P-846

BCA-20

System Programming

Bachelor of Computer Application (BCA)

6th 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. Explain one pass and two pass assembler in detail with block diagram.

2. Explain the difference between top-down parsing and bottom-up parsing.

3. Explain the structure of section table in two pass assembler?

4. What do you understand by a Grammar? Explain type 0, type 1, type 2 Grammar.

5. Explain direct-linking loaders. What are the functions of a Loader?

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. What is system programming? Explain the components of System programming.

2. Explain design of absolute loader with neat diagram.

3. Draw the detailed PASS-1 flow chart of an assembler.

4. What do you understand by semantic and syntax analysis Explain?

5. What is the differences between compiler and Interpreter?

6. Explain Architecture of Intel 8088.

7. With neat diagram explain the structure of a compiler.

8. Write a note on Parse tree structure for an arithmetic statement.

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