



## STANDARD 8<sup>TH</sup>: CHAPTER 14

### Compound Interest

#### Q.1. Choose the correct alternative

1. A fireman invests \$40,000 in a retirement account for 2 years. The interest rate is 6%. The interest is compounded monthly. What will his final balance be?
  - a. 45086.39.
  - b. 45088.40
  - c. 45600.50
  - d. 45678.00
2. Calculate the amount of this investment after 5 years with interest compounded yearly.
  - a. 3659.96
  - b. 3249.98
  - c. 3659.96
  - d. 3649.96
3. If the rate is  $16\frac{2}{3}\%$  =16 and the principal is 216, then calculate the CI for 2 years
  - a. 79
  - b. 76
  - c. 78
  - d. 73
4. If Rs 1200 is invested at a compound interest rate 8% per annum compounded quarterly for 12 months, find the compound interest.
  - a. 98.56
  - b. 98.91
  - c. 96.78
  - d. 94.93

5. A invested Rs. 3000 on compound interest at a rate of interest 10% for 2 years and B invested Rs. 3200 on compound interest at a rate of interest 15% for 3 years. Find total C.I. (compounded annually).
- 2296.8
  - 2398
  - 2400
  - 2345.60
6. Find the compound interest on \$5000 for 3 years at 8% per annum, compounded annually.
- 1298.56
  - 1398.56
  - 1456.60
  - 1253.30
7. Find the compound interest on \$25000 for 3 years at 6% per annum, compounded annually.
- 4675.40
  - 4765.30
  - 4775.40
  - 4367.40
8. A sum of money is put on CI for 2 years at 20%. It would fetch Rs 482 more if the interest is payable half yearly than if it were payable yearly. Find the sum.
- 30000
  - 40000
  - 80000
  - 20000
9. The CI on a sum of Rs 625 in 2 years is Rs 51. Find the rate of interest.
- 5%
  - 4%
  - 3%
  - 6%

10. Manish invested a sum of money at CI. It amounted to Rs 2420 in 2 years and Rs 2662 in 3 years. Find the rate percent per annum.
- 10%
  - 20%
  - 9%
  - 15%

**Q.2 Solve the following.**

- The compound interest on rs.30000 at 7% per annum is Rs.4347. Find period?  
(The population of a town decreased every year due to migration, poverty and unemployment. The present population of the town is 6,31,680. Last year the migration was 4%, and the year before last, it was 6%. What was the population two years ago?)
- On a sum of \$ 15000 for 2 years, if the difference between compound interest and simple interest is \$ 96. Find the rate of interest per cent per annum.
- If the simple interest on a sum of money at 5% per annum for 3 years is \$ 1200, then the compound interest on the same sum for the same period at the same rate will be .....
- Calculate the compound interest for the second and third year on \$ 20,000 invested for 4 years at 10% p.a.  
(Ans: Therefore, compound interest for the second and third year on \$ 20,000 invested for 4 years at 10% p.a. are \$ 2,200 and \$ 2,420 respectively.)
- Vijay borrowed \$ 5,000 and agreed to pay interest at the rate of 10% , 12%, and 14% for the first, second and third year respectively. Find the total amount he had to pay after 3 years.
- Sandy borrowed \$ 40960 from a bank to buy a piece of land. If the bank charges  $12\frac{1}{2}$  % per annum, compounded half-yearly, what

amount will she have to pay after  $1\frac{1}{2}$  years? Also find the interest paid by her.

7. Find the amount and the compound interest on Rs. 1,00,000 compounded quarterly for 9 months at the rate of 4% per annum?
8. A man deposited \$1000 in a bank. In return he got \$1331. Bank gave interest 10% per annum. How long did he kept the money in the bank?
9. A house is valued at £150,000. On average, the house price increases by 0.24% per month over a period of 2.5 years compound interest. What is the value of the house after this time?