Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (NEW) - EXAMINATION - SUMMER 2017

Subject Code: 2182506 Date: 06/05/2017

Subject Name: Managing Projects(Department Elective III)

Time: 10:30 AM to 01:00 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) List of activities for erecting a canteen in a factory is given below. Draw the AOA network and identify critical path.

Activity	Precedence	Nor	mal	Crash		
Activity	activity	Duration	Cost	Duration	Cost	
A	-	5	3000	4	4000	
В	A	6	1200	2	2000	
С	A	4	1000	3	1800	
D	A	5	1200	3	2000	
Е	B, C, D	3	1600	3	1600	

If indirect cost is Rs. 300 per day, determine time-cost trade-off for the project.

(b) How do projects, programs, tasks, and work packages differ?

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Q.2 (a) You are required to perform earned value analysis for the project having a project 07 plan as follows:

Budget = 5 million

Activities = 20 (equally weighted)

Duration = 10 months

The spending rate is the same each month until completion. At month 5 your personnel in the field are reporting that you are 40% complete on the project and you've spent 3 million.

(b) Describe the three variances of an earned value chart and explain their 07 significance.

OR

- (b) Discuss matrix organization structure for project. How it is different from project type organization structure?
- Q.3 (a) "Project control should always focus on critical path." Comment.

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(b) The following activities are part of a project to be scheduled using CPM:

Activity	Α	В	С	D	Е	F	G
Immediate Predecessor	-	-	Α	A, B	C, D	B, D	E, F
Time (Weeks)	2	1	3	2	1	3	1

Draw the AOA network; find EST, SFT, LST, LFT for all activities. Also find the critical path and project duration.

OR

Q.3 (a) Consider a project as follows. Draw AOA network, determine expected project duration. What is the probability that the project will be completed in expected project duration?

Activity	A	В	С	D	Е	F	G	Н
Immediate Predecessor	-	Α	Α	С	B, C	B, C	С	D, E
Optimistic Time	2	0.5	1	1	6	3	1	4
Most Likely Time	2	2.5	1.5	2.5	7	4	2	6
Pessimistic	8	7.5	11	7	8	11	3	8

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	(b)	What is resource loading? How does it differ from resource leveling?	07
Q.4	(a)	Discuss Critical Chain Project Management (CCPM)	07
	(b)	What is RACI matrix? Discuss its usefulness to project manager.	07
		OR	
Q.4	(a)	List and briefly describe the ways projects may be terminated.	07
	(b)	Differentiate between general management and project management.	07
Q.5	(a)	What are some potential problems with top-down and bottom-up budgeting processes? What are some ways of dealing with these potential problems?	07
	(b)	Discuss the trade-off among the three prime objectives of project management.	07
		OR	
Q.5	(a)	Discuss Work Breakdown Structure (WBS) with an example.	07
	(b)	Discuss various skills to be considered in the selection of a project manager. ***********************************	07