

**Mid-West University**  
**Examinations Management Office**  
**Final Examinations -2079**

Bachelor level/ B.Sc CSIT / 2<sup>nd</sup> Semester

Full Marks: 60

Time: 3 hours

Pass Marks: 30

**Subject: Microprocessor and Assembly programming (COM422)**

*Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.*

**Group A**

**Long Answer Questions (Any Three) [3x8=24]**

- 1) What is Addressing Mode? Explain the types of Addressing Modes in 8085 microprocessors.
- 2) Explain the 8086 Functional Units.
- 3) Define Bus. Explain the types of Bus. Difference between a Synchronous and Asynchronous bus.
- 4) What is Interrupts? Explain the types of 8086 Interrupts.

**Group B**

**Short Answer Questions (Any Five) [5x4=20]**

- 5) Explain Harvard architecture.
- 6) Draw the block diagram of 8237 DMA controller & explain each component in data.
- 7) Define Primary Memory. Explain the different type of RAM.
- 8) Explain the different methods of Parallel Communication.
- 9) What is Fetch and execution cycle and fetch execution overlap?
- 10) Explain the Arithmetic group instructions of 8085.

**Group C**

**Very Short Answer Questions**

**[8x2=16]**

- 11) Write the application of Microprocessor?
- 12) What is Resister transfer language (RTL)?
- 13) What is Instruction cycle and Machine cycle?
- 14) Define Restart Instruction used in 8085 Microprocessor.
- 15) What do you mean by Serial communication?
- 16) Define types of Assemblers.
- 17) Give the format of Assembles instructions.
- 18) Draw the block diagram of 8255 Programmable Peripheral Interface.

**THE END**