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Seat No.	

F.E. (Part - I) (Semester - II) (Revised) Examination, April - 2016
FUNDAMENTALS OF ELECTRONICS AND COMPUTERS
Sub. Code : 59184

Day and Date : Monday, 25 - 04 - 2016 **Total Marks : 100**
Time : 10.30 a.m. to 1.30 p.m.

Instructions :
1) **In Section - I, all questions are compulsory.**
2) **In Section - II, Q4 is compulsory. Solve any two questions from Q.No. 5, 6 and 7.**
3) **Figures to the right indicate full marks.**
4) **Assume suitable data if necessary.**

SECTION - I

Q1) a) Explain full wave rectifier using center tap transformer with necessary waveforms. **[6]**

b) Explain NOR as universal gate. **[6]**

c) Explain any one type of temperature transducer. **[6]**

Q2) Solve any two of the following: **[16]**

a) Explain digital thermometer with its block diagram.

b) Explain 8 to 1 multiplexer circuit with truth table.

c) Explain thermal stability concept in transistor.

Q3) Solve any two of the following: **[16]**

a) With the help of neat circuit diagram explain series regulated power supply.

b) State and explain various digital logic families.

c) Write note on mobile handset.

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SECTION - II

Q4) a) Give any five applications of Computers. **[10]**

b) Explain the use of the following - Pen Drive, Printer, Mouse, and CD-ROM. **[8]**

Q5) a) Give and describe any four hardware inside the computer system. **[8]**

b) Convert the following Octal to their Binary equivalent. **[8]**

i) 16 ii) 24

iii) 32 iv) 64

Q6) a) What are the functions of an operating system? **[8]**

b) Give and explain any four tools in a Spreadsheet software. **[8]**

Q7) a) Enlist and explain different network topologies. **[8]**

b) What are low level and high level languages? **[8]**