Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VIII • EXAMINATION – SUMMER 2014

Subject Code: 182506   **Date: 27-05-2014**
Subject Name: Managing Projects
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 consists of 7 activities having predecessor relationship given in the following table. Construct the network diagram using AOA and find the critical path. Also table lists the normal durations, normal cost, crash durations and crash costs. The indirect cost is workout to $ 160 / day. Find the optimum duration and optimum cost of the project.   **11**

Activity	Immediate Predecessor	Normal		Crash	
		Time(days)	Cost ($)	Time(days)	Cost ($)
A(1-2)	-	3	360	2	400
B(2-3)	A	6	1440	4	1620
C(2-4)	A	9	2160	5	2380
D(2-5)	A	7	1120	5	1600
E(3-4)	B	8	400	4	800
F(4-5)	C,E	5	1600	3	1770
G(5-6)	D,F	3	480	2	760

(b) Define project, program and portfolio.   **03**

Q.2 **(a)** Enlist all steps of the project portfolio process and explain any three of them.   **07**
(b) Discuss the characteristics of an effective project team.   **07**
OR
(b) What are the selection criteria of a project manager? Explain it.   **07**

Q.3 **(a)** Explain the Linear Responsibility Chart with any suitable example.   **07**
(b) What is the primary function of a project plan? Give the overview of a project planning process.   **07**
OR
Q.3 **(a)** What is project action plan? Construct an action plan for any project of your choice.   **07**
(b) What is budgeting a project? Explain Top Down and Bottom Up Approach of budgeting a project.   **07**

Q.4 **(a)** Enlist the processes of risk management and explain any three of them.   **07**

(b) Define following terms **07**
  (i) Critical path
  (ii) Milestone
  (iii) Slack
  (iv) Earned Value
  (v) Planned Value
  (vi) PERT
  (vii) CPM

OR

Q.4 **(a)** What is meant by Goldratt's critical chain? How does it work? **07**
(b) Explain the process of project Auditing. **07**

Q.5 **(a)** You are working on a construction project. The Project will have four **11** buildings. Each building takes one quarter to complete and is budgeted for INR 20,00,000 per building. At the end of the third quarter, the status is as follows:
  • Building 1 is complete and the amount spent is INR 20,00,000.
  • Building 2 is complete and the amount spent is INR 22,00,000.
  • Building 3 is 60% complete and the amount spent is INR 18,00,000.
  • Building 4 is not yet started.
Calculate the following: PV, EV, AC, BAC, CV, CPI, SV, SPI, EAC, ETC, VAC.

(b) Discuss the main duties of the Termination manager. **03**
OR
Q.5 **(a)** Write a short note on three goals of a project. **07**
(b) Explain Resource loading and Resource leveling. **07**

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