Fourth Semester MBA Degree Examination, June/July 2015
Project Appraisal, Planning and Control

Time: 3 hrs.   Max. Marks: 100

Note: 1. *1. Answer any THREE full questions from Q.No.1 to 6.*
2. *Q.No.7 and Q.No.8 are compulsory.*

1   a. What is capital Rationing?   **(03 Marks)**
     b. Distinguish between NPV and IRP.   **(07 Marks)**
     c. Explain BCG matrix and McKensey Matrix and portfolio planning tools.   **(10 Marks)**

2   a. What are the sources of project Idea?   **(03 Marks)**
     b. What are the phases of capital Budgeting?   **(07 Marks)**
     c. On April 1, 2012 M/s Bharat Ltd, has ₹ 900,000 share capital and ₹ 1,00,000 reserve against ₹ 7,00,000 invested in fixed assets. Stock and debtors were ₹ 1,70,000 and ₹ 50,000 Respectively and Trade and other creditor ₹ 50,000. For the growth in activity, stock level is prepared to be increased by 50%. Machinery worth ₹ 50,000 to be purchased and estimated profit for the year is ₹ 1, 50,000 after charging ₹ 50,000 as depreciation and 50% of profit for provisions for taxation.
       Advance income tax paid is ₹ 50,000 and Trade and other creditors are likely to be increased by ₹ 25,000 5% dividend is to be paid and 10% provision for dividend for next year is to be made. Debtors are estimated to be O/S for 3 months sales, sales budget shows sales of ₹ 12,00,000 for the year.
       Prepare projected Balance sheet from the above information.   **(10 Marks)**

3   a. What are the sources of positive NPV for a project?   **(03 Marks)**
     b. Discuss porter's model used for Identifying investment opportunities.   **(07 Marks)**
     c. A company is considering investment proposal to install a new milling controls at a cost of ₹ 50,000. Life of the facility is 5 year with no salvage value. The Tax rate is 35% and uses straight line method of depreciation for Tax purpose. The estimated cash flow Before tax (CFBT) are as follows :

Year	1	2	3	4	5
CFBT (₹)	10,000	10,692	12,769	13,462	20,325

Compute :   i) Payback period   ii) ARR   iii) NPV @ 10% discount rate
iv) PI @ 10% discount rate.

Note : Discount rate @ 10%

1	2	3	4	5
0.909	0.826	0.751	0.683	0.621

(10 Marks)

4   a. What are the levels of Decision making?   **(03 Marks)**
     b. Determine demand forecasting equation in the form of y = a + bx for a company sales actual number of units over 14 days from the following data.

Days	1	2	3	4	5	6	7	8	9	10	11	12	13	14
No. of units sold	10	13	14	17	18	18	19	20	22	23	22	24	24	25

(07 Marks)

c. Advice the company regarding financial feasibility of a project using decision tree approach from the following PV of future cash flow after taxes concerned with the investment proposal for expanding the capacity. The PV of future cashflow after tax are follows:

With expansion	Without expansion	Probability
3,00,000	2,00,000	0.2
5,00,000	2,00,000	0.4
9,00,000	3,50,000	0.4

(10 Marks)

5 a. Give any four sources of finance for a project. **(03 Marks)**

b. Consider the following project that are being implemented by a firm which has a capital budget constraint of ₹ 30, 00,000 and project details are on follows.

Project	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

In the above, project B and C are mutually exclusive, other projects are independent. Determine the feasible combination of projects to maximize NPV. **(07 Marks)**

c. XYZ Ltd, is considering the following two proposals :

Particulars	Proposal 'A'		Proposal 'B'	
	(₹)	Certainty (%)	(₹)	Certainty (%)
Initial investment	17000	-	15000	
Annual cash inflows				
Year 1	10,000	90	8000	90
2	10,000	80	9000	90
3	10,000	60	10,000	50

If the risk rate is 10% which of the proposal should be selected by XYZ Ltd? **(10 Marks)**

6 a. A project consists of the following activities. The activities and their time estimates are shown below.

Activity	Time in weeks		
	Optimistic Time	Most likely time	Pessimistic Time
1 – 2	3	6	9
1 – 3	4	5	12
1 – 4	4	6	8
1 – 7	2	4	6
2 – 4	6	10	20
2 – 6	3	4	5
2 – 7	5	9	13
3 – 4	3	7	11
4 – 5	2	4	6
5 – 6	4	6	8
3 – 7	2	5	8
6 – 7	4	5	6

i) Draw the network diagram.
ii) Determine critical path.
iii) Determine standard deviation.
iv) Compute the probability of completing the project in 35 weeks.
Given: probability for Normal distribution table = 0.3643. **(15 Marks)**

b. Explain the different steps in simulation process. **(05 Marks)**

7 a. A project cost ₹ 5,00,000 and yields annually profit of ₹ 80,000 after depreciation at 12% per annum but before tax of 50%. Calculate payback period. **(05 Marks)**

b. What are the objectives of capital budgeting? **(05 Marks)**

c. What are the four stages of life cycle curve? Express them on a curve. **(05 Marks)**

d. Explain the stages of UNIDO approach. **(05 Marks)**

8 The management of a capital chooser Ltd, has 5 projects A, B, C, D and E on hand. The initial outlays, annual cash flows and life of the project are as under.

Particulars	A	B	C	D	E
Initial outlay (in lakhs)	100.0	150	175	180	135
Expected annual cash inflow (in lakhs)	22	34	49	43	37
Life of the project	10	9	6	8	7

i) Find NPV and PI for each project a cost of capital of 15%.
ii) Rank the projects in order of preference based on PI criteria.
iii) Rank in projects in order of performance of NPV criteria.

Note :

Present Value of year	6	7	8	9	10
Annuity @ 15%	3.7845	4.1604	4.4873	4.7716	5.0188

(20 Marks)

* * * * *