

## APJ Abdul Kalam Technological University

## Ernakulam II Cluster

Third Semester M.Tech Degree Examination December 2017

**05ME 7441 PRACTICAL PROJECT MANAGEMENT**

Time: 3 hrs

Max. Marks 60

1.
  - a) Explain the system concept of project management. (3 Marks)
  - b) What do you mean by project planning? (3 Marks)
  - c) What is Project Management? Explain project life cycle phases with a neat sketch. (6 Marks)
  
2.
  - a) Define critical path method. (3 Marks)
  - b) Illustrate the essential difference between PERT and CPM techniques. (3 Marks)
  - c) Consider the (simplified) list of activities and predecessors that are involved in building a house. Draw a project network and find the critical path and the minimum number of days needed to build the house.

Activity	Description	Predecessors	Duration (days)
Activity A	Build foundation	—	5
Activity B	Build walls and ceilings	A	8
Activity C	Build roof	B	10
Activity D	Do electrical wiring	B	5
Activity E	Put in windows	B	4
Activity F	Put on siding	E	6
Activity G	Paint house	C, F	3

(6 Marks)

3.
  - a) Write notes on the following investment alternative evaluation methods: (i) Net Present Value method and (iii) IRR. (8 Marks)
  - b) A company is considering the following investment projects

Projects	Cash flows (Rs)			
	C0	C1	C2	C3
A	-10,000	+10,000		
B	-10,000	+7500	+7500	
C	-10,000	+2000	+4000	+12,000
D	-10,000	+10,000	+3000	+3000

Rank the project according to each of the following methods (i) Pay back method (ii) ARR (iii) IRR and (iv) NPV, assuming rates of discount of 10 & 30 percent. Assuming the projects are independent, which should be accepted. If the projects are mutually exclusive which one is the best?

(10 Marks)

**OR**

4.

- a) Discuss the five broad phases of capital budgeting. (10 Marks)
- b) XYZ company is considering three alternative projects A,B & C each requiring an investment of Rs 10000 at the beginning of the first year. The life of the project is 5 Years, 10 Years, and 10 Years respectively. If the depreciation is to be charged by straight line method. Salvage value is nil. The rate of tax is 40% and net annual profit before tax but after depreciation is Rs 4000/- for A starting from the first year, Rs5000/- for B and starting from second year and Rs 6000/- for project C starting with the third year, and required rate of return is 20%. Which project out of A, B and C should be selected by(i) Payback period method(ii) Accounting rate of return method(iii) Internal rate of return method. (10 Marks)

5.

- a) Describe a risk management plan. (5 Marks)
- b) Explain the risk management process. (5 Marks)
- c) What are the salient features of decision trees? Explain the steps in decision tree analysis? (8 Marks)

**OR**

6.

- a) What are the four types of project management roles? Describe the responsibility and authority of managers in each role. (6 Marks)
- b) “The objective of risk management is to avoid or minimize the adverse effects of unforeseen events by avoiding the risks or drawing up contingency plans for dealing with them” – Explain. (6 Marks)
- c) Explain the various features and facilities available in MS project software package. (6 Marks)