

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

Class: 6-CO*,CO,F1, F2, F3

Marks: 100

Sub: Maths , Physics

Time: 2 ½ Hrs

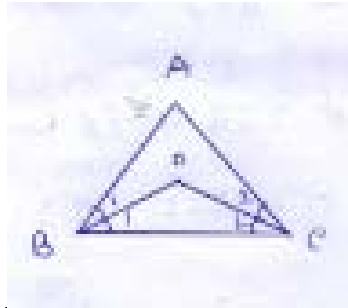
I. Objective type questions :

50 × 2= 100 M

Maths

1. In $\triangle ABC$, the bisector of $\angle B$ and $\angle C$ intersect each other at a point 'O' the value of $\angle BOC =$

- _____
- a. $90 + \frac{1}{2}\angle A$ b. $90 - \frac{1}{2}\angle A$
 c. $\frac{\angle A}{2}$ d. $2 \times \angle A$

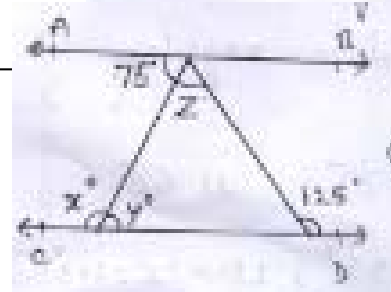


2. The complimentary angle of 72° is _____ []
 a. 36° b. 18° c. 28° d. 45°

3. In the figure the values of x,y,z are _____ []
 a. $65^\circ, 115^\circ, 65^\circ$ b. $65, 65, 115$
 b. $115^\circ, 65^\circ, 115^\circ$ d. none

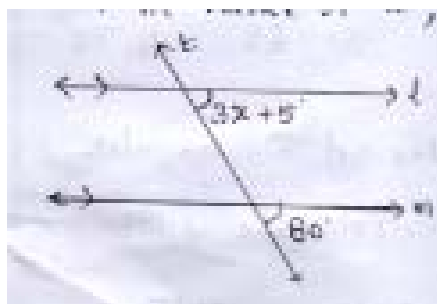


4. In the given figure $AB \parallel CD$, find x,y,z _____ []
 a. $105^\circ, 75^\circ, 50^\circ$ b. $75^\circ, 75, 75$
 b. $60, 60, 60,$ d. none

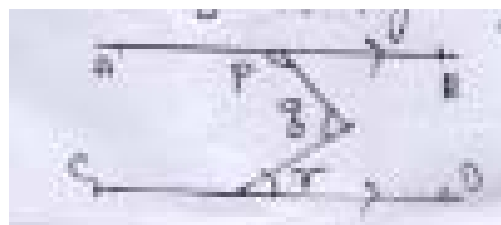


5. Find the value of x, where l, m are parallel , the angle are $(3x+5)^\circ, 80^\circ$ []

- a. 5° c. 25°
 b. 15° d. 35°

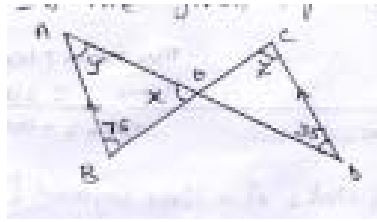


6. In the given figure $AB \parallel CD$, $P+q-r =$ _____ []
 a. 90° c. 45°
 b. 180° d. none



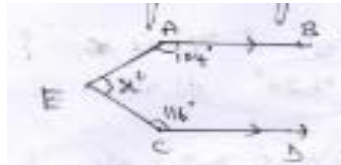
7. In the given figure, $AB \parallel CD$, $\angle ABC = 75^\circ$, $\angle CDA = 35^\circ$ find $x =$ _____

- []
 a. 60° c. 80°
 b. 70° d. 90°



8. In the given figure $AB \parallel CD$. The angles are $\angle EAB = 104^\circ$, $\angle ECD = 116^\circ$. Find $x =$

- []
 a. 120° c. 160°
 b. 140° d. 200°



9. The sum of the interior angles of a polygon of 54 sides is []

- a. 360° b. 540° c. 720° d. 900°

10. Each exterior angle of a regular Hexagon is []

- a. 90° b. 108° c. 72° d. 60°

11. In $\triangle ABC$, $\angle A + \angle B = 125^\circ$, $\angle B + \angle C = 113^\circ$ find $\angle B =$ _____ []

- a. 48° b. 58° c. 68° d. 78°

12. The number of sides of a regular polygon, if each interior angle is 150° []

- a. 9 b. 10 c. 12 d. 15

13. $\frac{2a}{3} + \frac{3a}{5} =$ _____ []

- a. $\frac{19a}{15}$ b. $\frac{5a}{8}$ c. $\frac{a^5}{15}$ d. $\frac{5a}{15}$

14. $\sqrt{3^2 + 4^2} =$ _____ []

- a. 7 b. 25 c. 12 d. 5

15. The rational Number that cannot be expressed as terminating decimal is _____ []

- a. $\frac{25}{8}$ b. $\frac{17}{25}$ c. $\frac{5}{7}$ d. $\frac{5}{2}$

16. $\bar{5}$ is a _____ number []

- a. Irrational b. Rational c. Natural d. Whole

17. Given $\sqrt{729} = 27$, find value of []

$$\sqrt{0.0729} + \sqrt{7.29} + \sqrt{729}$$

- a. 29.97 b. 27.79 c. 729 d. 270

18. $\sqrt{1\frac{9}{16}} =$ _____ []

