Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VIII • EXAMINATION – WINTER • 2014

Subject Code: 182506 **Date: 25-11-2014**

Subject Name: Managing Projects

Time: 02:30 pm - 05:00 pm **Total Marks: 70**

Instructions:

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

Q.1 **(a)** A small project of seven activities whose time estimates (in Months) and other characteristics are given below: **10**

Activity	Immediate Predecessor	Time (Months)
A	-	4
B	-	6
C	A	2
D	B	6
E	C, B	3
F	C, B	3
G	D, E	5

Draw AOA network. Find the critical path and project duration. Also find the total slack for each activity.

(b) Draw AOA network for the following projects: **04**

Activity	Immediate Predecessor
A	-
B	A
C	A
D	A
E	C, D
F	D
G	E
H	G
I	F, H
J	B, I

Q.2 **(a)** Discus project life cycle in detail. **07**

(b) Discuss role of Project Manager **07**

OR

(b) Discuss the skill required for selection of project manager. **07**

Q.3 **(a)** Describe why planning is so important, and list the steps involved in detailed planning. **07**

(b) What is work breakdown structure? What is responsibility matrix? How are they related? **07**

OR

Q.3 **(a)** There exists a trade-off between activity duration and the associated cost. Discuss the time/cost trade off in project management. When should one resort to crashing? Discuss. **07**

(b) What is meant by Scope Creep and Change Control? Discuss **07**

Q.4 **(a)** Discuss Social Cost Benefit Analysis (SCBA) of Project. **07**

(b) Discuss steps in Project Closing Process. **07**

OR

Q.4 **(a)** What is matrix organization? How is it better from Project type Organization? Discuss. **07**

Q.4 **(b)** What is Critical Chain Project Management? Discuss **07**

Q.5 **(a)** What is EVA? Define BCWP, BCWA, and ACWP. Show all three parameters on a chart. **07**

(b) Discuss methods of Budgeting a Project. **07**

OR

Q.5 **(a)** What id Resource loading? How does it differ from resource leveling? **04**

(b) The following table gives for each activity of a project, its duration and corresponding resource requirements as well as total availability of each type of resource: **10**

Activity	**Duration (Months)**	**Manpower Required**
1 – 2	4	10
1 – 3	5	4
2 – 3	8	5
2 – 4	8	2
3 – 4	4	7

The maximum **Manpower = 10**

Under the given resource constraints find out the minimum duration to complete the project and compare the utilization of resources for that duration.

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