

ME Chemical- II 3rd Sem
Project Management
2nd Sessional Jan, 2022

Time allowed: 1 hour

Max.Marks: 25

Attempt any **2 questions** carrying **12.5 marks each**

Q1. A company is considering which of two mutually exclusive projects it should undertake. The Finance Director thinks that the project with the higher NPV should be chosen whereas the Managing Director thinks that the one with the higher IRR should be undertaken especially as both projects have the same initial outlay and length of life. The company anticipates a cost of capital of 10% and the net after-tax cash flows of the projects are as follows:

Year	0	1	2	3	4	5
Cash Flows :						
Project X	(200)	35	80	90	75	20
Project Y	(200)	218	10	10	4	3

Required :

- (a) Calculate the NPV and IRR of each project.
- (b) State, with reasons, which project you would recommend.
- (c) Explain the inconsistency in the ranking of the two projects.

The discount factors are as follows :

Year	0	1	2	3	4	5
Discount Factors : (10%)	1	0.91	0.83	0.75	0.68	0.62
(20%)	1	0.83	0.69	0.58	0.48	0.41

Q2.

A project has the following characteristics

Activity	Most optimistic time (a)	Most pessimistic time (b)	Most likely time (m)
(1 – 2)	1	5	1.5
(2 – 3)	1	3	2
(2 – 4)	1	5	3

(3 – 5)	3	5	4
(4 – 5)	2	4	3
(4 – 6)	3	7	5
(5 – 7)	4	6	5
(6 – 7)	6	8	7
(7 – 8)	2	6	4
(7 – 9)	5	8	6
(8 – 10)	1	3	2
(9 – 10)	3	7	5

Construct a PERT network. Find the critical path and variance for each event.

Q3. (a) Discuss the incentives for industrially backward and Small-Scale industries

(b) Capital Investment and its types

Q4. (a) Discuss Working capital Management and Importance of liquidity in projects

(b) Sources of long term funds for business