Assignment 4

The due date for submitting the assignment is 18 April. Any work received after this date will not be accepted.

1. A sum of Rs. 10,000 is taken as a loan from a loan agency. If the agency charges a quarterly interest rate of 3%, then the effective interest rate in a quarter, when the interest is compounded quarterly, is equal to

2. The total amount to which a sum of Rs. 75,000 would accumulate after 3 years at a nominal interest rate of 4% per year, with interest compounded annually, is equal to

3. The effective annual interest rate in this case is equal to

(A) 4.096%
(B) 4.016%
(C) 4.046%
(D) 4.036%

4. What is the principal amount?

5. A company has just purchased a plant that has a useful life of five years. The maintenance fees for the plant during the first year will be Rs. 1,000 and the maintenance fees are expected to increase at a rate of Rs. 100 per year over the remaining life. Assuming that the increase in the maintenance fee is at a constant rate and the cumulative interest to be accrued over the useful life of the plant is Rs. 5,120, the amount of money the company has to dispose in the revenue account is approximately

(A) Rs. 3,500
(B) Rs. 3,200
(C) Rs. 3,100
(D) Rs. 3,000

6. The amount of equipment financing for Rs. 75,000 at an interest rate of 5% per annum on the end of 5 months of 17 years. The value of depreciation (in lakhs) for the 5th year, calculated by using the declining balance method, is equal to

7. Which of the following

(A) Labour cost
(B) Variable cost
(C) Working capital
(D) Depreciation cost

8. For a chemical plant, the Fixed Capital Investment is Rs. 10,000 and the Working capital Investment is 40% of the Fixed Capital Investment. The annual total fixed cost is Rs. 5,000. If the total annual sales are Rs. 20,000 and the increase in the plant in 35%, what is the rate of cash inflow to the chemical plant after tax?

9. The original cost of an equipment is Rs. 1,00,000 and its Salvage Value is Rs. 10,000. The equipment is expected to have a working life of 5 years. If the annual depreciation amount for the first year calculated by using sum-of-the-year-digits method is estimated by declining balance method. The minimum fixed percentage factor for declining balance method in such case will be

10. The depreciation charge during the first year of a certain equipment can be Rs. 200,000. When the equipment is depreciated by using straight-line method, the depreciation charge during the first year of the equipment can be Rs. 300,000. The service life of the equipment (in years) is

11. An equipment has an initial investment of Rs. 75,000 and a salvage value of Rs. 10,000. What is the equipment is depreciated by using straight-line method, the depreciation charge during the first year of a certain equipment cannot be Rs. 200,000. When the equipment is depreciated by using sum-of-the-year-digits method, the depreciation charge during the first year of the equipment cannot be Rs. 300,000. The service life of the equipment (in years) is