

**B.Tech. – VIEP – ELECTRICAL ENGINEERING
(BTELVI)**

Term-End Examination

June, 2015

00006

BIEEE-001 : DYNAMIC SYSTEM SIMULATION

Time : 3 hours

Maximum Marks : 70

*Note : Attempt any **seven** questions. All questions carry equal marks. Assume suitable data wherever not provided.*

1. Elaborate the application of MATLAB/SIMULINK in the fields of power electronics and electrical machines. 10

2. Describe the computer simulation of continuous time dynamic system using transfer function model with suitable example. 10

3. Explain the procedure to design a Simulink based simulation model of 'Ward-Leonard System' for speed control. 10

4. Discuss the steps involved in the blockset based simulation of a hydraulic system using transfer function model. 10

5. Explain the characteristics of queuing systems. 10
6. Discuss the simulation of "AR Process" in detail. 10
7. What is meant by "m-files" ? How are "m-files" created ? 5+5
8. Design a Simulink model for the analysis of a voltage source inverter fed induction motor drive. 10
9. Write short notes on the following : 5+5
- (a) Matrix Operations in MATLAB
 - (b) Poisson Processes
-