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Roll No

EC-5005 (3) (CBGS)**B.E. V Semester**

Examination, November 2018

Choice Based Grading System (CBGS)**Industrial Electronics***Time : Three Hours**Maximum Marks : 70*

- Note:** i) Attempt any five questions.
 ii) All questions carry equal marks.
 iii) Assume suitable data if needed.

1. a) Describe switched regulator (SMPS). 7
 b) Describe rectifiers (Half wave, Full wave). 7
2. a) Give the principle of operation of SCR and give various turn-on methods. 7
 b) How SCR adopted for over voltage protection. 7
3. a) Differentiate between Power MOSFET and IGBT. 7
 b) Describe Triacs and Diacs. 7
4. a) How OP-AMP used in power supplies. 7
 b) Describe Wien bridge oscillator, function generator. 7
5. a) What are factors to be considered in selecting PLC and what are advantages of PLC. 7
 b) Give functional block diagram of PLC. 7

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6. a) Give simple process control applications of PLC. 7
 b) Describe switch mode converter (buck, boost). 7
7. a) Describe VI characteristics of SCR. 7
 b) Give the various turn-off methods of SCRs. 7
8. a) Give the basics of Op-Amp, and relaxation oscillator. 7
 b) What is power diodes and power transistor. 7

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