## **GUJARAT TECHNOLOGICAL UNIVERSITY**

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

Subject Code:182506 Date:06/05/2017

**Subject Name: Managing Projects (Department Elective II)** 

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) A Project has fourteen activities A through M. The relationship which contain amongst these activities are given below:

A is the first operation, B and C can be performed in parallel and are immediate successor to A, D,E and F follow B, G follows E, H follows D but it cannot start until E is complete, I and J succeed G, F and J precede K,H and I precede L,M succeeds L and K. The last operation N succeeds M and C. Construct the network diagram.

**(b)** Figure-1 shows the network for a project, the data for the duration and costs of each activity are given in table.

each activity are given in table.				
Activity	Normal	Normal	Crash	Crash
	duration	Cost	Duration	Cost
	(weeks)	Rs.	(weeks)	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 direct cost of the project is Rs. 3000 per week. Determine the optimum duration of the project and the corresponding minimum cost. Draw the time scaled version of the network at each stage of crashing.

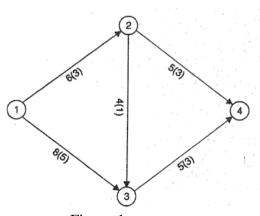


Figure-1

**Q.2** (a) The network shown in Figure-2 has the estimated duration for each activity marked. Determine EST, EFT, LST and LFT for each activity and find the critical path.

**07** 

04

10

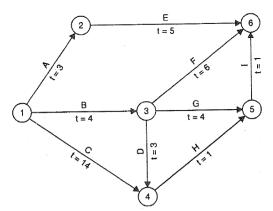


Figure-2

(b) How to select the projects to meet organizational objectives? Explain the Non-**07** numeric methods for selecting the projects. OR (b) Enlist the various aspects to be considered in project formulation and explain it. **07 Q.3** Explain the Project Manager's responsibility to the project. 07 (a) What is project action plan? Construct an action plan for any project of your **07 (b)** choice. OR 0.3 (a) Discuss the characteristics of an effective project team. 07 What is the primary function of a project plan? Discuss the different elements **(b) 07** of project planning. 0.4 Explain Budget uncertainty. **07** (a) Which are the resources of project? How they are loaded, leveled and **07 (b)** allocated? OR **Q.4** (a) Enlist the processes of risk management and explain any three of them. **07** What is meant by Goldratt's critical chain? How does it work? **(b)** 07 0.5 Explain Scope creep and Change control in Project Management. **07** (a) Define PERT, CPM, Total float, Free float, Earned value, Planned value and **(b) 07** slack. OR **Q.5** Describe plan-monitor-control cycle? How a project can be controlled with **07** (a) minimum effort? Explain the process of Auditing a Project. **07** 

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**(b)**