

Total No. of Questions :8}

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Roll No

EI/IC-8403
B.E. VIII Semester
 Examination, June 2017
Advanced Industrial Electronics
(Elective - IV)

Time : Three Hours

Maximum Marks : 70

Note: i) Answer any five questions.
 ii) All questions carry equal marks.

1. Compare the constructional details of IGBT with BJT.
2. Discuss the advantages and disadvantages of MOSFET.
3. Draw the circuit diagram of Buck-Boost converter with neat circuit diagram and waveforms.
4. Draw the block diagram of SMPS. Explain the function of each block.
5. Draw circuit diagram of CSI and explain the same.
6. How VSI is used in induction motor control draw its circuit diagram and explain.
7. Draw the block diagram of UPS. Explain the function of each block.

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8. Answer any four of the following:

- a) What is GTO? Describe its basic structure.
- b) Describe M-type ZCS resonant converter with circuit diagram.
- c) Draw circuit diagram of VSI.
- d) Describe the principle of working of Induction heating along with necessary expressions.
- e) How Microprocessor is used in induction motor drives?
- f) Discuss slip power controlled induction motor drives.

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