CHAPTER 5

APPLICATIONS OF PERCENTAGES

More Questions for Practice

1. Express:

    (*i*) 90 paise as a per cent of ₹ 6

    (*ii*) 50 minutes 18 seconds as a per cent of 2 hours

    (*iii*) 4 m 36 cm as a per cent of 7 m 12 cm

    (*iv*) 350 g as a per cent of 9 kg

2. Answer the following questions:

    (*i*) 21 is $23\frac{1}{3}\%$ of what number?   (*ii*) 14 is what per cent of 84?

    (*iii*) 23 kg is $57\frac{1}{2}\%$ of how many kilograms?   (*iv*) What per cent is 160 metres of 4 km?

3. In the Municipal election, there are two candidates *A* and *B* contesting from a constituency. Total number of voters in this constituency is 65500, out of which only 70% votes were polled. If the 54% of the polled votes were cast in favour of *B*, how many votes did *A* get?

4. In a school library, 40% of the books are in Hindi, 40% of the remaining books are in English and the remaining books are in regional languages. If the number of books in English is 4800, find the total number of books in the library.

5. Number *x* is 10% more than number *y*. Number *y* is 10% more than number *z*. How much per cent is number *z* less than number *x*?

6. *A*'s income is 25% more than *B*'s. How much per cent is *B*'s income less than that of *A*'s?

7. Meenal's age is 10% of Anjali's age and 20% of Prerna's age. What per cent of Anjali's age is Prerna's age?

8. Pawan's income is 25% more than that of Anil's income. By what per cent is Anil's income less than Pawan's income?

9. (*a*) Find the number which when increased by 10% becomes 88.

    (*b*) Find the number which when decreased by 35% becomes 5395.

10. In measuring a line segment of length 2.5 cm, it was measured as 2.55 cm by mistake. Find the error per cent.

11. At present a tank holds 60 litres of water. It is only 30% full. How many more litres of water should be put in this tank so that it is 50% full?

12. Out of a monthly salary of ₹ 4,500, Kavita saves one third. Of the remainder, she spends 50% on food and 20% on house rent. How much does she spend on food and house rent together?

13. The populations of two towns were equal in a particular year. Subsequently, the population of one town increased by 8% and the population of the other town decreased by 6%. Then the population of the two towns together was 45,854. What was the population of each town in that particular year when the populations were equal?

14. Mr. Sinha earns ₹ 5,500 per month. He spends 85% of the amount and saves the rest. On 1st January his salary was increased by 10%. He now increased his expenses to 87% of his salary. How much less or more does he save now?

15. When 60% of a number is added to 60, the result is the same number. Find the number.

16. The weight of a 3 month old baby is 6.08 kg. This is 190% of her weight at birth. Calculate the baby's birth weight.

ANSWERS

1. (i) 15%   (ii) $41\frac{11}{12}\%$ (iii) $61\frac{21}{89}\%$ (iv) $3\frac{8}{9}\%$

2. (i) 90   (ii) $16\frac{2}{3}\%$ (iii) 40 kg   (iv) 4%

3. 21091   4. 20000   5. 17.4%   6. 20%   7. 50%   8. 20%

9. (a) 80   (b) 8300   10. 2%   11. 40 litres   12. ₹ 2100   13. 22700

14. He saves ₹ 38.50 less now.   15. 150   16. 3.2 kg.