Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VIII • EXAMINATION – SUMMER • 2015

Subject Code: 182506 Date:05/05/2015

Subject Name: Managing Projects

Time: 10.30AM-01.00PM Total Marks: 70

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 What is manpower balancing? Solve the following example of project scheduling. Obtain a schedule which minimize the peak manpower requirement and also smooth out period to period variation of manpower requirement, **14**

Activity	Duration (Weeks)	Manpower Requirement
1-2	4	9
1-3	8	5
2-3	10	6
3-4	9	8
2-4	6	6
3-5	5	12
4-5	7	7

Q.2 **(a)** Define scope of the project and develop a work breakdown structure of the project of your choice. **07**

(b) Describe the different attributes of the project. **07**

OR

(b) Explain stages of project life cycle with neat sketch **07**

Q.3 **(a)** Describe various appraisal methods in project scanning and selection with suitable example **07**

(b) What is Gantt chart? Explain applications of Gantt chart with suitable case problem. **07**

OR

Q.3 **(a)** Describe investment appraisal techniques with suitable examples **07**

(b) What are the techniques can be used to determine the optimum investment schedule for a company? Explain them in detail. **07**

Q.4 **(a)** Explain different types of risks involved in projects with suitable example. **07**

(b) Discuss various components of project planning in detail. **07**

OR

Q.4 **(a)** Explain different attributes and measures for the success & failure of project. **07**

(b) What is matrix organization structure of a project organization? Describe different levels of matrix organization in detail. **07**

Q.5 Consider the network for a small maintenance project in t he following table. All given times are in days. **14**

Job	Initial node	Final node	Optimistic time	Pessimistic time	Most likely time
A	1	2	1	3	2
B	1	4	4	6	5
C	1	3	4	5	3
D	2	6	2	4	3
E	2	4	1	3	2
F	3	4	2	4	3
G	3	5	6	15	7
H	4	6	4	6	5
I	4	7	5	15	8
J	4	5	1	3	2
K	5	7	2	4	3
L	6	7	6	15	10

(i) Draw the PERT diagram representing project

(ii) What is the critical path and what is the total slack time in the network?

(iii) What is the expected time for 68%, 95% and 98% completion limits?

OR

Q.5 **(a)** Explain project control stage with suitable case problem **07**

(b) Write a short note on crashing of the project. **07**

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