Roll No. ....

(07/21-II)

5372

B.C.A. EXAMINATION

(For Batch 2011 & Onwards)

(Second Semester)

LOGICAL ORGANIZATION OF COMPUTER—II

BCA-122

Time : Three Hours   *Maximum Marks : 80*

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Attempt all the parts :

   (a) Define sequential circuit. What are the characteristics of sequential circuits ? 4

   (b) Define clock and its role in a sequential circuit.   4

   (c) What is a register ?   4

(6-07/9) B-5372   P.T.O.

(d) Differentiate between primary memory and secondary memory. 4

Unit I

2. What is a flip-flop ? Explain the working of a D Flip-Flop. 16

3. What is race around condition in JK Flip-Flop ? Explain in detail. 16

Unit II

4. What are various types of registers ? Explain any *two* in detail. 16

5. What are Counters ? Explain asynchronous counters in detail. 16

Unit III

6. What are various storage devices ? Explain in detail. 16

7. Write a note on Flash memory, I/O devices. 16

Unit IV

8. What is instruction cycle ? What are the various instruction formats ? 16

9. Write a detailed note on various addressing modes. 16