Registration no:

Total Number of Pages: 02

5th Semester Regular / Back Examination 2015-16 PROJECT MANAGEMENT

> BRANCH: MECH Time: 3 Hours Max Marks: 70 Q.CODE: T657

Answer Question No.1 which is compulsory and any five from the rest. The figures in the right hand margin indicate marks.

Q1 Answer the following questions:

(2 x 10)

B.TECH FEME6302

- a) What is the difference between projects and operations?
- **b)** Name some factors used in screening the projects.
- c) Distinguish between an activity and an event.
- d) Write the difference between AOA and AON.
- **e)** What are various time estimates of activities in PERT? How expected time is determined?
- **f)** Distinguish between direct cost and indirect cost.
- **g)** What is meant by resource leveling?
- h) Distinguish between monitoring and control.
- i) Write some tools/ charts used for project monitoring and control.
- **j)** What is post project audit?
- What are the different stages in the life cycle of a project? Highlight the major decisions to be taken at each of these stages. (10)
- **Q3** a) Write the duties and responsibilities of Project Manager.

(5) (5)

(10)

- **b)** Explain Matrix organization and its suitability for projects.
- A firm has three projects A, B and C under considerations. It has identified critical factors as availability of inputs, availability of markets, cost risk, compatibility with promoter's interest and government policy. Rating of three projects on these factors is as follows.

Factors	Weight	Score of project		
		Project A	Project B	Project C
Availability of inputs	0.25	85	90	50
Availability of markets	0.20	90	75	85
Cost	0.15	90	50	75
Risk	0.15	65	90	85
Compatibility	0.1	80	60	70
Government policy	0.15	85	90	75

Which project would you recommend and why?

Q5 The estimated project cost to set up a factory is given below.

> Cost of land Rs. 150,00,000 Cost of building Rs. 70,00,000 Cost of furniture, machines, etc. Rs. 200,00,000

The monthly expenditure to run the factory including salary to employees is Rs. 10.00.000. The factory is expected to produce 800 units of a product per month to be sold at price of Rs.5500 per unit. The material cost and processing cost for producing one unit of product is Rs. 1,600 per unit Rs. 1,000 respectively.

The working capital requirement is estimated to be Rs 80,00,000 only. Assuming cost of capital (interest) as 14% and the rate of depreciation as 10% determine whether the project is economically feasible or not. Also determine the Break Even Point.

The activities of a project and their time estimates are given below. Q6

Activity	Preceding Activity	Estimated duration in weeks	Activity	Preceding Activity	Estimated duration in weeks
А	-	5	F	B, D	6
В	А	12	G	D, E	4
С	А	5	Н	F, G	6
D	С	4			
Е	С	5			

Draw the network diagram and determine the duration of project, critical path and float for each activity.

Q7 a) Explain the Earn Value concept for measuring the progress of work made in the project.

b) Explain the project closure process.

Write short notes on any two:

(5)

a) LOB technique in Project Management

- **b)** Work Breakdown Structure
- c) GERT

Q8

d) Project Management Information System

(10)

(10)

(5)

 (5×2)