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**CMR TECHNICAL CAMPUS
UGC AUTONOMOUS**

**B.Tech - IV Semester, Regular End Examinations, July-2022
Computer Organization (20CS405PC)
(Common to CSE, IT, CSM & CSD)**

Time: 3 Hours

Max. Marks: 70

**Answer Any Five Questions
All Questions Carry Equal Marks**

5 X 14 = 70 Marks

1. a. Explain Digital Computer in detail with a neat diagram. [7M]
b. Discuss various types of number systems with an example. [7M]
2. a. Explain Multiple-Register configuration with a neat diagram. [7M]
b. Discuss Arithmetic Logic Shift Unit with a neat diagram. [7M]
3. a. Explain the common bus system architecture used in Computer registers. [7M]
b. Explain Program Interrupt with a Flow Chart. [7M]
4. a. Discuss Control Memory in Detail. [7M]
b. Describe the design of Control Unit. [7M]
5. a. Explain the following: [7M]
i. Zero-Address Instruction
ii. RISC Instruction
b. Explain the following: [7M]
i. Three-Address Instruction
ii. Two-Address Instruction
ii. One-Address Instruction
6. a. Explain Booth Multiplication Algorithm with an Example. [7M]
b. Explain any Division Algorithm with a Flow Chart. [7M]
7. a. Discuss Main Memory in Detail [7M]
b. Explain the following: [7M]
i. I/O Bus and Interface Modules
ii. Isolate vs. Memory Mapped I/O
8. a. Discuss Inter connection structures. [7M]
b. Discuss the Characteristics of Multiprocessors. [7M]
