

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 07

BCA (2011 & 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**1. Write briefly :**

- a) Define Instruction cycle.
 - b) What is the use of flags in microprocessor?
 - c) Explain ALE.
 - d) Branching operations.
 - e) Write a program in assembly language to add two nos.
 - f) Synchronous serial communication vs. Asynchronous serial communication.
 - g) What are various priority modes available in 8259 interrupt controller?
 - h) Explain various software interrupts of 8085.
 - i) Internal and external memories.
 - j) Explain cycle stealing mode.
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SECTION-B

2. Explain architecture of 8085 with diagram.
3. Explain Instruction cycle and timing diagram of memory read/write operations.
4. a) Discuss the operations performed by the following 8085 instructions :
 - i) MVI A, DATA
 - ii) JMP 2085H
 - iii) DAA
 - iv) LDA 1234H
 - v) ADC B
- b) Write a program in assembly language to multiply a number by 8.
5. Explain the architecture of 8051 with pin diagram.
6. Discuss the operation and architecture of 8284.
7. Explain the use of DMA controller with diagram.