Reg. No.				
10g.110.			U_UI	

## IV Semester M.B.A (Day & Evening) Degree Examination, December -2024 MANAGEMENT

# Project Management and Analysis (CBCS Scheme 2019 Onwards)

Paper - 4.2.1

Time: 3 Hours

Maximum Marks: 70

#### SECTION-A

Answer any FIVE questions from the following each question carries 5 marks.

 $(5 \times 5 = 25)$ 

- 1. Explain the types and process of Negotiation
- From the following information relating to ABC Ltd Determine the NPV, the cash outlay is equal to 45 Lakh.

Year	Expected Cashflow	Certainty Equivalent Cl		
1	10,000	0.90		
2 15,000		0.85		
3 20,000		0.82		
4	25,000	0.78		

The Risk Free Rate of Interest is 5%.

Assume that you are evaluating a 5-year project involving software development. You
believe that the technology uncertainty associated with this industry leads to higher
discount rate in the future. From the following information determine NPV of the
proposal.

Year	0	1	2	3	4	5
Discount rate		14%	15%	16%	18%	20%
Investment cash flow	(12,000)	4,000	5,000	7,000	6,000	5,000



- Explain the stages of Private Equity Financing.
- Why negotiation skills to important for a project Managers. Explain.
- 6. Futura Ltd. is evaluating different dates for investing in a microelectronics project. The net future value for various dates is as follows:

Time	Net Future Value
	(Rs in millions)
0	20
1	28
2	. 33
3	36
4	38

The discount rate applicable for the project is 12%. Compute the optimal timing.

Plastic emulsion painting for a building costs Rs 300,000 and has a life of 7 years.
 Distemper painting costs Rs 180,000 and has a life of 3 years. How does the UAE of plastic emulsion painting compare with that of distemper painting? Assume a discount rate of 10%.

#### SECTION-B

Answer any THREE questions from the following each question carries 10 marks.

 $(3 \times 10 = 30)$ 

- What is project planning? Explain the tools and techniques of project planning.
- For the following project Normal Time, Normal Cost, Crash Time, and Crash Cost are given. Find the optimal project duration considering an estimated indirect cost of Rs 150 per day.

Activities	Normal Time	Normal Cost	Crash Time	Crash Cost
1 - 2	3	140	2	210
1 - 3	6	215	5	275
1 - 4	2	160	1	240
2 - 3	4	1 30	3	180
2 -4	2	170	1	250
2 - 5	7	165	4	285
3 - 5	4	210	3	290
4 - 5	3	110	2	160



10. A project involves an outlay of Rs 10 million has the following benefited associated with it

Year I		Year II		Year III	
CF (million )	P	CF	P	CF	P
4	.4	5	.4	3	.3
5	.5	6	,4	4	.5
6	.1	7	.2	5	.2

Assume that the CF are independent. Calculate the expected NPV and standard deviation of NPV assuming that risk free rate is 10%.

11. The Projected Income Statement and distributed earnings for the year n+1 given below:

Particulars	Amount
Sales	80,000
Cost of Goods Sold	60,000
Depreciation	4,000
Profit before Interest and Tax	16,000
Interest	4,000
Profit before Tax	12,000
Tax	6,000
Profit after Tax	6,000
Dividends	2,000
Retained earnings	4,000



### Additional Information:

During the year n+ 1 the firm plans to raise a secured term loan of Rs. 4,000, repay a previous term loan to the extent of Rs. 1000 and increase unsecured loans by 2000. There will be no changes in the current liabilities and previous. The company wants to purchase fixed assets of Rs 6,000 and increase in receivables by 3000. Expect cash other assets expected to remain same. The firm plans to prepare equity dividend of Rs 2,000.

Prepare Projected Cashflow Statement and Projected Balance Sheet of ABC Ltd.

#### SECTION-C

### 12. Case Study (Compulsory):

 $(1 \times 15 = 15)$ 

From the following information obtain 5 simulation value. Capital cost is 30,000, cost of capital is 10%, FC other than Depreciation is 3000, Depreciation is 2000, tax rate is 50%. Life is 5 years, salvage value is 0. The probability distribution for Q, P and V has been defined as follows.

Q			P	V		
Values	Probabilities	Values	Probabilities	Values	Probabilities	
800	0.10	20	0.40	15	0.30	
1000	0.10	30	0.40	20	0.50	
1200	0.20	40	0.10	40	0.20	
1400	0.30	50	0.10	a .		
1600	0.20					
1800	0.10					

Using the following Random numbers alternatively for Q, P & V. 53, 97, 66, 99, 13, 81, 19, 9, 31, 67, 81, 70, 38, 75, 48.

Q represents Quantity Demanded

P represents Selling price per unit

V variable cost per unit