

II B. Tech II Semester Supplementary Examinations, April - 2021
COMPUTER ORGANIZATION
 (Com to CSE, IT, ECC)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answer **ALL** the question in **Part-A**
 3. Answer any **FOUR** Questions from **Part-B**

PART -A

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|-------|---|----|
| 1. a) | Write about processor clock and clock cycles. | 3M |
| b) | Write about condition code flags | 2M |
| c) | What are the two modes that need no address field? | 2M |
| d) | Explain different types of interrupts in computer system. | 3M |
| e) | What is the disadvantage of Flash memory? | 2M |
| f) | Define Hardwired Control unit. | 2M |

PART -B

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|-------|---|-----|
| 2. a) | Define Computer. Explain about various types of computers. | 4M |
| b) | With a neat diagram, explain the operation of basic functional units of a computer. | 6M |
| c) | Write about following registers
i)IR ii)PC iii)MAR iv)MDR | 4M |
| 3. a) | Explain about data transfers between the memory and processor registers. | 4M |
| b) | What is subroutine and nested subroutine in computer architecture? What is the role of stack in calling a subroutine and returning from the routine? Explain. | 10M |
| 4. | Explain in detail about various addressing modes of instruction. | 14M |
| 5. a) | Explain in detail about the implementation of Direct Memory Access in computer system. | 6M |
| b) | Explain the following
i) PCI Bus ii)Universal Serial Bus | 8M |
| 6. a) | What is Cache memory? How Cache memory helps in improving the performance of processor? Explain. | 7M |
| b) | With a neat diagram, explain the memory hierarchy. | 7M |
| 7. a) | Explain about the sequence of control signals generated by processor in executing an instruction. | 7M |
| b) | Explain the operation of a micro programmed control unit with the help of a diagram. | 7M |

