P-830

BCA-01

Computer Fundamentals and Introduction to Digital Logic

Bachelor of Computer Application (BCA)

1st Semester Examination, 2023 (June)

Time : 2 Hours]   **Max. Marks : 70**

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answer to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

SECTION–A
(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

(2×19=38)

1. Draw and explain block diagram of general purpose computer.

2. Explain different types of computer generations based on processing speed with its characteristics.

3. Explain any five input and five output devices with their uses.

4. What are combinational circuits? Explain Full Adder circuits with their circuit design and truth table.

5. What is storage device? Explain primary and secondary storage device. Explain with example.

SECTION–B
(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.   (4×8=32)

1. Explain the function of Address Bus, Data Bus and Control Bus.

2. What is register? Write down the different types of shift registers and its functions.

3. Explain the basic components of CPU with block diagram.

4. Explain NOR, NAND and XOR facts with truth table.

5. What is number system? Explain octal and hexadecimal number system.

6. Explain the various pointing devices.

7. Explain the difference between AND, or gate?

8. Explain the following terms :

(a) Multiplexor.

(b) De-multiplexor.

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