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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII EXAMINATION - SUMMER 2016

| S | Subjec | ct Code:180804 Date:16/05/2016 | Date:16/05/2016 | |
|---|------------|--|-----------------|--|
| Time:10:30 AM to 01:00 PM Instructions: | | tions: | | |
| | | Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. | | |
| Q.1 | (a) (b) | Explain the basic elements of Simulink software. Explain modelling of continuous system & Formulated to Solve Series RLC Using Resistor Voltage with diagram. | 07 07 | |
| Q.2 | (a) (b) | Explain the block parameters & tunable parameters in details. What do you mean by Modelling & Simulation? Enlist its advantages & disadvantages. | 07 07 | |
| | (b) | OR Specifying Simulation Accuracy/Speed Trade-off parameters. | 07 | |
| Q.3 | (a) (b) | What do you mean by subsystem? Explain types of subsystems. Define the Algebraic loop. Explain it with example. | 07 07 | |
| Q.3 | (a) | OR Explain Parameterizing an Exponential Diode from a SPICE Netlist. | 07 | |
| Q.S | (b) | Explain the types of blocks which are used in Simulink library. | 07 | |
| Q.4 | (a) (b) | List and explain the graphical representation of a block that has states. Explain the Model compilation, Simulation loop phase & Link phase in details. | 07 07 | |
| Q.4 | (a) (b) | OR Design and Building the Triangle Wave Generator Model. Explain the Transfer function, Poles & Zeros. | 07 07 | |
| Q.5 | (a) (b) | Explain the basic steps to use Simulink software in brief with figures. Explain the Block diagram Semantics, Block method & Model Method in details. | 07 07 | |
| Q.5 | (a) (b) | OR Define Solver. Explain the types of solvers with example. Design a RLC Circuit Simulink Model. | 07 07 | |