- a. $1\frac{1}{4}$ b. $1\frac{2}{4}$ c. $1\frac{3}{4}$ d. $\frac{4}{5}$

19. Simplify $56 - [47 - \{7 \times 8 + (9 - 2 \times 5)\}]$ _____ []

- a. 48 b. 64 c. 66 d. 68

20. To what power (-2) should be raised to get 16 ? []
 a. 3 b. 4 c. 5 d. 8
21. Lowest form of $\frac{-24}{36}$ is _____ []
 a. $\frac{2}{3}$ b. $\frac{-2}{3}$ c. $\frac{12}{18}$ d. $\frac{-12}{18}$
22. $\frac{1}{4}$ as a rational number with denominator -36 is []
 a. $\frac{1}{9}$ b. $\frac{-1}{9}$ c. $\frac{-9}{-36}$ d. $\frac{-1}{9}$
23. The sum of $\frac{2}{3} + \frac{-3}{5} + \frac{1}{6} + \frac{-8}{15}$ is _____ []
 a. $\frac{3}{10}$ b. $\frac{4}{10}$ c. $\frac{5}{10}$ d. $\frac{-3}{10}$
24. What should be subtracted from $\frac{5}{9}$ to get $\frac{2}{3}$ []
 a. $\frac{1}{9}$ b. $\frac{-6}{9}$ c. $\frac{-1}{9}$ d. $\frac{6}{9}$
25. The sum of two rational numbers is 8. If one of the number is $\frac{15}{7}$. Then other ____ - []
 a. $\frac{7}{41}$ b. $\frac{-7}{41}$ c. $\frac{-41}{7}$ d. $\frac{41}{7}$
26. The square root of 12544 _____ []
 a. 102 b. 112 c. 122 d. 124
27. $2\sqrt{27} - \sqrt{75} + \sqrt{12} =$ _____ []
 a. $1\sqrt{3}$ b. $2\sqrt{3}$ c. $3\sqrt{3}$ d. $4\sqrt{3}$
28. If $a * b = a + b - ab/2$ then $3*4 =$ _____ []
 a. 7 b. 5 c. 9 d. 1
29. 18 men can do a piece of work in 18 days then how many men can do it in 27 days?
 a. 6 b. 12 c. 18 d. 15
30. If 4: x :: 12 : 9 then x = _____ []
 a. 5 b. 7 c. 3 d. 9

Physics

31. The density of a substance is 0.7 g/cc. Find the mass of the substance occupied in 200cc []
 a. 120g b. 130g c. 140g d. 150g
32. Find the relative density of the substance whose density is 0.45 g/cc []
 a. 0.45 b. 0.35 c. 0.55 d. 0.66
33. Find mass of the substance containing in a volume of 800cc whose SG is 0.75 []
 a. 300g b. 400g c. 600g d. 500g
34. Equal volumes of two substances whose densities are d_1 and d_2 are mixed homogeneously. Find the density of the mixture []
 a. $\frac{d_1 - d_2}{2}$ b. $\frac{d_1 + d_2}{2}$ c. $d_1 + d_2$ d. $\frac{2d_1d_2}{d_1 + d_2}$

35. Two substances having densities 2g/cc & 5g/cc are mixed homogeneously to get a mixture of density 3g/cc. Find the ratio of their volumes []
 a. 1 : 2 b. 2 : 1 c. 3 : 1 d. 1 : 1
36. The thrust acting on the bottom of water tank is 100N. Its area is 10m². Find the pressure in Pa
 a. 5pa b. 10pa c. 15pa d. 20 pa []
37. The word "Electron" belongs to the language of []
 a. Greed b. Latin c. Arabic d. Purssian
38. The substances which do not allow current pass through them are called []
 a. Conductors b. semi conductors c. Insulators d. none
39. A steady current of 0.5A flows through a wire. The charge passing through the wire, one minutes is
 a. 30 coulombs b. 1.3 coulombs c. 3.2 coulombs d. 15 coulombs []
40. A silver wire carries a charge 90 coulombs in one hour and 15 minutes then current through the silver is []
 a. 0.2 A b. 0.02 A c. 2 A d. 20A
41. How much energy is given to each coulomb of charge through a 6v battery []
 a. 9.6×10^{-18} J b. J c. 6×10^{-18} J d. 6J
42. What is the total e.m.f when three cells of voltage 1v, 1.5v and 2v are connected in series []
 a. 4.5 v b. 2v c. 2.25 v d. 1v
43. On sunny day, the day temperature is 40°C. Express it in Kelvin and in Faherenheit scales []
 a. 114k, 333F b. 313k, 104F c. 323k, 100F d. 300K, 100F
44. The temperature of the body is found as 243°K. Find temperature in Celsius, Reaumer scale []
 a. 10, 20 b. -30, -24 c. -20, -30 d. 20, 40
45. The unit of current in SI system is []
 a. Ampere b. volt c. ohm d. none
46. A student fills his bucket with 10 kg hot water at 60°C He returns after a while and found that the temperature of water become 30°C find the heat lost by the water []
47. In the month of Jan, the night temperature in Hyd is recorded as 15°C Express 17 Kelvin and in Fahrenheit
48. Water boils at a temperature of 80°C at the top of certain maintains Express it Reaumer Scale and Fahrenheit Scale.
49. The temperature recorded by Celsius thermometer and Fahrenheit thermometer are numerically equal. What is the temperature of the body?
50. The temperature of the body is found as 40°R. Find temperature in Kelvin.