

Code No: C8706**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****M.TECH I SEMESTER EXAMINATIONS, APRIL/MAY-2012****PROJECT MANAGEMENT
(HIGH WAY ENGINEERING)****Time: 3hours****Max.Marks:60****Answer any five questions
All questions carry equal marks**

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- 1.a) Explain the concept of construction organization.
- b) What are the management functions and objectives?

- 2.a) Explain project management processes and organizational structure.
- b) What is the role of project manager as a team leader? Explain the leadership qualities for project management?

- 3.a) Describe cost control procedure for construction works.
- b) How do you optimize the cost and resources of any construction project?

- 4.a) What is value engineering? What are the four fundamental concerns that must be addressed by the value engineer?
- b) Explain the terms: (i) Break-even analysis (ii) Cost modelling (iii) Energy Modelling

5. a) Describe the process involved in tendering and contracting? What are the laws of contract?
- b) Why is an accident prevention programme essential in a construction project? Explain general safety programmes for a construction project?

6. a) Define arbitration and what is its objective? Describe the advantage of an arbitration over law suits in court?
- b) How does CPM network facilitates the work of construction management of a project?

7. a) Explain the components of linear programming and write standard form of LPP?
- b) Draw a PERT network for the following and find expected mean time, variance and standard deviation of the project?

Activity	Thee time estimates (days)
0-1	2-3-10
0-2	4-5-6
1-2	0-0-0
1-3	6-7-8
1-4	1-5-9
2-5	3-5-19
3-4	0-0-0
4-5	1-3-5

- 8.a) Explain various types of games? What is maximin-minimax principle?
- b) Describe about Management Information system (MIS) and its components and structure? What are the advantages with MIS specifically construction industry?