

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 project management approach. **07**

(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. **07**

(b) What are the different factors to be considered during technical appraisal of a project? **07**

OR

(b) Discuss the role of S.S.I. in India. **07**

Q.3 (a) Explain risk involved in selection of a project. **07**

(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 an industry in backward area. **07**

(b) Explain in brief the difference between PERT and CPM. Explain the circumstances under which one is preferred to other. **07**

Q.4 (a) Demonstrate the concept of resource allocation with a suitable example. **07**

(b) A small project consisting of ten activities. Draw PERT network and determine the critical path. Prepare the activity schedule for the project. **07**

Activity	Preceding activity	Time estimated in weeks		
		optimistic	Most likely	pessimistic
A	-	4	5	12
B	-	1	1.5	5
C	A	2	3	4
D	A	3	4	11
E	A	2	3	4
F	C	1.5	2	2.5
G	D	1.5	3	4.5
H	B,E	2.5	3.5	7.5
I	H	1.5	2	2.5
J	F,G,I	1	2	3

OR

Q.4 (a) Explain the trade-off in network crashing. **07**

- Q.4 (b)** The following table gives a data on normal time and cost , crashed time and cost for a project. Find the optimum crashed schedule and corresponding minimum project cost. **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.

Activity	Immediate predecessor	time
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. **07**
- (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. **07**
Adjust the project work such that there will be smooth demand for these recourses.

ACTIVITY	DURATION	NO.OF LALOURES
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
