Geotropism
3. Thigmotropism
4. Hydrotropism

88. Kelps are the sources of _____
1. Iodine 2. Calcium 3. Potassium 4. Both a & c

89. _____are site of Photosynthesis
1. Ribosomes 2. Chloroplast 3. Leucoplast 4. Chromoplasts

90. _____a colourless (or) yellow coloured fluid that bathes all the body organs of human body
1. Blood 2. Water 3. Lymph 4. Serum

ENGLISH

91. He has to study well to get good marks. (Use "if")
1. If he has to study well, he will get good marks.
2. If he study well, he will get good marks.
3. If he studies well, he will get good marks
4. If he studies well, he would get good marks

92. The students got punished one hour back
1. Present simple 2. Past perfect 3. Past simple 4. Present perfect

93. You should help the poor. (Identify the expression)
1. Order 2. Obligation 3. Request 4. Command

94. I saw my friend playing in the ground.
1. Gerund 2. Participle 3. Noun 4. Main verb

95. The principal and _____in-charge is on leave today.
1. an 2. a 3. the 4. None

96. They elected him Chairman. (Change voice)
1. He was elected as Chairman 2. He was elected Chairman
3. He was an elected Chairman. 4. Chairman was elected by him.

97. Every one was present but Ram.
1. Conjunction 2. Preposition 3. Adverb 4. Interjection

98. Having studied well, he got good marks.
1. Complex sentence 2. Compound sentence
3. Simple sentence 4. Both a & *b*

99. Lankesh will say, "I will come".
1. Lankesh will say that I will come
2. Lankesh says that he will come
3. Lankesh will say that he will come
4. Lankesh will say that he would come.

100. He is my teacher. He is my uncle.
1. He is my teacher but not uncle.
2. Besides being my teacher, he is my uncle.
3. Besides being my teacher, he was my uncle.
4. He is my teacher as good as my uncle.

THE END