EduSahara™ Assignment

Name : Compound Interest Applications

Chapter : Comparing Quantities

Grade : CBSE Grade VIII

1. The population of a city is 30000. If the rate of increase in population is 4.00% per annum, what is the population after 2 year(s)?

(i) 32438 (ii) 32428 (iii) 32458 (iv) 32468 (v) 32448

2. The population of a city is 40000. If the rate of decrease in population is 6.00% per annum, what is the popoulation after 2 year(s)?

(i) 35354 (ii) 35344 (iii) 35324 (iv) 35364 (v) 35334

3. The present value of a machine is ₹8000.00. Suppose it depreciates at the rate of 7.00% per annum, what is the value of the machine after 1 year(s)?

(i) ₹7440.00 (ii) ₹7441.00 (iii) ₹7439.00 (iv) ₹7438.00 (v) ₹7442.00

4. The present value of a machine is ₹8000.00. Suppose it depreciates at the rate of 8.00% per annum, what was the value of the machine 4 year(s) ago?

(i) ₹11167.05 (ii) ₹11169.05 (iii) ₹11165.05 (iv) ₹11168.05 (v) ₹11166.05

5. The population of a city is 70000. If the rate of increase in population is 9.00% per annum, what is the population after 1 year(s)?

(i) 76300 (ii) 76320 (iii) 76290 (iv) 76280 (v) 76310

6. The population of a city is 70000. If the rate of decrease in population is 8.00% per annum, what is the popoulation after 4 year(s)?

(i) 50168 (ii) 50148 (iii) 50128 (iv) 50158 (v) 50138

7. The present value of a machine is ₹20000.00. Suppose it depreciates at the rate of 12.00% per annum, what is the value of the machine after 5 year(s)?

(i) ₹10552.64 (ii) ₹10553.64 (iii) ₹10555.64 (iv) ₹10554.64 (v) ₹10556.64

8. The present value of a machine is ₹20000.00. Suppose it depreciates at the rate of 16.00% per annum, what was the value of the machine 2 year(s) ago?

(i) ₹28342.67 (ii) ₹28345.67 (iii) ₹28346.67 (iv) ₹28343.67 (v) ₹28344.67

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

Assignment Key

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