

***Wishing you all the very best for your COA Examination.
May your hard work, dedication and preparation lead you
to excellent results.***

Computer Organization and Architecture

Important Question

Unit 1

1. Explain different types of Number Systems with suitable examples.
2. Explain Boolean Algebra laws and simplify Boolean expressions.
3. Convert $(7B4)_{16}$ into Binary and Decimal.
4. Define Logic gate. