

Dr.K.K.R GOWTHAM EDUCATIONAL INSTITUTIONS :: A.P & T.S

Class: 7-Level-B

Marks: 100

Sub: Maths , physics, chemistry

Time: 2 ½ Hrs

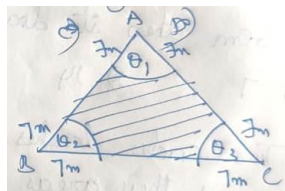
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**I. Objective type questions :**

**50 × 2= 100 M**

**Maths**

1. There is a square field of side 56m, of a path of uniform width 4m all around it on the out side , the area of path is \_\_\_\_\_m<sup>2</sup> [     ]  
a. 950                      b. 960                      c. 970                      d. 980
2. If the area of a square is 7200m<sup>2</sup> then the length of its diagonal is \_\_\_\_\_ [     ]  
a. 12                      b. 120                      c. 1200                      d. 1.2
3. The area of an equilateral triangle whose side is 18cm is \_\_\_\_\_cm<sup>2</sup> [     ]  
a. 81                      b. 72                      c.  $8\sqrt{3}$                       d.  $72\sqrt{3}$
4. If the circumference of a circle is 88cm then its area is \_\_\_\_\_cm<sup>2</sup> [     ]  
a. 316                      b. 216                      c. 416                      d. 516
5. The outer and inner radii of circular path are 25m and 18m respectively then the area of the circular path is \_\_\_\_\_m<sup>2</sup> [     ]  
a. 946                      b. 846                      c. 746                      d. 646
6. A wire when bent in the form of a square, encloses an area of 484cm<sup>2</sup>, then the largest area enclosed if the same wire is bent to form a circle is \_\_\_\_\_cm<sup>2</sup> [     ]  
a. 416                      b. 516                      c. 616                      d. 716
7. If the perimeter of semi circle is 36cm then its diameter is \_\_\_\_\_cm [     ]  
a. 7                      b. 14                      c. 21                      d. 28
8. Two circles touches externally the sum of their areas is  $130\pi$  sq.cm and the distance between their centres to 14cm, then the radii of circles are \_\_\_\_\_ and \_\_\_\_\_cm [     ]  
a. (11,3)                      b. 10,4                      c. (9,5)                      d. (8,6)
9. The sum of the radii of two circle is 7cm and the difference of their circumferences is 8cm then the radius of bigger circle is \_\_\_\_\_cm [     ]  
a.  $99/22$                       b.  $63/22$                       c.  $22/99$                       d.  $22/63$
10. The perimeter of a sector of a circle of radius 5.6cm is 27.2cm then the area of a sector is \_\_\_\_\_cm<sup>2</sup> [     ]  
a. 448                      b. 44.8                      c. 4.48                      d. 0.448
11. Three horses are tethered with 7m long ropes at the three corners of a triangular field having sides 20m, 34m, 42m, then the area of the plot which remains ungrazed is \_\_\_\_\_m<sup>2</sup> [     ]  
a. 336                      b. 259  
b. 77                      d. 515



12. The wheels of a car make 2500 revolutions in covering a distance of 4.95 km, then the diameter of a wheel is \_\_\_\_\_ metres [     ]  
 a. 315                      b. 630                      c. 215                      d. 430
13. A chord 10cm long is drawn in a circle whose radius is  $5\sqrt{2}$  cm then the area of major segment is \_\_\_\_\_sqcm [     ]  
 a.  $1100/7$                       b.  $100/7$                       c.  $1000/7$                       d. 25
14. The volume of a cube whose edge is 3.5cm is \_\_\_\_\_cm<sup>3</sup> [     ]  
 a. 42875                      b. 4287.5                      c. 428.75                      d. 42.875
15. A rectangular tank is 3.5m long, 1.6m wide and its volume is 4.2m<sup>3</sup> then the depth of the tank is \_\_\_\_\_m [     ]  
 a. 75                      b. 7.5                      c. 0.75                      d. 0.075
16. If the volume of a cube is 1331 cm<sup>3</sup> then its total surface area is \_\_\_\_\_cm<sup>2</sup> [     ]  
 a. 11                      b. 121                      c. 6                      d. 726
17. If 22.5 cubic metres of sand is spread uniformly on square plot of side 7.5m, then the rise in the level of the plot is \_\_\_\_\_cm [     ]  
 a. 0.4                      b. 0.04                      c. 4                      d. 40
18. If two cubes of side 15cm are joined end to end. Then total surface area of the resulting cuboid is \_\_\_\_\_cm<sup>2</sup> [     ]  
 a. 1125                      b. 225                      c. 450                      d. 2250
19. If the base of an isosceles triangle is 12cm and its perimeter is 32cm then its area is \_\_\_\_\_cm<sup>2</sup> [     ]  
 a. 96                      b. 48                      c. 36                      d. 72
20. The circumference of a circle whose area 38.5 cm<sup>2</sup> is \_\_\_\_\_cm [     ]  
 a. 220                      b. 2200                      c. 22                      d. 2.2

#### Physics

21. Newton's law of motion is also called as [     ]  
 (a) Charles                      (b) Galileo's                      (c) Newton's.                      (d) coulombus
22. 1kg.wt [     ]  
 (a) 9.8N.                      (b) 98N                      (c) 980N                      (d) 9800N
23. Inertia of a body has a direct dependence on [     ]  
 (a) Velocity                      (b) mass                      (c) area.                      (d) volume
24. Force generally denotes [     ]  
 (a) a push                      (b) a pull                      (c) both A and B.                      (d) None

25. weight of an object is always directed [     ]  
 (a) vertically downward                      (b) vertically up  
 (c) parallel to surface                      (d) Inclined
26. Newton's second law of motion gives the quantitative definition of [     ]  
 (a) force.                      (b) mass                      (c) speed                      (d) Velocity
27. find the magnitude of momentum of a body of mass 10kg moving with a  
 Velocity of 5m/s [     ]  
 (a) 40kgm/s                      (b) 30kgm/s                      (c) 50kgm/s                      (d) 60kgm/s
28. The tension in the rope when they become slack [     ]  
 (a) zero                      (b) constant                      (c) unequal                      (d) None
29. The gravitational force of attraction of the earth acting on a body is known as [     ]  
 (a) mass                      (b) weight                      (c) acceleration                      (d) none
30. Force = . [     ]  
 (a) mass x acceleration                      (b) mass x speed                      (c) speed x distance                      (d) None
31. Tension across a pulley or frictionless pulley remains [     ]  
 (a) zero                      (b) constant                      (c) unequal                      (d) none
32. momentum is a [     ]  
 (a) scalar                      (b) vector                      (c) tensor                      (d) none
33. which of the following has the largest inertia ( )  
 (a) a pen.                      (b) a pin                      (c) your physics book                      (d) your loaded school bag
34. A car of mass 1800kg moving with a speed of 10m/s is brought to rest after a  
 covering a distance of 50m. calculate the force acting on a car [     ]  
 (a) 1800N                      (b) 900N                      (c) 3600N                      (d) 1600N
35. A body of mass 5kg started from rest with an acceleration of 4m/second  
 square. its momentum after 5s is [     ]  
 (a) 20kgm/s                      (b) 100kgm/s                      (c) 4kgm/s                      (d) 25kgm/s

### Chemistry

36. Latin name of silver is [     ]  
 a. Aurum                      b. argentinum                      c. argon                      d. asmium
37. An element X has electronic configuration is  $1s^2 2s^2, 2p^6$  it represents  
 ....element [     ]  
 a. Ar                      b. Na                      c. Nc                      d. Ni
38. The element x having atomic number is 21 and its atomic weight is 45. The  
 symbol x is [     ]  
 a. Ar                      b. Sc                      c. Ti                      d. Mn

39. A divalent cation is isoelectronic with  $\text{CO}_2$  and has  $(z+2)$  neutrons. The ionic mass of divalent cation is [     ]
- a. 48                      b. 45                      c. 50                      d. 51
40. If  $z=20$  and  $A=40$  for an unknown element  $x$  and the number of neutrons in another element  $y$  ( $z=18$ ) is more than in  $x$ . the mass no of  $y$  is [     ]
- a. 20                      b. 38                      c. 40                      d. 18
41. The symbol of a metal which is used in making thermometer is [     ]
- a. Ag                      b. Hg                      c. Mg                      d. Sg
42. Atomic weights of Si, Cr, Ca respectively are [     ]
- a. 28,40,52              b. 52,28,40              c. 52,40,28              d. 28,52,40
43. Acidic radical also called [     ]
- a. Anin                      b. cation                      c. electropositive radical              d. none
44. Per chlorate radical is [     ]
- a. Clo                      b.  $\text{ClO}_4$                       c.  $\text{ClO}_3$                       d. Cl
45. An example of basic radical is [     ]
- a. Chloride              b. calcium              c. sulphate              d. sulphide
46.  $\text{NaHSO}_4$  is the formula of sodium [     ]
- a. Sulphate              b. bisulphate              c. sulphite              d. bisulphate
47. A monovalent cation is isoelectronic with  $\text{NO}_2$  and has  $(z+1)$  neutrons. The ionic mass of monovalent cation [     ]
- a. 48                      b. 49                      c. 50                      d. 51
48. A monovalent cation is electronic with  $\text{NO}_2$  and has  $(z+1)$  neutrons. The ionic mass of monovalent cation [     ]
- a. 48                      b. 49                      c. 50                      d. 51
49. An ion  $X$  has isoelectrons. It has  $(z+1)$  neutrons. The mass no of  $X$  is [     ]
- a. 20                      b. 30                      c. 19                      d. 18
50. An ion has 3 positive charges the mass no of the ation is 27 and neurons no is 14. The no of electrons in ion is [     ]
- a. 13                      b. 12                      c. 11                      d. 10

