

**Code No: MC1612/R16**

**MCA I Semester Supplementary Examinations, February-2020**

**COMPUTER ORGANIZATION**

**Time: 3 Hours**

**Max. Marks: 60**

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*Answer Any FIVE Questions  
All Questions Carry Equal Marks*

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|------|---|----|
| 1. a | Explain about functions of CPU?   | 6M |
| b    | Explain about program control instructions?   | 6M |
| 2. a | What is subroutine? Explain about subroutine stack frame with an example.                       | 6M |
| b    | Explain various instruction formats.  | 6M |
| 3. a | Define addressing mode and explain different addressing modes presented in 8086 microprocessor. | 6M |
| b    | Define addressing mode and explain different addressing modes presented in 8085 microprocessor. | 6M |
| 4. a | Draw and discuss interrupt structure of 8086 microprocessor.                                    | 6M |
| b    | Explain 8086 address decoding for memory banks.   | 6M |
| 5. a | What is Hardwired Control? Explain it in detail.  | 6M |
| b    | Explain about Micro program Sequencing.   | 6M |
| 6. a | Explain the addressing modes with instruction cycle in detail.                                  | 6M |
| b    | Explain Direct addressing mode.   | 6M |
| 7. a | In detail, explain about DMA controller with neat diagram.                                      | 6M |
| b    | Explain the following 8085 instructions: SIM, RIM, RST 7, RAR                                   | 6M |
| 8. a | Describe the basic configuration of flash memory.   | 6M |
| b    | Implement a 2-bit multiplier using ROM  | 6M |

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