

CS3351 DIGITAL PRINCIPLES AND COMPUTER ORGANISATION

IMPORTANT QUESTIONS

UNIT – I COMBINATIONAL LOGIC

2 – Mark

1. What is Combinational Circuits?
2. Define Analysis and Design Procedures.
3. What is Binary Adder?
4. Define Subtractor
5. What is Decoder?
6. What is Demultiplexers?

13 - Mark

1. Describe Karnaugh Map.
2. Explain Decimal Adder.
3. Describe Magnitude Comparator.
4. Write about Encoder with detailed reference.
5. Explain Multiplexers.

UNIT - II SYNCHRONOUS SEQUENTIAL LOGIC

2 – Mark

1. What is Sequential Circuits?
2. Define operation and excitation tables
3. Write the Design of Synchronous Sequential Logic.
4. Define Moore/Mealy models.
5. Write about state minimization.
6. What is state assignment?
7. Define circuit implementation.

13 - Mark

1. Explain Flip-Flops.
2. Write about Triggering of FF with detailed reference.
3. Describe Analysis and design of clocked sequential circuits.
4. Differentiate state minimization & state assignment.

UNIT - III COMPUTER FUNDAMENTALS

2 - Mark

1. What is Von Neumann Architecture?
2. What is the Operation of Computer Fundamentals?
3. Write the Addressing Modes of Computer Fundamentals.
4. State Encoding of Machine Instruction.
5. What is the Interaction between Assembly and High Level Language?

13 - Mark

1. What are the Functional Units of a Digital Computer?
2. Describe the Operation and Operands of Computer Hardware Instruction.
3. Write about Instruction Set Architecture (ISA) with detailed reference.
4. Describe Instruction and Instruction Sequencing.

UNIT – IV PROCESSOR

2 - Mark

1. Write the Instruction Execution Processor.
2. Define Building a Data Path –
3. Write about Hardwired Control.
4. Define Pipelining

13 - Mark

1. Describe Designing a Control Unit.
2. Write about Microprogrammed Control detailed reference.
3. Differentiate Data Hazard & Control Hazard

UNIT – V MEMORY AND I/O

2 - Mark

1. What are memory Concepts?
2. Write about Memory Management.
3. Define Mapping and replacement techniques.
4. What is DMA?
5. Define interrupt I/O.
6. What is USB?

13 - Mark

1. Explain memory Concepts and Hierarchy.
2. Describe Cache memories.
3. Explain virtual memory.
4. Describe Accessing I/O.
5. Write about interconnection standards with detailed reference

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