

BCA-03**December – Examination 2020****BCA (Part I) Examination****Basic Electronics****Paper : BCA-03***Time : 2 Hours]**[Maximum Marks : 70*

Note :- The question paper is divided into two sections A and B. Write answers as per the given instructions.

Section-A**7×2=14****(Very Short Answer Type 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 logic gates.
- (ii) What is Capacitor ?

- (iii) Write any *two* applications of diodes in circuits.
- (iv) What do you mean by POS and SOP ?
- (v) What is Biasing ?
- (vi) What do you mean by drift current ?
- (vii) What is triggering in digital ?

Section–B **4×14=56**

(Short Answer Type Questions)

Note :- Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 14 marks.

- 2. Describe the functioning of current characteristics in NPN transistor.
- 3. Explain AC and DC resistances of crystal diodes.
- 4. What is the basic principle of earthing ?
- 5. What is De-Morgan's theorem in Boolean algebra ?
- 6. Discuss the functioning of full wave rectifier.

- 7. Describe T-flip-flop with state table and state diagram.
- 8. Discuss the functioning of half wave rectifier.
- 9. Explain stabilizing factor.