

B.E. Eighth Semester (Civil Engineering) (C.B.S.)
Construction Economics & Finance

P. Pages : 3

Time : Three Hours



NKT/KS/17/7547

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Assume suitable data whenever necessary.
 10. Diagrams and chemical equations should be given whenever necessary.
 11. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain the following : 3
i) Discounted cash flow.
ii) Time value of money. 4
- b) A company is planning to expand its present business activity. It has two alternative plans for the expansion programme and corresponding cash flows are tabulated below. Each alternative has a life of 5 years and a negligible salvage value. The minimum attractive rate of return for the company is 12% suggest the best alternative to the company. 6

	Initial Investment	Yearly Revenue
Alternative 1	₹ 5,00,000	₹ 1,70,000
Alternative 2	₹ 8,00,000	₹ 2,70,000

OR

2. a) Explain the importance of construction and infrastructure in economic development and growth of India? 7
- b) Consider the following cash flow of a project. 6

Year	0	1	2	3	4	5
Cash flow	10,000	4,000	4,500	5,000	5,500	6,000

Find the rate of return of the project.

3. a) What do you understand by Turnkey construction projects ? Discuss its nature and importance. 7

- b) A company has two alternatives for satisfying its daily travel requirements of its employees for the next five years : 6
Alternative 1 : Renting a vehicle at a cost of ₹ 10,00,000 per year.
Alternative 2 : Buying a vehicle for ₹ 5,00,000 with an operating and maintenance cost of ₹ 3,50,000 per year. The salvage value of the vehicle after five years is ₹ 1,00,000
 Select the best alternative based on the present worth method of comparison using the interest of 8% compound annually.

OR

4. a) Explain the merits and demerits of division of labour in the construction industry ? 7
 b) Find the net present worth of the following cash flow series Assume $i = 15\%$ compounded annually. 6

End of Year	0	1	2	3	4	5
Cash flow (₹)	10,000	30,000	30,000	30,000	30,000	30,000

5. a) Distinguish between Oligopoly and monopoly market structure with reference to construction industry. 7
 b) What is inflation state it's impact. 7

OR

6. a) Write explanatory notes on recession and stagflation. 7
 b) Explain the features of monopolistic competitive market structure. 7
 7. a) Explain the sources of finance to the construction companies. 7
 b) Assess the need of FDI in infrastructure development of India. 6

OR

8. a) What do you understand by project cash flow ? Explain in details. 7
 b) What is technical & marketing feasibility study. 6
 9. a) Consider the following data : 7
 Current Assets ₹ 10,00,000
 Current liabilities ₹ 7,00,000
 Stocks (inventories) ₹ 4,00,000
 Calculate current ratio and acid test ratios using above data.
 b) Discuss the affordable housing schemes of government of India with their special features. 6

OR

10. a) Consider the following data : 7

<u>Items</u>	<u>₹</u>
Net Sales	12,00,000
Fixed assets	10,00,000
Inventory	3,00,000
Net worth	8,00,000

Calculate (I) Net sales to net profit (II) operating ratios (III) Net sales to fixed assets.

- b) Explain the elements of balance sheet in the context of construction industry with the help of a specimen. 6

11. a) What do you understand by working capital ? Discuss the factors which influence working capital. 7

- b) Projected profit and loss account of ABC company. 7

<u>Particulars</u>	<u>₹ In lacs.</u>
Sales	21.00
<u>Cost of production</u>	
Raw material	12.00
Wages	3.00
Other production overheads	1.80
Depreciation	<u>1.20</u>
Gross profit	3.00
Administration & selling overhead	1.80

Net profit	1.20
Stock holding period and credit period	2 months
Raw material	0.5 months
WIP (Work in progress)	1 month
Credit allowed to Debtor	2 month
Credit enjoyed from supplier	1.5 month

Calculate working capital requirement.

OR

12. a) What is capital structure ? Discuss the relevance of capital structure planning. 7

- b) Explain short term and long term financing. 7
