EduSahara™ Assignment

Name : Compound Interest Applications

Chapter : Comparing Quantities using Proportion

Grade : SSC Grade VIII

1. The population of a city is 50000. If the rate of increase in population is 3.00% per annum, what is the population after 2 year(s)?

   (i) 53065 (ii) 53045 (iii) 53035 (iv) 53025 (v) 53055

2. The population of a city is 50000. If the rate of decrease in population is 6.00% per annum, what is the popoulation after 2 year(s)?

   (i) 44190 (ii) 44170 (iii) 44160 (iv) 44200 (v) 44180

3. The present value of a machine is ₹7000.00. Suppose it depreciates at the rate of 2.00% per annum, what is the value of the machine after 3 year(s)?

   (i) ₹6586.34 (ii) ₹6590.34 (iii) ₹6589.34 (iv) ₹6588.34 (v) ₹6587.34

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 3 year(s) ago?

   (i) ₹6782.68 (ii) ₹6779.68 (iii) ₹6783.68 (iv) ₹6781.68 (v) ₹6780.68

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

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

Assignment Key

1) (ii)	2) (v)	3) (iv)	4) (iv)	5) (ii)	6) (i)