Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V • EXAMINATION – SUMMER 2013

Subject Code: 152505 Date: 23-05-2013

Subject Name: Project Management

Time: 10.30 am - 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)** Differentiate between (i) project and program. Explain elements of project. **07**

(b) State and explain various network rules. **07**

Q.2 **(a)** Explain (i) scope creep (ii) hope creep (iii) effort creep (iv) feature creep. **07**

(b) Enlist various project characteristics to define classification of project. Give example of type A project. State characteristics of type A project. **07**

OR

(b) Enlist & explain six criteria to test completeness in the WBS. **07**

Q.3 **(a)** Explain conditions of satisfaction (COS). Discuss importance of COS. Describe the process for developing COS. **07**

(b) What is project definition statement (PDS)? Discuss purpose of PDS. **07**

OR

Q.3 **(a)** What is risk analysis worksheet? How is it prepared? **07**

(b) Discuss need of quality management. Describe any one quality management model. **07**

Q.4 **(a)** For the given data determine critical path and project duration. Also prepare table of floats. **07**

Activity	A	B	C	D	E	F	G
Just preceding activity	-	-	A	A	B	B	D, E
Duration (days)	10	9	7	9	8	5	11

(b) Explain 1.Dummy activity.(03) 2. Fulkerson's rules for numbering the events of a network.(04). **07**

OR

Q.4 **(a)** The time estimates for three activities A,B and C are as follows: **07**

	Optimistic time	Most likely time	Pessimistic time
A	10	12	14
B	6	8	12
C	5	10	12

Determine expected time and variance for each activity. Which activity has more reliable time estimates?

(b) Describe step by step procedure for resource leveling. **07**

Q.5 **(a)** Discuss joint planning session to develop POS. **07**

(b) Data for durations and costs of each activity are given in table. **07**

Activity	Normal Duration (Weeks)	Normal Cost (Rs)	Crash Duration (Weeks)	Crash Cost (Rs)
1-2	6	7000	3	14500
1-3	8	4000	5	8500
2-3	4	6000	1	9000
2-4	5	8000	3	15000
3-4	5	5000	3	11000

The indirect cost of the project is Rs.3000 per week. Determine the optimum cost of the project and the corresponding project duration.

Q.5 **(a)** Differentiate between 1. CPM & PERT. 2. Direct cost & indirect cost. **07**

(b) Enlist & explain briefly various methods to estimate activity duration. **07**

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