10 SIMPLE AND COMPOUND INTEREST

Q1. Calculate the simple interest and fill in the blanks in the table given below:

Principal	Time Period	Rate of interest	Simple Interest
₹ 11500	$2\frac{1}{3}$ years	6% per half yearly	_____
₹ 32,850	36 days	11% per annum	_____
₹ 18,198	42 months	6% per annum	_____

Q2. Find the principal, which will amount to ₹ 3480 in 5 years at 9% per annum simple interest.

Answer: _____

Q3. A sum P is deposited for T years at R% per annum rate of interest and the simple interest is calculated as S1. The same sum of money at the same rate of interest is deposited for double the time period and the interest is calculated as S2. Find the difference between S1 and S2 and choose the correct option:

a.   S2 – S1 = 0

b.   S2 – S1 = PTR

c.   S2 – S1 = S1

Answer: _____

Q4. A sum P is deposited for T years at R% per annum rate of interest and the simple interest is calculated. In which of the following cases, will the simple interest double itself?

a.   principal is doubled and time period is halved

b.   rate of interest is calculated quarterly and time period is halved

c.   rate of interest is calculated half–yearly and time period is halved

Answer: _____

Q5. The difference between the compound interest and the simple interest on a certain principal for 2 years at 5% per annum is ₹ 22. Find the principal.

Principal = _____

Q6. At what rate per cent per annum will the compound interest on ₹ 5000 be ₹ 832 in 2 years?

Rate = _____

Q7. In how many years will ₹ 25000 amount to ₹ 28090 at 6% per annum compounded annually?

Answer: _____

Q8. The cost of a flat increases at the rate of 5% every year. If the present rate of the flat is ₹ 45,00,000, what will be its value after 2 years?

Answer: _____

Q9. 3 years before Ajay bought a square piece of land at ₹ 25 per m². The price of the land depreciated by 12% in the first year and by 10% in the subsequent years. Find the cost of the square piece of land having each side 10 m long.

Answer: _____

Q10. Rashmi lent ₹ 16000 on simple interest and Sushma on compound interest for 2 years at 12.5% per annum. Find the ratio of the interest received by Rashmi to that received by Sushma after 2 years.

Ratio of the interest received by Rashmi to that received by Sushma = _____

Answers

1.

Principal	Time Period	Rate of interest	Simple Interest
₹ 11500	$2\frac{1}{3}$ years	6% per half yearly	₹ 3220
₹ 32,850	36 days	11% per annum	₹ 356.4
₹ 18,198	42 months	6% per annum	₹ 3821.58

2. ₹ 2400

3. (c)

4. (b)

5. ₹ 8800

6. 8% per annum

7. 2 years

8. ₹ 49,61,250

9. ₹ 1782

10. 16 : 17