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## BCA (Sem. - 5th)

## **SYSTEM SOFTWARE**

**SUBJECT CODE:** BC-502

<u>Paper ID</u>: [B0220]

[Note: Please fill subject code and paper ID on OMR]

Time: 03 Hours

Maximum Marks: 60

## **Instruction to Candidates:**

- 1) Section A is Compulsory.
- 2) Attempt any Four Questions from Section B.

## Section - A

 $(10 \times 2 = 20)$ 

**Q1**)

- a) What do you understand by virtual devices
- b) What are the various loader schemes available? Define them.
- c) Describe the functions of code generation phase of compilers.
- d) Define macros.
- e) What is the importance of text editor?
- f) Differentiate between binding and linking.
- g) What is the role of debug monitor?
- h) Explain the important components of an operating system.
- i) What are the advantages of system software?
- j) Describe overlay.

- Q2) Describe the functions and structure of DBMS and EDITOR.
- Q3) Give the algorithm used by the linker for merging definition table and use table of a module into linkage symbol table.
- Q4) What are the different schemes available for intermediate code generation and optimization in compliers? Explain with examples.
- Q5) Explain the following:
  - Macro calls within Macro.
  - Macro Instruction arguments.
- Q6) What are the different addressing modes generally used in assembly language? vith an ext Explain with examples.
- Q7) Discuss the design of a two pass assembler with an example.