Roll no: ....

Name: ....

SECOND SEMESTER M.Tech EXAMINATION- 2014

MODEL QUESTION PAPER

BRANCH: EMBEDDED SYSTEMS

TEC 2001 DESIGN OF EMBEDDED SYSTEMS

Time: 3hrs   **Max. Marks: 60**

(Answer *any TWO* questions from each module; each carries 10 marks)

MODULE I

1. Compare state oriented models with the activity oriented models for description of control systems in embedded systems.

2. a. Discuss on the heterogeneous models to represent data, activity and control modelling.   **(6)**
    b. Compare Statecharts programming constructs with SpecCharts.   **(4)**

3. Discuss on the specification languages used for embedded system design.

MODULE II

4. Explain group migration and hierarchical clustering in partitioning.

5. What is structural and functional partitioning? Describe the difference between hill climbing and greedy algorithms.

6. Discuss on the partitioning issues in system specification of embedded design.

MODULE III

7. What is fidelity of estimation? Explain the probability based flow analysis for execution time estimation.

8. What are the different quality metrics commonly used to characterize an embedded design? Elaborate on clock cycle estimation metrics.

9. Explain the hardware and software estimation models for an embedded design.