

6E3203

B.Tech VI Semester (Main/Back) exam. May, 2012

Computer Engg.

6CS3 Theory of Computation

Common to CS &amp; IT

Time : 3 Hours

Maximum Marks : 80

Min. Passing Marks : 24

*Instructions to Candidates:*

Attempt any five questions, selecting one question from each unit. All Question carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.

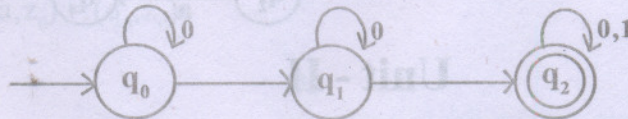
Units of quantities used/ calculated must be stated clerly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1. Nil2. Nil

### Unit-1

1. (a) What is Automata? Explain finits Automata with neat & labeled diagram. Also check acceptability of string 101101 for the given Automata. 8



- (b) Construct a Moore machine equivalent to the Mealy machine M defined by the table given below : 8