

Seat No.	
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W - 1124

Subject : Fundamentals of Electronics & Computers

Code : 59184

First Year Sem I and II (New Course)

* Note – Use only one Answer Book for the Section I & II

Day and Date : Wednesday, 28-05-2014

Time : 10 a.m. to 1.00 p.m.

Total Marks: 100

- Instructions :
- 1) Q. No.1 from Section I & Q No. 8 from Section II are compulsory.
 - 2) Solve any two from Q.No. 2, 3 & 4 from Section I
 - 3) Assume suitable data wherever necessary.
 - 4) Solve any two from Q. No.5, 6 & 7 from Section II

SECTION - I

- Q.1 a) With a suitable block schematic, explain working of a Regulated Power supply. 08
- b) Explain with truth table, working of derived gates. 08
- Q.2 a) Explain any one of the displacement transducers with a diagram. 08
- b) What is RTD? How it is used for a temperature measurement? 08
- Q.3 a) How transistor (BJT) Operates in Common Emitter configurations? Explain with i/p and o/p characteristics. 08
- b) What is Operating Point? Draw and explain with AC/DC loadline. 08
- Q.4 Short Notes (any three)
- a) R.S. flip flop 06
 - b) Digital Thermometer 06
 - c) Micro wave oven 06
 - d) R. C. coupled amplifier 06

SECTION-II

- Q.5 a) Give and discuss any four applications of computers in various areas. 08
b) Enlist different input & output devices that can be connected to a computer. 08
Give details.
- Q.6 a) What is an operating system? Give features of windows 7 operating system. 08
b) Convert the following binary nos to their decimal equivalents (also explain the procedure)
(i) $(110010)_2$ (ii) $(0101001)_2$
(iii) $(1101101)_2$ (iv) $(1110011)_2$ 08
- Q.7 a) Explain the following Linux/ Unix commands 08
(i) rm (ii) ls (iii) cp (iv) wc 08
b) What is the difference between a compiler & an interpreter. 08
- Q.8 Write short notes on : (Any Three) 18
(i) Types of networks.
(ii) Word Processors
(iii) Generations of computers
(iv) Operating system functions.
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