

GUJARAT TECHNOLOGICAL UNIVERSITY**M.E –IIst SEMESTER–EXAMINATION – JULY- 2012****Subject code: 725302****Date: 09/07/2012****Subject Name: System Development Methodology****Time: 10:30 am – 13:00 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) Explain the importance of making correct estimates in project management. **07**
 (b) List and Explain principal activities of a modern quality system ? **07**

- Q.2** (a) Explain relative merits of ISO 9001 certification and the SEI CMM based quality assessment. **07**
 (b) Using following set of tasks and task relationships: **07**

Task	Duration	Waits for
T1	6	--
T2	9	T1
T3	7	T2
T4	11	T1
T5	3	--
T6	6	T5
T7	3	T4,T6
T8	6	T5
T9	3	T4,T6
T10	11	T8,T9
T11	4	T3,T7,T10

1. Draw GANTT and PERT Charts for these tasks.
2. Compute earliest & latest start times for each task?
3. Compute earliest completion time for the project?

OR

- (b) Using white – box testing strategies design a test suite for the algorithm of binary search. **07**

- Q.3** (a) List and Explain main components of an organization's information systems strategy? **07**
 (b) Using black – box testing strategies design a test suite for the program that accepts two strings and checks if the first string is a substring of the second string and display the number of times the first string occurs in the second string.. **07**

OR

- Q.3** (b) Discuss how the reliability changes over the lifetime of a software product and a hardware product. **07**

- Q.4** (a) Why must the application plan be integrated with equipment acquisition? **07**
 (b) Using example explain difference between process metrics and product metrics. **07**

OR

- Q.4** (a) Describe why you need a strategic plan? **07**

- Q.4** (b) Using white – box testing strategies design a test suite for the algorithm of sorting . **07**

- Q.5** (a) Design the black box test suite for a program that accepts up to 10 simultaneous linear equations in up to 10 independent variables and displays the solution. **07**

- (b) Explain how SCCS or RCS can be used to efficiently manage the configuration of source code. **07**

OR

- Q.5** (b) Explain roles walkthrough **07**
