Sheet-1

Problem Based on Percentage

1. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was :

2500   2700   2900   3100

2. Fresh fruit contains 68% water and dry fruit contains 20% water. How much dry fruit can be obtained from 100 kg of fresh fruits ?

20   30   40   50

3. If 20% of a = b, then b% of 20 is the same as :

4% of a   6% of a   8% of a   10% of a

4. The value of a machine depreciates at the rate of 10% every year. It was purchased 3 years ago. If its present value is Rs. 8748, its purchase price was :

10000   12000   14000   16000

5. A student multiplied a number by 3/5 instead of 5/3, What is the percentage error in the calculation ?

54 %   64 %   74 %   84 %

6. if the price of a book is first decreased by 25% and then increased by 20%, then the net change in the price will be :

10   20   30   40

7. Gaurav spends 30% of his monthly income on food articles, 40% of the remaining on conveyance and clothes and saves 50% of the remaining. If his monthly salary is Rs. 18,400, how much money does he save every month ?

3864   4903   5849   6789

8. A student has to obtain 33% of the total marks to pass. He got 125 marks and failed by 40 marks. The maximum marks are :

500   600   800   1000

9. If A's height is 40% less than that of B, how much percent B's height is more than that of A?

66.66%   76.66%   96.66%   86.66%

10. 405 sweets were distributed equally among children in such a way that the number of sweets received by each child is 20% of the total number of children. How many sweets did each child recieve ?

9   10   11   12

11. A man spends 35% of his income on food, 25% on children's education and 80% of the remaining on house rent. What percent of his income he is left with ?

6 %   8%   10 %   12 %

12. If 75% of a number is added to 75, then the result is the number itself. The number is :

100   200   300   400

13. In an election only two candidates contested 20% of the voters did not vote and 120 votes were declared as invalid. The winner got 200 votes more than his opponent thus he secured 41% votes of the total voters on the voter list. Percentage votes of the defeated candidate out of the total votes casted is:

47.5%   41%   38%   45%

14. The ratio 5 : 4 expressed as a percent equals :

12.5 %   40 %   80 %   125 %

15. The population of a town was 1,60,000 three years ago, If it increased by 3%, 2.5% and 5% respectively in the last three years, then the present population in

155679   167890   179890   177366

16. A's salary is 40% of B's salary which is 25% of C's salary. What percentage of C's salary is A's salary ?

10   20   30   40

17. In a History examination, the average for the entire class was 80 marks. If 10% of the students scored 35 marks and 20% scored 90 marks, what was the average marks of the remaining students of the class ?

25   50   75   100

18. What percent of 7.2 kg is 18 gms ?

.25%   .5%   .75%   1%

19. A number is decreased by 10% and then increased by 10%. The number so obtained is 10 less than the original number. What was the oiginal number ?

1000   2000   3000   4000

20. In a competitive examination in State A, 6% candidates got selected from the total appeared candidates. State B had an equal number of candidates appeared and 7% candidates got selected with 80 more candidates got selected than A. What was the number of candidates appeared from each State ?

4000   8000   12000   16000

21. 270 candidates appeared for an examination, of which 252 passed. The pass percentage is :

(91 + 1/3)%   (93 + 1/3)%   (97 + 1/3)%   (98 + 1/3) %

22. If x is 80% of y, then what percent of 2x is y?

65.5 %   64.5 %   63.5 %   62.5 %

23. A housewife saved Rs. 2.50 in buying an item on sale. If she spent Rs. 25 for the item, approximately how much percent she saved in the transaction ?

8   9   10   11

24. 1100 boys and 700 girls are examined in a test; 42% of the boys and 30% of the girls pass. The percentage of the total who failed is :

58   62 *2/3   64   67

25) A textile worker's wages are increased by 10% and afterwards decreased by 10 %. Find the change percentage in his wages.

a. 2 % increase   b. 4% increase   c. 1% decrease   d. 4% decrease

26) In an examination, the percentage of students qualified to the students appeared from school 'P' is 70%. In school 'Q', the number of students appeared is 30% more than the students appeared from school 'P' and the number of students qualified from school 'Q' is 50% more than the students qualified from school 'P'. What is the % of students qualified to the number of students appeared from school 'Q' ?

a. 80.76%   b. 75.5%   c. 60.50%   d. 43 %

27) A fruit seller had some mangoes. He sells 30% mangoes and still has 280 mangoes. Find the number of mangoes he had.

a. 588 mangoes   b. 400 mangoes   c. 672 mangoes   d. 700 mangoes

28) The population of a city is 160,000. If it increases at the rate of 6% per annum, then what will be its population 2 years hence?

a. 268942   b. 186935   c. 179776   d. 167425

29) The number which exceeds 12% of it by 52.8 is:

a. 50   b. 52   c. 58   d. 60

30) If the sales tax be reduced from 4 (1/3) % to 2 (1/2) %, then what difference does it make to a person who purchases a bag with marked price of Rs. 8000?

a. Rs. 156.66   b. Rs. 150.23   c. Rs. 146.66   d. Rs. 135.06

31) Evaluate : 28% of 400 + 45 % of 250

a. 220.3   b. 224.5   c. 190.3   d. 150

32) If the population of a city increases by 5 % annually, what will be the population of the city in 2 years time if its current population is 78000?

a. 81900   b. 85995   c. 85800   d. 90000

33)   For a candidate to clear an examination, he/she must score 55% marks. If he/she gets 120 and fails by 78 marks, the total marks for the examination is

a. 300   b. 360   c. 400   d. 320

34)   In a class, 20% of the students were absent for an exam. 30% failed by 20 marks and 10% just passed. Find the average score of the class if the remaining students scored an average of 65 marks and the cut off for passing the exam is 40.

a. 45   b. 49   c. 36   d. 40

35) If the salary of an employee is first increased by 20% and the decreased by 12%, then what is the change in his salary in percent?

a. 16% increase   b. 16% decrease   c. 5.6 % increase   d. 8 % increase

36) Find number which is 70% less than 60.

a. 18   b. 42   c. 20   d. 40

37) A man bought 6 pencils for Rs 5 and sold them at 5 pencils for Rs. 6. Calculate his gain percentage

a. 30%   b. 33%   c. 33.33%   d. 44%

38) What fraction is equivalent to 0.8% ?

a. 1/125   b. 2/25   c. 4/5   d. None of these

39) A vehicle has an insurance of 4/5 of its original value. Premium on the vehicle at the rate of 1.3% amounts to 910 Rs. What is the original value of the vehicle?

a. 78,500   b. 82,500   c. 87,500   d. 90,000

40) 300 gm of sugar solution has 40% sugar. How much sugar should be added to make it 50% in the solution?

a. 55 gm   b. 60 gm   c. 70 gm   d. 40 gm