EduSahara™ Assignment

Name : Compound Interest Applications

Chapter : Comparing Quantities

Grade : CBSE Grade VIII

1. The population of a city is 40000. If the rate of increase in population is 5.00% per annum, what is the population after 1 year(s)?

(i) 42020 (ii) 41980 (iii) 41990 (iv) 42000 (v) 42010

2. The population of a city is 30000. If the rate of decrease in population is 2.00% per annum, what is the popoulation after 1 year(s)?

(i) 29400 (ii) 29380 (iii) 29410 (iv) 29420 (v) 29390

3. The present value of a machine is ₹7000.00. Suppose it depreciates at the rate of 4.00% per annum, what is the value of the machine after 1 year(s)?

(i) ₹6719.00 (ii) ₹6722.00 (iii) ₹6718.00 (iv) ₹6721.00 (v) ₹6720.00

4. The present value of a machine is ₹6000.00. Suppose it depreciates at the rate of 4.00% per annum, what was the value of the machine 1 year(s) ago?

(i) ₹6251.00 (ii) ₹6248.00 (iii) ₹6250.00 (iv) ₹6252.00 (v) ₹6249.00

5. The population of a city is 70000. If the rate of increase in population is 7.00% per annum, what is the population after 2 year(s)?

(i) 80133 (ii) 80123 (iii) 80163 (iv) 80153 (v) 80143

6. The population of a city is 60000. If the rate of decrease in population is 9.00% per annum, what is the popoulation after 1 year(s)?

(i) 54600 (ii) 54580 (iii) 54610 (iv) 54620 (v) 54590

7. The present value of a machine is ₹19000.00. Suppose it depreciates at the rate of 16.00% per annum, what is the value of the machine after 4 year(s)?

(i) ₹9459.55 (ii) ₹9458.55 (iii) ₹9460.55 (iv) ₹9457.55 (v) ₹9461.55

8. The present value of a machine is ₹14000.00. Suppose it depreciates at the rate of 19.00% per annum, what was the value of the machine 5 year(s) ago?

(i) ₹40151.61 (ii) ₹40149.61 (iii) ₹40153.61 (iv) ₹40150.61 (v) ₹40152.61

9. Let the present value of a machine be P. If it depreciates at the rate of r% per annum, the value of the machine after n years is

(i) $\frac{P}{[1-\frac{r}{100}]^n}$ (ii) $P[1-\frac{r}{100}]^n$ (iii) $\frac{P}{[1-\frac{100}{r}]^n}$ (iv) $P[1-\frac{100}{r}]^n$

10. Let the present value of a machine be P. If it depreciates at the rate of r% per annum, the value of the machine n years ago is

(i) $\frac{P}{[1-\frac{100}{r}]^n}$ (ii) $P[1-\frac{r}{100}]^n$ (iii) $\frac{P}{[1-\frac{r}{100}]^n}$ (iv) $P[1-\frac{100}{r}]^n$

Assignment Key

1) (iv)	2) (i)	3) (v)	4) (iii)	5) (v)	6) (i)
7) (i)	8) (i)	9) (ii)	10) (iii)		