

Bachelor of Computer Application - II Fourth Semester  
**BCA244 - Paper-IV : System Software and Microprocessor 8086**

P. Pages : 1

Time : Three Hours



**GUG/W/18/1112**

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram and use supporting data wherever necessary.
  3. Avoid vague answers and write specific answer related to question.

**1. Either:-**

- a) What is the function of an Assembler? What are the purpose of pass-1 and pass-2 of an assembler. 8
  - b) Write a note on: 8
    - i) MDT
    - ii) MOT
    - iii) POT
- OR**
- c) Explain Linear and Binary search with example. 8
  - d) What is macro? Explain in detail various features of macro facility. 8

**2. Either:-**

- a) Explain compiler-and-go loader scheme with diagram. State its advantages and disadvantages. 8
  - b) Explain relocating Loader in detail. 8
- OR**
- c) Write a note on: 8
    - i) Direct Linking Loaders
    - ii) Absolute Loader.
  - d) Draw and explain the General Loader scheme. 8

**3. Either:-**

- a) Draw a Block diagram of 8086 Microprocessor. 8
  - b) List the advantages of segment register. 8
- OR**
- c) What is Bus? Explain various types of Bus. 8
  - d) Explain various general purpose register supported by microprocessor. 8

**4. Either:-**

- a) Explain Assembler directives and operators. 8
  - b) Write an ALP to check number is positive or negative. 8
- OR**
- c) What is interrupt? Explain the types of interrupt. 8
  - d) Write an ALP to find factorial of a number. 8

**5. Solve all the question.**

- a) State various translation phases of an Assembler. 4
- b) What are the functions of loader. 4
- c) Explain Addressing modes. 4
- d) What is MASM? 4

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