Introduction to Ratio

1. **Write T for true and F for false statement.**

   a. A ratio has no unit. ☐

   b. A ratio compares only two numbers. ☐

   c. A ratio does not compare two numbers only. ☐

   d. A ratio of two quantities is their comparison by difference. ☐

2. **Express the following in ratios:**

   a. In a class the number of girls in the merit list of the board examination is five times that of boys. _____

   b. The number of students passing the Science test is four-fifth of the number that appeared. _____

   c. One part of milk and three parts of water is required to prepare tea. _____

   d. The length of a rectangle is four times of its breadth. _____

   e. One part oxygen and two parts of hydrogen by volume combine to form water. _____

3. **Choose the correct answer:**

   a. The first term of a ratio is called:

   i) antecedent ☐ ii) consequent ☐ iii) extreme ☐

   b. The last term of a proportion is called:

   i) fourth term ☐ ii) middle term ☐ iii) third term ☐

   c. The ratio 28 : 35 in the simplest form is:

   i) $\frac{7}{5}$ ☐ ii) $\frac{4}{5}$ ☐ iii) $\frac{5}{4}$ ☐

   d. The ratio of 20 seconds to 20 minutes is:

   i) $\frac{1}{60}$ ☐ ii) $\frac{3}{20}$ ☐ iii) $\frac{4}{15}$ ☐

e. The value of x, if 4, x, 32 and 40 are in proportion is

i) 5 ☐ ii) 10 ☐ iii) 6 ☐

f. If a : b :: c : d then a and d are called

i) a middle and d extreme term ☐

ii) middle terms ☐

iii) extreme terms. ☐

4. Fill in the blanks.

a. The ratio of ₹8 to 20 paise is_____.

b. If the first three terms of a proportion are 2, 3 and 6, then the fourth term is _____.

c. 6 men can do a work in 20 days. 15 men will do the same work in _____ days.

d. The value of x in the proportion 15:13 = 225: x is_____.

e. If the ratio between two quantities is 10:3 and the first quantity be 300, then the second quantity is_____.

5. Write T for true and F for false statement.

a. A ratio is a fraction. ☐

b. A ratio has a unit. ☐

c. Ratio is comparison of two quantities of the same kind, even if they are having different units. ☐

d. 8:16 = 16:8 ☐

e. If b^2 = ac, then a, b, c are in continued proportion. ☐