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

Class: 6- F1, F2, F3   **Marks: 100**
Sub: Maths , Physics   **Time: 2 ½ Hrs**

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I.   **Objective type questions :**   **50 × 2= 100 M**

Maths

1. 3 less than 2 times 'x' in symbol form   [   ]
        a. 2x-3   b. 3-2x   c. 2x+3   d. 3x-2

2. A two digit number having x in unit place and 2 in tens place is   [   ]
        a. 20+x   b. 20x   c. 2 + x   d. 2x

3. If $\dfrac{x+1}{3} - \dfrac{x-1}{4} = 1$ Then value of x is   [   ]
        a. 6   b. 7   c. 5   d. 4

4. If $\dfrac{2x+1}{7x-2} = \dfrac{3}{5}$ then the value of x is   [   ]
        a. 2   b. 1   c. 3   d. 4

5. If the sum of 3 consecutive number is 255 then the numbers are   [   ]
        a. 83, 84, 85   b. 84, 85, 86   d. 86, 85, 84   d. 80, 82, 83

6. If the angle of triangles are 3x+20, 4x, 6x+30 then value of x is   [   ]
        a. 10   b. 50   c. 40   d. 90

7. If $3x-3\dfrac{1}{3} = 8\dfrac{2}{3}$ then x = _____   [   ]
        a. 2   b. 3   c. 4   d. 5

8. If 4(2-x) + 3(3-x) = -4 then the value of _____   [   ]
        a. 7   b. 3   c. 2   d. 4

9. IF the present age of pooja is 'y' years her age after 9 years is _____ (in yrs)   [   ]
        a. 9-y   b. y – 9   c. y + 9   d. 9y

10. '8' added to half of x is equal to 16 in symbolic form is   [   ]
        a. 2x+8 = 16   b. $\dfrac{x}{2}+8 = 16$ c. $\dfrac{x}{8}+2 = 16$ d. $\dfrac{x}{3}+8 = 16$

11. What is the 40% of 360 in _____   [   ]
        a. 144   b. 1440   c. 90   d. 900

12. 23% of a number is 46. Then the number is _____   [   ]
        a. 50   b. 100   c. 200   d. 400

13. Sita had Rs.1600 with her if he spent 20% of money the money left with her _____   [   ]
        a. 320   b. 1280   c. 1200   d. 1350

14. The value of machine reduces by 20% every year. If the present value is 18,000 what will its value
        a. 3600   b. 9600   c. 14400   d. 15000   [   ]

15. Ram's income is 25% more than the income of his wife. By how much percent is his wife's income less that his income   [   ]
        a. 20%   b. $16\dfrac{2}{3}$ %   c. 25%   d. 30%

16. If 15% of 'x' is 600 then x = _____   [   ]
        a. 2000   b. 4000   c. 5000   d. 6000

17. The strength of population in school is 3000 in that 60% are boys then no. of boys =   [   ]
        a. 1500   b. 1800   c. 1200   d. 1000

18. 58% in decimal form   [   ]
        a. 5.8   b. 0.58   c. 580   d. 0.058

19. Ramu got 200 rupees profit on his Rs 4000 investment. The % of profit   [   ]
        a. 4%   b. 5%   c. 10%   d. 15%

20. 70% of students did not go for picnic then _____ of students went for picnic   [   ]
        a. 20%   b. 30%   c. 40%   d. 50

21. Varma bought a T.V for Rs. 5000 and sold it for 6000. Then his profit or loss percent is [   ]

a. 20%　　　　　　b. 30%　　　　　　c. 40%　　　　d. 50%

22. If the cost price of 18 oranges is same as the selling price of 16 oranges then gain percent is[   ]
　　　a. 10%　　　　b. 12 ½%　　　　c. 15%　　　　　d. 16 2/3%

23. A man buys a cycle for Rs. 1400 and sells it at loss of 15% what is the selling price of the cycle
　　　a. 1300　　　　b. 1200　　　　c. 1000　　　d. 1190

24. If the selling price is doubled the profit triples, find the profit percent　　　　　　[　　　]
　　　a. 25%　　　　b. 50%　　　　c. 75%　　　d. 100%

25. Gain = _____　　　　　　　　　　　　　　　　　　　　　　　　　[　　　]
　　　a. Sp –cp　　　　b. cp – sp　　　　c. cp + sp　　　　d. none

26. On selling 17 balls at Rs. 720 there is a loss equal to the cost price of 5 balls The cost price of ball is
　　　a. Rs. 50　　　　b. Rs. 60　　　　c. 70　　　　　d. Rs. 80

