Assignment 6

Due on 2020-03-11, 23:59 IST.

1. A donor borrowed a loan of Rs. 10000 at an interest rate of 10% for 2 years and paid it down into 3 monthly payments. The monthly interest payment (MIP) and the monthly principal payment (MPP) is.

   (a) Rs. 1000, Rs. 10000
   (b) Rs. 1000, Rs. 1000
   (c) Rs. 1000, Rs. 100
   (d) Rs. 1000, Rs. 10

   Answer: (b)

2. The monthly payment for the fourth payment in a 25-year payment loan is _________. (Here, P is the principal and i is the total interest).

   (a) \( \frac{P}{i} \)
   (b) \( \frac{i}{P} \)
   (c) \( \frac{P}{i+1} \)
   (d) \( \frac{P}{i+2} \)

   Answer: (c)

3. The present value of a stream of cash flows, the first of which is Rs. 10000, that grows at a rate of 4% annually for 20 years given that the interest rate is 6%.

   (a) Rs. 10000
   (b) Rs. 1000
   (c) Rs. 100
   (d) Rs. 10

   Answer: (b)

4. A mortgage loan of Rs. 150000 at 6% compounded annually for 15 years is paid off only on a monthly basis. The mortgage contract has a prepayment penalty of a quarter of a month's interest on the remaining balance. The prepayment penalty is.

   (a) Rs. 15000
   (b) Rs. 50000
   (c) Rs. 10000
   (d) Rs. 5000

   Answer: (c)

5. A sum borrowed at 16% simple interest for 9 years. The total interest he has to pay for the loan is.

   (a) Rs. 5000
   (b) Rs. 50000
   (c) Rs. 10000
   (d) Rs. 500

   Answer: (c)

6. The quarterly deposit into a sinking fund paying 7% compound interest to pay off a debt of Rs. 45000 in 12 years is.

   (a) Rs. 814.16
   (b) Rs. 7000.16
   (c) Rs. 5380.27
   (d) Rs. 8000.16

   Answer: (d)

7. If a number of payments within a year is 4, the principal or the original amount borrowed in Rs. 7200, the total number of payments throughout the maturity period is 12, and the total interest is Rs. 4800. Then actual annual percentage rate would be.

   (a) 5.87%
   (b) 12.87%
   (c) 12.78%
   (d) 12.67%

   Answer: (c)

8. A car is purchased for Rs. 30000 with a down payment of Rs. 12000 at an annual interest rate of 5% for 15 years. The unpaid balance after 10 years of making payments would be.

   (a) Rs. 30000.73
   (b) Rs. 20125.76
   (c) Rs. 10050.17
   (d) Rs. 3450.66

   Answer: (d)

9. The number of mortgage payments were left on Ram's house if the remaining balance is Rs. 10035.10, given that he purchased at 14% interest and paid off a total of monthly payment of Rs. 500 is.

   (a) 300 payments
   (b) 360 payments
   (c) 320 payments
   (d) 310 payments

   Answer: (b)

10. For 4 years hence, the depreciation in the value of his method would be.

   (a) Rs. 400
   (b) Rs. 450
   (c) Rs. 500
   (d) Rs. 600

   Answer: (c)