Unit 7 - Week 5

Assignment 5

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

Due on 2020-10-21, 23:59 IST.

1) *1 point*

Select the correct option:

I. In general, the cash flows for the early years of operation are larger than those for later years due to the effect of the depreciation allowance.

II. Usually the revenue for the first year after start-up is less than in subsequent years.

(a) Only statement – I is true
(b) Only statement-II is true
(c) Both the statements are true
(d) Both the statements are false

a)
b)
c)
d)

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

2) *1 point*

Select the correct option.

I. Turnover Ratio represents the ratio of Gross Sales to the Fixed Capital Investment.

II. The reciprocal of Turnover Ratio is called Capital Ratio.

III. A low Turnover Ratio indicates greater efficiency on the part of the company to utilize its fixed capital to generate sales.

(a) Only statement – I and statement –II are true
(b) Only statement-II and statement – III are true
(c) Only statement-I and statement-III are true
(d) All the statements are true

a)
b)
c)
d)

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

3) *1 point*

A proposed chemical plant will require a fixed-capital investment of INR 12 crore. It is estimated that the working capital will be 30% of the total investment. Annual depreciation costs are estimated to be 10% of the fixed-capital investment. If the annual profit will be 4crore, determine the percent return on the total investment and the payout period.

(a) Percent Return on investment – 25%, Payout Period : 4 years
(b) Percent Return on investment – 22.5%, Payout Period : 4.5 years
(c) Percent Return on investment – 21.3%, Payout Period : 3.5 years
(d) Percent Return on investment – 23.3%, Payout Period : 2.3 years

a)
b)
c)
d)

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

4) *1 point*

Select the correct option.

I. The Discounted Cash Flow Rate of Return (DCFROR) can be determined as the interest rate for which the Net Present Value (NPV) at the end of the project lifetime becomes zero.

II. Lower DCFROR means more profitable project.

III. When the NPV is favourable, the DCFROR will necessarily be favourable.

(a) Only statement – I and statement –II are true
(b) Only statement-II and statement – III are true
(c) Only statement-I and statement-III are true
(d) All the statements are true

a)
b)
c)
d)

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

5) *1 point*

A compressor (COMPRESSOR-A) costs Rs. 2,00,000 and is expected to have a service life of 6 years before it requires replacement. Another compressor (COMPRESSOR-B) is available at Rs. 2,50,000 and is expected to have increased service life of 12 years. Which compressor is more economical if the cost of capital is 10%?

(a) COMPRESSOR-A is more economical.
(b) COMPRESSOR-B is more economical.
(c) Both are equivalent.
(d) Data insufficient, comparison is not possible.

a)
b)
c)
d)

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

6) *1 point*

The total fixed cost of a chemical plant is Rs. 20 lakh, the internal rate of return is 20% and the annual operating cost is Rs. 3 lakh. The annualized cost of the plant is (in lakh Rs) _____.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 6.90,7.10

7) *1 point*

A public project will have a first cost of Rs. 25,00,000, annual maintenance cost of Rs. 12,500 and minor reconstruction costs of Rs. 2,00,000 every 10 years. At an interest rate of 12% per year. The Capitalized Cost (in Rs.) of the project is _____.
(Enter 7 digit integer values)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 2699000,2699300

8) *1 point*

Two pumps are considered for a corrosive service. Which alternative would you recommend if MARR is 15% per year?

Equipment	Capital Cost(Rs.)	Equipment Life(Years)
A	25,000	4
B	35,000	6

(a) Equipment-A is recommended.
(b) Equipment-B is recommended.
(c) Both are equivalent.
(d) Data insufficient, comparison is not possible.

a)
b)
c)
d)

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

9) *1 point*

Match the list of 'Investment Description' in Column A with their estimated 'Minimum Acceptable Rate of Return' value (in percent per year) in Column B

Column A	Column B
1. New product entering into established Market, or new process technology	(A) 4 to 8 percent
2. New product or process in a new application	(B) 16 to 24 percent
3. Safe corporate investment opportunities, or cost of capital	(C) 24 to 32 percent
4. Everything new, high R & D and marketing effort	(D) 32 to 48 percent

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

a)
b)
c)
d)

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

10) *1 point*

A proposed chemical plant is estimated to have a fixed capital investment (F.C.I) of Rs. 10 crores. Assume other costs are negligible and the total investment is equal to the F.C.I. After commissioning (at t = 0 years), the annual profit before tax is Rs. 5 crores/years (at the end of each year) and the service life of the plant is 5 years. The tax rate is 35% per year and the Straight-line depreciation method is used. The salvage value is zero. If the annual interest rate is 15%, the net present value (N.P.V.) of the project in **crores of rupees** is _____.

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 2.70,3.70

1 point