Unit 6 - Week 4

Assignment 4

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-10-14, 23:59 IST.

1) A sum of Rs. 50,000 was taken as a loan from a loan agency. If the agency charges a quarterly interest rate of 3%, then the effective interest rate (in percent), when the interest is compounded quarterly, is equal to _____.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 12.13

1 point

1 point

2) The total amount to which a sum of Rs. 70,000 would accumulate after 3 years at a nominal interest rate of 15% per year with continuous compounding, is equal to _____. Also the effective annual interest rate in this case is equal to _____.

(a) Rs. 106461 and 15%
(b) Rs. 109782 and 17.18%
(c) Rs. 106461 and 17.18%
(d) Rs. 109782 and 16.18%

a)
b)
c)
d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
d)

3) A company has just purchased a pump that has a useful life of five years. The maintenance costs for the pump during the first year will be Rs. 1,000 and the maintenance costs are expected to increase at a rate of Rs. 250 per year over the remaining life. Assume that the maintenance costs occur at the end of each year. The company wants to set up a maintenance account to meet all future maintenance expenses. If the account earns 12% annual interest, the amount of money the company has to deposit in the account now is (Rs.) _____.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 5200,5210

1 point

4) A piece of equipment has installed cost of Rs. 50,000 and a salvage value of Rs 2,000 at the end of its useful life of 7 years. The value of depreciation (in Rupees) for the 5^{th} year, calculated by using the declining balance method, is equal to _____ (answer to the nearest integer).

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 2920,2940

1 point

1 point

5) The cost of installation of a reactor is Rs. 30 Lakhs and is expected to have a working life of 8 years. Let 'R' be the amount deposited annually in an annuity at an interest rate of 12%. In order to obtain sufficient funds to replace the reactor at the end of 8 years, the value of R should approximately be _____.

(a) Rs. 3.75 Lakhs
(b) Rs. 6.04 Lakhs
(c) Rs. 7.04 Lakhs
(d) Rs. 5.75 Lakhs

a)
b)
c)
d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
b)

6) A sale contract signed by chemical manufacturer is expected to generate a net cash flow of Rs. 1,25,000 per year at the end of each year for a period of five years. The applicable discount rate (interest rate) is 20%. The net present worth of the total cash flow is Rs. _____.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 373800,373850

1 point

1 point

7) Match the following:

Group 1	Group 2
1. Sunk cost	(A) Labour cost
2. Cost index	(B) Irrecoverable funds
3. Working capital	(C) Investment mode
4. Sinking fund	(D) Updating cost data of equipment

Options are as follows:

(a) 1-(B), 2-(D), 3-(A), 4-(C)
(b) 1-(D), 2-(B), 3-(A), 4-(C)
(c) 1-(A), 2-(B), 3-(C), 4-(D)
(d) 1-(B), 2-(D), 3-(C), 4-(A)

a)
b)
c)
d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
a)

1 point

8) For a chemical plant, the Fixed Capital Investment is 6×10^9 and the Working capital investment is 40% of the Total Capital Investment. The annual total product costs are Rs. 3×10^9 whereas the annual depreciation costs are Rs. 4×10^8. If the total annual sales are 4×10^9 and the income-tax rate is 30%, what is the net annual cash flow to the chemical plant after taxes?

(a) 8.2×10^9
(b) 8.2×10^8
(c) 4.2×10^9
(d) 4.2×10^8

a)
b)
c)
d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
b)

1 point

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 8 years. It was found out that the depreciation amount for the 2^{nd} year, calculated by using Sum of the Years Digits method was same as that calculated by Declining Balance method. The minimum fixed percentage factor for Declining balance method, in such case will be

(a) 0.2261 (b) 0.1461
(c) 0.7739 (d) 0.4679

a)
b)
c)
d)

No, the answer is incorrect.
Score: 0
Accepted Answers:
a)

10) An equipment has an initial investment of Rs. 70,000 and a Salvage value of Rs. 10,000. When the equipment is depreciated by using Sum-of-the-years-digits method, the depreciation charge during the third year of its service comes out to be Rs. 9300. The service life of the equipment (in years) is _____ (round off to the nearest integer).

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 9

1 point