Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII • EXAMINATION - SUMMER 2014

Subject Code: 181501 Date: 05-06-2014

Subject Name: Project Management

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) What do you understand by project management? Describe the steps required for 07 project management approach.
 - (b) Explain the most commonly used indicators for project management performance. **07** When can you say that a project is a total failure?
- Q.2 (a) Explain the concept of feasibility report with suitable example.
 - (b) What are the different factors to be considered during technical appraisal of a project? 07
 - (b) Discuss the role of S.S.I. in India.
- Q.3 (a) Explain risk involved in selection of a project.
 - (b) Mention the areas of application of PERT/CPM with illustrations. 07

OR

- Q.3 (a) What is industrially backward area? Write the advantages and disadvantages of starting 07 an industry in backward area.
 - (b) Explain in brief the difference between PERT and CPM. Explain the circumstances 07 under which one is preferred to other.
- Q.4 (a) Demonstrate the concept of recourse allocation with a suitable example. 07
 - (b) A small project consisting of ten activities. Draw PERT network and determined the 0' critical path. Prepare the activity schedule for the project.

Activity	Preceding	Time estimated in weeks		
	activity			
		optimistic	Most likely	pessimistic
A	-	4	5	12
В	-	1	1.5	5
С	A	2	3	4
D	A	3	4	11
Е	A	2	3	4
F	С	1.5	2	2.5
G	D	1.5	3	4.5
Н	В,Е	2.5	3.5	7.5
I	Н	1.5	2	2.5
J	F,G,I	1	2	3

OR

Q.4 (a) Explain the trade-off in network crashing.

07

07

Activity	Normal		Crash	
	Time(days)	Cost(Rs.)	Time(days)	Cost(Rs.)
1-2	8	200	6	400
1-3	4	300	2	700
2-4	2	100	1	180
2-5	10	200	5	800
3-4	5	200	1	400
4-5	3	160	1	200

Q.5 (a) Explain the critical and sub-critical paths in a network.

07

(b) The activities involved in M/S PNG(p)ltd., MORBI is listed below with time estimates. **07** Draw the network for the given activities and carryout the critical path calculations.

	<i>-</i>	1
Activity	Immediate	time
	predecessor	
1-2		6
1-3		5
2-4	1-2	7
3-4	1-3	3
4-5	2-4	2
4-6	2-4 & 3-4	8
5-7	4-5	9
6-7	4-6	5
7-8	6-7 & 5-7	4

OR

Q.5 (a) Explain recourse scheduling.

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(b) For the following data ,draw a network and establish a critical path.. Also draw a square network assuming that all the activities begins at the earliest start time. Adjust the project work such that there will be smooth demand for these recourses.

ACTIVITY	DURATION	NO.OF LALOURS
1-2	3	5
2-4	2	3
2-3	3	7
3-4	0	0
3-5	3	2
4-5	7	2
3-6	2	1
5-6	6	6
4-6	5	5
