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12MBAFM425

Fourth Semester MBA Degree Examination, June/July 2016
Project Appraisal Planning and Control

Time: 3 hrs. Max. Marks:100

Note: 1. *Answer any THREE questions from Q.No. 1 to Q.No. 6.*
2. *Question No.7 and 8 are compulsory.*
3. *Use of value table permitted.*

1 a. What is Capital Budgeting? (03 Marks)
b. Which key issues would you examine in project preliminary screening? (07 Marks)
c. Sun Ltd is considering setting up two projects A & B. The investment outlays and cash flows after taxation are as under :

Investment outlays	Project A Rs 4,00,000	Project B Rs 4,50,000
Cash inflows	Rs	Rs
Year 1	40,000	1,20,000
Year 2	1,20,000	1,60,000
Year 3	1,60,000	2,00,000
Year 4	2,40,000	1,20,000
Year 5	1,60,000	80,000

The company has a target return on capital of 10% and on this basis you are required to compare the profitability of the projects and state which alternative you consider financially more profitable. (10 Marks)

2 a. What do you mean by plant location and site? (03 Marks)
b. Discuss the sources of positive NPV. (07 Marks)
c. Explain the elementary investment strategies. (10 Marks)

3 a. What do you mean by abandonment analysis? (03 Marks)
b. Elucidate the rationale for Social Cost Benefit Analysis (SCBA). (07 Marks)
c. A firm evaluating the seven investment opportunities.

Projects	NPV	Cash outflow CF_j1	Cash outflow CF_j2	Power E_j	Managerial Requirement M_j
1	6	5	7	2	6
2	8	9	5	4	5
3	8	12	4	5	7
4	7	3	10	3	2
5	4	4	6	4	4
6	12	10	15	7	8
7	9	13	9	6	3
				$\Sigma E_j \le 18$	$\Sigma M_j \le 20$

The budget available to the firm is limited to 35 in year 1 and 30 in year 2. Develop the linear programming (LPP) formulation of the above capital budgeting problem. (10 Marks)

4 a. State the steps involved in UNIDO approach. (03 Marks)
b. What are pre – requisites for successful project implementation? Explain. (07 Marks)

c. Five projects A, B, C, D and E are available to a company.

Projects	Outlay	NPV
A	18,00,000	7,50,000
B	15,00,000	6,00,000
C	12,00,000	5,00,000
D	7,50,000	3,60,000
E	6,00,000	3,00,000

Projects B & C are mutually exclusive. Other projects are independent. Which projects should be chosen at the budget constraint of Rs 30,00,000. Use the feasible combination approach. **(10 Marks)**

5 a. What are human aspects of project management? **(03 Marks)**

b. The following information is available with respect to a flour mills projects :
Variable cost 66.67% of sales ; Fixed cost Rs 1,00,000 ; Depreciation Rs 2,00,000 ;
Tax rate is 33.33% and Cash flows for last 10 years. Find financial breakeven point if investment is Rs 2,00,00,000. Assume discount rate @ 12%. **(07 Marks)**

c. Arvind corporation is evaluating its projects under three different scenarios. It wants to manufacture a components used in the manufacture of machinery. In all three scenarios, the initial investment is Rs 80,00,000. The unit selling is Rs 1,500 , Rs 1,000 and Rs 3,000 in three scenarios. The demand is 4000 units, 7000 units and 3000 units and the variable costs are Rs 50, Rs 60 and Rs 70 per unit under three scenarios. Fixed cost are Rs 5,00,000 and depreciation Rs 3,00,000. The tax rate is 50%. What is the NPV under three scenarios if the life of the asset is 5 years and the discount rate is 24%? **(10 Marks)**

6 a. What is CAPM? What are its assumptions? **(05 Marks)**

b. ABC Ltd is evaluating different dates for investing in a project. The discount rate is applicable to the project is 12%. Determine the optimal timing of the project considering following net future values for various dates. **(05 Marks)**

Time (years)	NFV millions	PVIF	Time (years)	NFV millions	PVIF
0	10	1.00	3	23	0.712
1	15	0.893	4	26	0.636
2	19	0.797	-	-	-

c. A project was given on Jan 1, 2013 was expected to be completed by 30th Sept 2013. The project being reviewed on 1-6-2013, when the following information has been developed.
BCWS Rs 15,00,000 ; BCTW Rs 25,00,000 ; BCWP Rs 14,00,000 ;
ACC Rs 12,00,000 ; ACWP Rs 16,00,000.
Determine cost variance, schedule variance in cost terms, cost performance index, schedule performance index and estimated cost performance index. **(10 Marks)**

7 a. Discus the various means of financing the projects in India. **(10 Marks)**

b. Aditya Ltd is considering a capital project about which the following information is available :

i) The investment outlay on the project will be Rs 200 million, which consist of Rs 150 million on plant and machinery and Rs 50 million on working capital, entire outlay incurred in the beginning.

ii) The life of the project is expected to be 7 years. At the end of 7th year fixed assets fetch a net salvage value of Rs 48 million where as working capital will be liquidated at its book value.

iii) The project is expected to increase the revenue of the firm by Rs 250 million per year. The increase in cost on account of project is expected to be Rs 100 million per year. (Depreciation tax excluded). The tax rate is 30%.

iv) Plant and Machinery will be depreciated at the rate of 25% per year as per WDV method. Estimate the post tax cash flow of the project. **(10 Marks)**

8 A building project consists of the following activities :

A = Lay foundation.
B = Errect framework
C = Install mill work
D = Install wiring.
E = Install plumbing
F = plaster walls
G = Install sliding
H = Decorate the interior
I = Finish the exterior.

The interrelationship among these activities are as follows :

1. A should proceed B.
2. B should proceed C, D, E, F and G.
3. C, D, E & F should proceeds H.
4. G should preceed I.

Draw a net diagram. **(20 Marks)**

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