

Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

**BCA (2013 & Onwards) (Sem.-4)**  
**MICROPROCESSORS & MICROCONTROLLERS**  
Subject Code : BSBC-402  
Paper ID : [B0241]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and a student has to attempt any **FOUR** questions.

**SECTION-A**

**Q1) Answer briefly :**

- a) Explain ALE.
- b) Discuss various software interrupt of 8085.
- c) Discuss Clock Generator.
- d) Differentiate between internal and external memories.
- e) What is an Interrupt? Discuss it in detail.
- f) What are counters and timers?
- g) Discuss I/O ports of 8086.
- h) Discuss Arithmetic Instructions.
- i) What is the use of flags in microprocessor?
- j) Explain Historic Background of Microprocessor.

## SECTION-B

- Q2) Explain the addressing modes with instruction cycle in detail.
- Q3) Elaborate in detail the architecture of programmable Interrupt Controller 8259.
- Q4) Discuss the architecture of the Microcontroller.
- Q5) Explain the architecture of 8085 microprocessor in detail.
- Q6) Differentiate between RISC and CISC Processors.
- Q7) a) Discuss architecture of 8284 controller  
b) Explain Pin Diagram of 8085.