MCQ Question Solving Session-3

Subject: Energy Conservation and Management

Subject Code: 2181916

Prof. Krunal Khiraiya

1. Which of the following equation is used to calculate the future value of the cash flow?

a) NPV (1 - i)^n

b) NPV + (1 - i)^n

c) NPV (1 + i)^n

d) NPV/ (1 + i)^n

NPV →

(i) →

n →

✓ NPV (1+i)^n

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2. Select the wrong statement

a) NPV of a project is equal to sum of the all present values of the cash flows ✓

b) NPV represents the net benefit over and above compensation for time and risk ✓

c) accept the project if NPV is negative ✗

d) NPV takes into account time value of money ✓

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3. If NPV = 1000 and i = 5% then the future value after 10 years is

a) 1,551

b) 614

c) 1,629 ✓

d) 645

$NPV(1+i)^n$

$1000\left(1+\frac{5}{100}\right)^{10}$

$1000(1.05)^{10}$

1000×1.6289

1628.9

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4. What is the expected Return on Investment (ROI) from the project with Rs.10 lakhs investment and annual saving of Rs.3.0 lakhs and annual operating cost of Rs.1.0 lakhs

$$ROI = \frac{\text{annual saving} - \text{annual cost}}{\text{Initial investment}} \times 100\%$$

$$= \frac{3 - 1}{10} \times 100\%$$

$$= \frac{2}{10} \times 100\% = 20\%$$

a) 20% ✓

b) 25%

c) 30%

d) 10 %

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5. ROI must always be ___ than interest rate

a) lower

b) equal

c) Higher

d) lower or equal

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6. The factor that reflects the risk of the project while evaluating the present value of the expected future cash flow is

a) life of the project

b) discount rate

c) capital cost

d) all the above

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7. What does the concept of time value of money imply

a) present value of money

b) b) future value of money

c) discounting of cash flows

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8. Which source of project financing is not from an internal source?

a) loans from employees

b) direct cash from company resources

c) new share capital

d) payment by savings

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9. In project financing, sensitivity analysis is applied because

a) almost all the cash flow methods involve uncertainty

b) of the need to assess how sensitive the project to changes in input parameters

c) what if one or more factors are different from what is predicted

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10. _____Determines the project viability in response to changes in input parameters.

a) Life cycle analysis

b) b) Financial analysis

c) Sensitivity analysis

d) Payback analysis

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11. Which one is not a macro factor in a sensitivity analysis?

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b) technology changes

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12. To judge the attractiveness of any investment, the project manager must consider:

a) Initial capital cost

b) b) Net operating cash inflows

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