

ROLL No:

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Total number of pages:[1]

Total number of questions:06

M.C.A. 6th Sem

Advanced Computer Architecture

Subject Code: MCA 603 (R4)

Paper ID: M118

Time allowed: 3 Hrs

Max Marks:60

Important Instructions:

- All questions are compulsory
- Assume any missing data

PART A (2×10)

Q. 1. Short-Answer Questions:

All COs

- What do you understand by data hazards?
- What is memory Mapping?
- Define Multi-Core Processor.
- How can we analyze Processor Performance?
- What do you mean by Register Renaming?
- What is Memory Synchronization ?
- How virtualization can be implemented?
- What is Multi Threaded?
- Define Write Through Cache.
- What is Speculation Execution?

PART B (8×5)

Q. 2. Discuss Instruction set architecture in detail.

CO1

OR

Differentiate between hard wired and Micro coded Processor.

CO1

Q. 3. Explain Memory Technology in detail.

CO2

OR

What is Finite State Machine? Discuss its working.

CO2

Q. 4. Explain in detail VLIW & SIMD Processor. Also differentiate between them.

CO3

OR

Discuss Super Scalar Execution. Also explain out of order execution.

CO3

Q. 5. Explain Following:

CO4

a) Memory Protection

b) Consistency and coherence.

OR

What is Cache memory? Discuss Non blocking Cache memories.

CO4

Q. 6. Explain Pipelined Processor in detail.

CO2

OR

Discuss Single cycle processor in detail.

CO1