Roll No.......................

MAY 2014

### BCA(IV Sem)

### Microprocessors and Microcontrollers

### Subject Code:BSBC 402

**Time:03 Hours**                                              **MM:60**

**Instructions to Candidates:**

1.Section A is compulsory.

2.Attempt any four questions from Section B.

<div align="center"><b>Section A</b></div>                    (10*2  20)

1.a)Define Machine cycle.

b)Draw the timing diagram for memory read instruction.

c)Explain System bus.

d)Logical operations.

e)Explain instruction word size.

f)ROM based controller

g)What is the importance of arithmetic coprocessor?

h)Explain the purpose of CLK signal in 8085.

i)What is the use of microcontroller resources?.

j)Explain transparent mode.

<div align="center"><b>Section B</b></div>                   (4*10  40)

2.Explain  8085 with pin diagram.

3.Discuss addressing modes of 8085 with example.

4.a)Differentiate between RISC and CISC.

b)Write a program in assembly language to find greatest between 2 numbers.

5.Explain 8051 microcontroller interrupt.

6.Discuss the operation and architecture of 8259.

7.Explain the architecture of 8257.