

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

Class: 7-Level-C

Marks: 100

Sub: Maths , physics, chemistry

Time: 2 ½ Hrs

I. Objective type questions :

50 × 2= 100 M

Maths

1. Solution of $x+3y=8$ and $3x=2+2y$ []
a. (1,1) b. (2,2) c. (3,3) d. (-2,-2)
2. Roots of the equation of $4x-18=3y$ and $6x+7y-4=0$ []
a. (3,2) b. (2,3) c. (3,-2) d. (-3,2)
3. If one of the root of $x/6 + 6=y$ and $3x/4 = x+y$ is 12 and another root to []
a. 12 b. 8 c. 4 d. 2
4. If $(3x+4)^2 + (3x-2)^2 = (6x+5)(3x-2) +12$ then $x=$ _____ []
a. 1 b. 2 c. -1 d. -2
5. If the sides of an equilateral triangle are $(x+3y)$ cm , $(3x+2y)$ cm and $(4x+ \frac{1}{2} y +1)$ cm then the length of a side of a triangle is []
a. $\frac{1}{2}$ b. 1 c. $1 \frac{1}{2}$ d. $3 \frac{1}{2}$
6. If $x+y=5x+y$, $y+z=6yz$, $z+x=zx$ then $x+y+z==$ _____ []
a. $13/12$ b. $12/13$ c. $1 \frac{1}{13}$ d. 1
7. No. of pair of interreges (m,n) such that $2mn - 5n+n=55$ []
a. 10 b. 15 c. 16 d. 20
8. In a two digit number the ten's digit exceeds the units digit by 3. The sum of the digits is $5/23$ of the number, the number is []
a. 96 b. 69 c. 36 d. 63
9. The dimensions of a rectangle are $(8x+6y)$ m and $4x+2y$ m. if the path of uniform width $(x+y)$ m runs all around on the outside then the area of path is _____m²[]
a. $28x^2-48xy+20y^2$ c. $28x^2-48xy-20y^2$
b. $28x^2+48xy+20y^2$ d. $28x^2+48xy-20y^2$
10. In a quadrilateral ABCD diagonl AC= the length of the perpendiculars from B and D to AC are 5cm and 7cm respectively, then the area of the quadrilateral is _____cm²[]
a. 40 b. 50 c. 60 d. 70
11. If the parallel sides of a trapezium are 22cm and 10cm while its non parallel sides are 13cm and 5cm, then the area of the trapezium is _____ sqcm []
a. 100 b. 80 c. 60 d. 40
12. If the cost ploughind the circular field at Rs 1.50 per m² is Rs 5775 then cost of fencing the field at Rs 8.50 per metre is Rs _____ []
a. 1870 b. 1780 c. 1980 d. 1890
13. If the perimeter of a semicircle is 36cm, the its diameter is _____cm []

- a. 7 b. 4 c. 21 d. 28

14. Two circles touch externally. The distance between their centres is 14cm then radii of the circles are _____ []

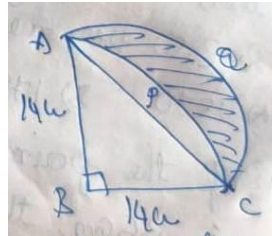
- a. (11,3) b. (10,4) c. (9,5) d. (8,6)

15. The perimeter of a sector of a circle of radius 5.6 cm is 27.2cm then the area of sector is _____ cm² []

- a. 448 b. 44.8 c. 4.48 d. 0.448

16. In the given figure ABC is a quadrant of a circle of radius 14cm with AC as diameter, a semi circle is drawn, the area of the shaded region is _____ cm² []

- A. 154 c. 98
B. $14\sqrt{2}$ d. 108



17. The sum of radii of two circles is 7cm and the difference of their circumferences is 8cm then the radius of bigger circle is _____ []

- a. $99/22$ b. $63/22$ c. $22/99$ d. $22/63$

18. The radius of the wheel of a bus is 42cm, no. of revolutions will it complete in 19.8km, of journey is _____ []

- a. 75 b. 750 c. 7500 d. 75000

19. Four cows are tethered at the four corners of a square field of side 50m such that each can graze the maximum unshaded area, then the area which will be left ungrazed is []

- a. 2500 b. 537.5 c. 1962.5 d. 4462.5

20. The minute hand of a clock is 15cm long, then the area swept by it in 20 minutes is _____ cm² []

- a. 535.5 b. 706.5 c. 607.5 d. 235.5

Physics

21. Newton's law of motion is also called as []

- (a) Charles (b) Galileo's (c) Newton's. (d) Columbus

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. Newtons 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 muscles 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 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. ClO_4 c. ClO_3 d. Cl

45. An example of basic radical is []

- a. Chloride b. calcium c. sulphate d. sulphide

46. NaHSO_4 is the formula of sodium []

- a. Sulphate b. bisulphate c. sulphite d. bisulphate

47. A monovalent cation is isoelectronic with 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 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 cation is 27 and neutrons no is 14. The no of electrons in ion is []

- a. 13 b. 12 c. 11 d. 10

