

**TRIBHUVAN UNIVERSITY**  
**FACULTY OF MANAGEMENT**

Office of the Dean  
**2014**

Full Marks: 40  
Time: 2hrs.

<b>BIM/ Third Semester/ITC 217: Microprocessor Programming</b>
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*Candidates are required to answer the questions in their own words as far as practicable*

**Group “A”**

**1. Brief Answer Question:**

**[10X 1=10]**

- i. How do you determine that microprocessor is an 8,16 or 32 bit
- ii. Why instruction queue is required?
- iii. Write use a flag.
- iv. What is the function of segment register in 8086?
- v. Identify the addressing mode for MOV AX, [BX].
- vi. Write the function of 8286.
- vii. What is ISR?
- viii. Define Asynchronous serial transmission.
- ix. Why interrupt is required?
- x. What is interrupt latency?

**Group “B”**

**Short Answer Question:**

**[5X 3=15]**

2. Describe various components of CPU with suitable diagram.
3. Make distinction between instruction and directives. Explain with examples.
4. Write 8086 program to input a upper case character from keyboard and display it in lowercase.
5. Sketch and explain RS 232 9 pin connection.
6. Describe various methods of parallel communication.

**Group “C”**

**Long Answer Question:**

**[3X 5=15]**

7. Describe the various addressing modes of 8086 microprocessor.
8. Write a assembly language program to read string from keyboard and display in reverse order.
9. Draw a block diagram of 8255 PPI and explain.