SE - 839

Total No. of Pages : 2

Seat No.	

F.Y. B.Tech. (Semester - I) (Revised) Examination, December - 2018

FUNDAMENTALS OF ELECTRONICS AND COMPUTERS

(All Branches)

Sub. Code : 71818

Day and Date : Monday, 03 - 12 - 2018 **Total Marks : 70**

Time : 02.30 p.m. to 05.00 p.m.

Instructions : 1) **Solve any three questions from Section - I and Section - II.**

2) **Figures to the right indicate full marks.**

3) **Assume suitable data, if necessary.**

SECTION - I

Q1) Solve the following : **[12]**

a) Explain FW bridge rectifier with necessary waveforms.

b) For CE configuration explain cut-off and saturation mode of operation.

Q2) Solve the following : **[11]**

a) Explain basic gates and NAND as universal gate with its truth tables.

b) What is multiplexer? Explain 4:1 mux with truth table.

Q3) Solve the following : **[11]**

a) What is leakage current? Explain with CB and CE configuration.

b) With range, specification and limitations explain stain gauge transducer.

Q4) Solve the following : **[12]**

a) Explain full adder circuit with truth table.

b) Explain temperature transducer. What is RTD transducer?

SECTION - II

Q5) a) Mention and elaborate six applications of Computers. **[6]**

b) Give the classification of computers based on their speed. **[6]**

P.T.O.

Q6) a) Convert following number system [6]

i) $(1101001.011)_2$ to Decimal

ii) $(657.40625)_{10}$ to Binary

iii) $(74B7.C1)_{16}$ to Decimal

b) Explain the characteristics and applications of Word Processor. [5]

Q7) a) With neat schematic diagram, Explain program development life cycle. [6]

b) What are different types of networks? Explain any one in brief. [5]

Q8) Write Short Note on (any two) : [2 × 6 = 12]

a) Compiler

b) Operating System

c) Flowchart

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