

**MANMOHAN TECHNICAL UNIVERSITY**

**SCHOOL OF ENGINEERING**

**MODEL Questions (2081)**

**Microprocessor (EG556EX)  
BEEE (II/II)**

FM: 50

PM: 20

Group A: Multiple Choice questions [10 X 1 = 10]

1. The size of the address bus in a 8085 microprocessor is  
a. 8- Bit                      b. 16- bit                      c. 20-bit                      d. 32-bit
2. The no. of address lines required to address a memory of size 32 K is  
a. 15                      b. 16                      c. 18                      d. 14
3. The size of each segment in 8086 is  
a. 64 Kb                      b. 24 Kb                      c. 50 Kb                      d. 16 Kb
4. In 8085 microprocessor, the RST6 instruction transfer program execution to following location  
a. 0030H                      b. 0024H                      c. 0048H                      d. 0060H
5. HLT opcode means  
a. Load data to accumulator  
b. Store result in memory  
c. Load accumulator with contents of register  
d. End of Program
6. At the beginning of a fetch cycle, the contents of the program counter are  
a. Incremented by one  
b. Transferred to address bus  
c. Transferred to memory address register  
d. Transferred to memory data register
7. The first machine cycle of an instruction is always  
a. A memory read cycle  
b. A fetch cycle  
c. An I/O read cycle  
d. . A memory write cycle
8. \_\_\_\_\_ Signal prevent the microprocessor from reading the same data more than one.  
a. Pipelining                      b. Handshaking                      c. Controlling                      d. Signaling
9. Data transfer between the microprocessor for peripheral takes place through \_\_\_\_\_  
a. I/O port                      b. Input port                      c. Output port                      d. multi-port
10. The \_\_\_\_\_ allow data transfer between memory and peripherals.  
a. DMA technique                      b. Microprocessor                      c. register                      d.  
Decoder

**Sample Question**

Group B: Attempt any 8 questions [8 X 2 = 16]

1. Explain the processing cycle in a stored program concept.
2. Explain address de-multiplexing process in 8085 microprocessor with suitable diagram.
3. Explain different addressing modes of 8085 microprocessor.
4. Explain the PUSH and POP instruction with example illustrating the use of these instruction.
5. Explain the types of handshaking methods used in data communication
6. Explain the Bus Interface Unit (BIU) and Execution Unit (EU) in 8086.
7. Explain the difference between 8051 microcontroller and 8085 microprocessor
8. Explain the Assembling, Linking and Executing process of 8086 microprocessor
9. Explain the Addressing modes used in 8051 microcontroller

Group C: Attempt any 6 questions [6 X 4 = 24]

1. Draw the internal architecture of 8086 microprocessor and explain the function of each part.
2. Write an assembly language program to interchange (swap) the contents of two memory locations 2100 H and 2101 H
3. What are the practical implications of asynchronous serial communication? Explain DTE-DCE connection according to RS-232 serial communication standard.
4. What is the purpose of Programmable Peripheral Interface 8255A? Explain about its different ports.
5. Explain the operation mechanism of DMA controller.
6. What is a flag? Discuss about 8085 associated flags. Show how these flags are affected by arithmetic and logical instructions.
7. Differentiate between maskable and non-maskable interrupts. Explain how different interrupt pins are used in 8085.

**Sample Question**