B.C.A. (Part - I) EXAMINATION, 2017
(Faculty of Science)
(Three - Year Scheme of 10 +2 + 3 Pattern)
Paper - 135
COMPUTER ORGANIZATION

Time : Three Hours]   *[Maximum Marks : 100*

Answer of all the questions (short answer as well as descriptive) are to be given in the main answer -book only. Answers of short answer type questions must be given in sequential order. Similarly all the parts of one question of descriptive part should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book. Write your roll numbers on question paper before start writing answers of questions.

PART - I

Each question is of 2 marks.

Words limit for the answers is 40 words.

1. a)   What was the first generation of computer?

    b)   What is cache memory?

    c)   What do you mean by data path?

    d)   What are the major parts of a central processing unit?

    e)   What is the function of program counter.

    f)   Write the basic instruction processing steps?

    g)   What are the inputs of a sequence computer (SC)?

    h)   What is instruction cycle and opcode fetch?

    i)   What is the full form of EEPROM?

    j)   Write the name of auxiliary storage devices.

                                                    [10 × 2 = 20]

R-681   *P.T.O.*

PART - II

Each question is of 4 marks

Words limit for the answers is 80 words.

2. Write short note on historical evolution of the computers.

3. Write the operations of control unit.

4. Write the features of pentium microprocessor.

5. Write the functions of data transfer instruction.

6. Write the major difference between microprocessor and microcontroller.

$$[5 \times 4 = 20]$$

PART - III

Each question is of 12 marks

7. What is a Von-Neumann architecture of a computer? Explain the functions of different units used in it. [12]

OR

Explain the various types of output devices of computer. [12]

8. Draw the Basic building block diagram of computer system. Explain its blocks in brief. [12]

OR

Write the classification of computers, Compare mini computers, micro computers and mainframe computers. [12]

9. What do you mean by 'system buses'? Draw the common bus system diagram and explain it. [12]

OR

Explain the phases of instruction cycle of the computer system. [12]

10. What do you mean by 'registers'? Write the name of basic registers they are used in computer system. Explain any four registers. [12]

OR

Draw the diagram for memory hierarchy in a computer system. Discuss the magnetic disk in detail. [12]

11. Explain the 8085 microprocessor with block diagram. [12]

OR

Explain the characteristics of RISC and CISC computers. [12]

5116636

System

+ + +