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II/IV B. TECH DEGREE EXAMINATIONS, JULY/AUGUST-2023

Second Semester

CSE/AM

COMPUTER ORGANIZATION & ARCHITECTURE

Time: Three Hours Maximum: 70 Marks

Answer ONE Question from each unit.

 $5 \times 14 = 70 M$

All Questions carry equal marks.

UNIT-I

1. Define Register? Describe different types of registers along with their functionality.

(OR)

2. What is restoring and non-restoring division algorithm? How restoring division method is different from non-restoring division method with an example.

UNIT-II

3. Explain in detail about micro programmed control unit with neat diagram and suitable example.

(OR)

4. Describe the concept of memory hierarchy with neat sketch.

UNIT-III

5. List and explain different modes of I/O transfers.

(OR)

- 6. Explain the following with respect to Asynchronous data transfer with neat diagrams.
 - (i) Strobe control method

(ii) Handshaking method.

1 P.T.O

UNIT-IV

7. Define pipelining Hazards? Explain the types of pipeline hazards in computer architecture.

(OR)

8. Explain the concurrent access to memory in parallel processors.

UNIT-V

9. Define memory? Describe the different levels of memory in computer organization.

(OR)

- 10. Write short notes on
 - (i) Memory interleaving
 - (ii) Cache memory Vs virtual memory

