

GUJARAT TECHNOLOGICAL UNIVERSITY**M. E. - SEMESTER – I • EXAMINATION – WINTER 2012****Subject code: 711401N****Date: 08 -01-2013****Subject Name: Construction Management****Time: 02.30 pm – 05.00 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) Write short note on “Monitoring of Construction Projects” **07**
 (b) Write a brief note on decision networks with the help of a network diagram. **07**
- Q.2** (a) Discuss objectives of planning for construction projects. **07**
 (b) Differentiate clearly between a decision network and a CPM network. **07**
- OR**
- (b) Discuss advantages & limitations of planning. **07**
- Q.3** (a) Explain the working principle of GERT networks with neat sketches. **07**
 (b) Write short note on “Time and Motion studies” **07**
- OR**
- Q.3** (a) How are the GERT networks different from CPM-PERT networks? Comment. **07**
 (b) Write short note on “Use of computer in different fields on construction industry” **07**
- Q.4** (a) Write short note on “The Line of Balance” **07**
 (b) Explain : Total Float, PERT, Free Float **07**
- OR**
- Q.4** (a) Write short note on “Work Breakdown Structure” **07**
Q.4 (b) Explain : Interfering Float, Resource Allocation, Resource Levelling **07**
- Q.5** (a) Consider each of the following statements and state whether it is true or false. **07**
 In case it is false, write the correct position.
 1. Every path in a pert network would be critical if all activities were to start at their finish time.
 2. Irrespective of method of resource levelling used to satisfy resource limitations, we must always preserve precedence relationships in the network.
 (b) What is critical path? State the necessary and sufficient conditions of critical path. Can a project have multiple critical paths? **07**
- OR**
- Q.5** (a) “PERT network will act as only wall decorators in a business enterprise, since there are slippages of the project despite all the PERT charts.” Do you agree with this view? Explain. **07**
 (b) Write short note on “Role of construction managers in improving productivity of construction projects.” **07**
