Subject: - Mathematics **TEST PAPER** **CBSE-7th**

Topic: - Ratio Prop.,Unitary Method, %age and S.I. **Time: - 60mins, M.M:-40**

(SECTION A – 1 MARK)

1. The ratio of the number of 30-days months to 31-days months in a year is _____.

2. The fourth proportional to 1.2, 3.9 and 2 is

a) 6.5 b) 5.6 c) 1.6 d) 4

3. To get 35% of a number, the number should be multiplied by

a) $\frac{7}{20}$ b) 3.5 c) $\frac{7}{50}$ d) 0.035

4. In what time will ₹ 1200 amount to ₹ 1344 at 6% per annum?

a) $2\frac{1}{2}$ years b) 3 years c) 2 years d) $3\frac{1}{2}$ years

5. If 10% of m is same as 20% of n, then m : n equals

a) 1 : 2 b) 2 : 1 c) 1 : 10 d) 1 : 20

(SECTION B – 2 MARKS)

1. If A : B = 3 : 5 and B : C = 6 : 7 find A : B : C

2. 26 cartons of 15 chocolates each costs ₹ 2145. Find the cost of 40 cartons of 18 chocolates each.

3. a) The speed of train is 110 km/hr. It is increased by 20%. Find the new speed of the train?
   b) If the speed is decreased by 10%, What would be the new speed?

4. At what rate of simple interest will a sum of money double itself in 20 years?

5. The length of the rope is decreased by $12\frac{1}{2}$%. What is the new length if it was 150 metres?

6. Find the mean proportional b/w $\frac{1}{36}$ and $\frac{1}{9}$?

(SECTION C – 3 MARKS)

1. Divide ₹ 414 into three parts such that first one is $\frac{2}{3}$ of the second and the ratio between second and third is 5 : 7.

2. Randhir donates ₹ 5000 to a school, the interest of which is to be used for awarding 10 scholarships of equal value every year. If the donation earns an interest of 11% per annum, find the value of each scholarship.

3. A sum of money is shared among Bobby, Sania and Veenu in the ratio 1 : 2 : 5. What percentage of money does Sania get?

4. The sum of the squares of three numbers which are in the ratio 2 : 3 : 4 is 725. What are the numbers?

5. If 15% of 40 is greater than 25% of a number by 2. Find the number.

(SECTION D – 4 MARKS)

1. In how much time would the simple interest on a certain sum be 0.125 times the principal at 10% per annum?

OR

The sides of the triangle are in the ratio $\frac{1}{3} : \frac{1}{4} : \frac{1}{5}$ and its perimeter is 94 cm. Find the length of the smallest side?

2. From the basket full of eggs, 20% of the eggs broke and 25% of the eggs were reserved for the guests. The remaining 22 eggs were consumed by the family members. How many eggs were there in the basket? How many broke and how many were kept for the guests?

OR

A sum of ₹ 400 amounts to Rs. 480 in 4 years. What will it amount to, if the rate of interest is increased by 2% p.a.?