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BIEEE-014

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

Term-End Examination

00763

June, 2018

BIEEE-014 : COMPUTER CONTROL PROCESS

Time : 3 hours *Maximum Marks : 70*

Note : *Attempt any **seven** questions. Each question carries equal marks. Use of scientific calculator is permitted.*

1. Draw the block diagram of a cascade control system. Also explain each block. *10*

2. What are the effects of adding feedback to a control system ? How does it influence the overall economics ? *10*

3. Explain feed-forward control and draw its block diagram for any application. *10*

4. (a) Define H_∞ method used in control theory. *5*

   (b) Which is the condition for a control system to be stable and robust ? *5*

5. With a suitable application, explain the working of a Ratio Control. *10*

6. Draw the block diagram of a programmable logic controller and explain the function of each block. *10*

7. What are the design techniques of a real-time system ? *10*

8. What are control network protocols ? Explain them. *10*

9. Write short notes on any ***two*** of the following : *2×5=10*

   (a) Ladder Program vs Sequential Function Chart

   (b) Continuous Process Control vs Batch Process Control

   (c) Distributed Control System
