

B.C.A.- II CBCS Pattern Semester-IV  
**UBCAT406 - Paper-VI : System Software & Microprocessor 8086**

P. Pages : 2

Time : Three Hours



**GUG/W/23/11980**

Max. Marks : 40

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- Notes :
1. All questions are compulsory & carry equal marks.
  2. Draw well labelled diagram wherever necessary.
  3. Avoid vague answer.

**Either:**

1. a) What is Assembler? Discuss design of Assembler. 4
- b) Explain Linear search with suitable example. 4

**OR**

- c) Discuss general design procedure for assembler. 4
- d) Explain features of Macro facility in detail. 4

**Either:**

2. a) Write a detail note on Compile and Go loader in detail. 4
- b) What is linking? Explain specification of problem. 4

**OR**

- c) Write a short note: 4
  - i) Subroutine Linkage
  - ii) Relocating Loaders
- d) Explain General Loader Scheme in detail. 4

**Either:**

3. a) Explain block diagram of 8086 in detail. 4
- b) Discuss general purpose registers in short. 4

**OR**

- c) What is interrupts? Explain its types. 4
- d) Explain data transfer technique in short. 4

**Either:**

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|-----------|----|--|----------|
| <b>4.</b> | a) | Explain Assembler directives in short.                             | <b>4</b> |
|           | b) | Explain in short different operators in assembly language program. | <b>4</b> |

**OR**

- |           |    |  |          |
|-----------|----|--|----------|
|           | c) | Explain DEBUG command in detail?                             | <b>4</b> |
|           | d) | Write a ALP for Addition of two 8-bit numbers.               | <b>4</b> |
| <b>5.</b> |    | Solve all the questions.                                     |          |
|           | a) | Write the advantages of Bubble Sort algorithm.               | <b>2</b> |
|           | b) | What is Loader? Explain features of Loader.                  | <b>2</b> |
|           | c) | Write and explain two string manipulation functions in 8086. | <b>2</b> |
|           | d) | Write the features of ALP.                                   | <b>2</b> |

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