BCA-03

June - Examination 2019

BCA Pt. I Examination

Basic Electronics

Paper - BCA-03

Time : 3 Hours]   **[Max. Marks :- 70**

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A $7 \times 2 = 14$

(Very Short Answer Questions)

Note: Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

1) (i)   Write about conductance and conductivity?

   (ii) What is the Loop Rule?

   (iii) Define the term three phase AC circuit?

   (iv) What is diode resistance? *

   (v)   What is use of parallel binary adder in digital electronics?

   (vi) What is use of priority encoder?

   (vii) Define the statement of don't care conditions?

Section - B $4 \times 7 = 28$

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 7 marks.

2) Discuss the concept of load line with its diagram.

3) Explain the CC configuration of amplifier with neat and clean diagram.

4) Explain the working of Hartley oscillator.

5) Describe the forms of feedback circuits of transistors.

6) Explain the minimization through K-Map for term F = A'BCD+ A'BCD'+A'BC'D+A'B'C'D+ABCD.

7) Describe binary arithmetic operations with examples.

8) What do you mean by early effect in transistors?

9) Explain the transistor as a switch with its diagram.

Section - C $2 \times 14 = 28$
(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 14 marks.

10. Describe the Intrinsic and Extrinsic semiconductors with neat and clean diagram.

11. Define digital comparator with diagram.

12. Explain functioning of synchronous counter with an example.

13. Explain the superposition's theorem with an example.

———