27. If the selling price of 10 Pens is equal to the cost price of 14 pens. Find the gain percent　　[　　　]
　　　a. 40%　　　　b. 60%　　　　c. 80%　　　d. 100%

28. A man bought 542 kg of sugar for 7560.90 and sold it so as to gain 20% the s.p per kg of sugar is
　　　a. Rs. 15　　　　b. Rs. 16.74　　　　c. Rs. 17.95　　　　d. 13.95

29. If loss is 1/3 of sp then loss percentage is　　　　　　　　　　　　　　[　　　]
　　　a. 25%　　　　b. 26%　　　　c. 30%　　　　d. 32%

30. A shopkeeper buys a 50 litres of oil for 6250 and sell it at Rs. 130 per litre. His loss (or) gain percent is
　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　[　　　]

　　　a. Gain 4%　　　　b. loss 4%　　　　c. gain 6%　　　　d. loss 6%

Physics

31. Workdone on a body can be　　　　　　　　　　　　　　　　　　[　　　]
　　　a. Positive　　　　b. negative　　　　c. zero　　　d. all the above

32. If a porter (of height 150cm) lifts the load of 20kg from railway platform and keeps on his head the
workdone by him on the load is　　　　　　　　　　　　　　　　[　　　]
　　　a. 200J　　　　b. -300J　　　　c. zero　　　d. 300J

33. A 10kg box is kept on a horizontal surface A horizontal force moves the box through a distance of 10m
with an acceleration of 1m/s². The amount of work done by force is　　　　[　　　]
　　　a. 200J　　　　b. 100J　　　　c. zero　　　d. 200J

34. Units of the work　　　　　　　　　　　　　　　　　　　　[　　　]
　　　a. Newton　　　　b. Joule　　　　c. N/m　　　d. J/sec

35. A book of mass 4kg is on the table of height 5m. Its potential energy is　　　[　　　]
　　　a. 20J　　　　b. -200J　　　　c. zero　　　d. 200J

36. A 100 kg man is running uniformly with speed of 2m/s his kinetic energy is　[　　　]
　　　a. 20J　　　　b. -200J　　　　c. zero　　　d. 200J

37. A 4 kg vulture is flying with speed of 5m/s in the sky at a height of 25m Its potential energy is
　　　a. 50J　　　　b. 1000J　　　　c. zero　　　d. 100J

38. The kinetic energy of a 4kg body is 50J. The speed of the body is　　　　　[　　　]

39. If the mass of the body is doubled and its velocity is halved then its kinetic energy is[   ]
　　　a. E　　　　b. ½ E　　　c. ¼ E　　　d. 2E

40. A body of mass m which is moving with velocity 'v' has momentum p. If the mass of the body is
doubled and its velocity is doubled then its momentum is　　　　　　　[　　　]
　　　a. P　　　　b 2p　　　　c. 4p　　　d. 8p

41. The momentum of a body having kinetic energy 'E' is halved then the find kinetic energy is
　　　a. 2E　　　　b. E/2　　　　c. 4E　　　d. E/4　　　　　　　[　　　]

42. A body has momenta in the ratio of 2 : 3 at different instant of times. The ratio of K.E at those instant is
　　　　　　　　　　　　　　　　　　　　　　　　　　　　　[　　　]
　　　a. 2:3　　　　b. 3:2　　　c. 4 : 9　　　d. 9 : 4

43. A body of mass 4 kg is at rest on the table. Due to application of force its velocity changed to 5m/s after
travelling a distance of 10 m. The work done by the force is　　　　　　[　　　]
　　　a. 25J　　　　b. 50J　　　c. 2.5J　　　d. 5J

44. A body of mass 5kg moving with a velocity of 6m/s comes to rest due to external force find the work
done by the force is　　　　　　　　　　　　　　　　　　　　[　　　]
　　　a. 60J　　　　b 90J　　　　c. -60J　　　d. -90J

45. The intial kinetic energy of a body is 50J. Find the amount of work done by the force if the final kinetic energy is 150J   [   ]

      a. 50J   b. 100J   c. 200J   d. 250J

    Descriptive type questions

46. If the workdone by the force to double the speed of a body is 300J then find the amount of work done by the force to triple the initial speed of the body?

47. The kinetic energy of a body is five times to that of another body when they are moving with same velocity. Find the ratio of their mass?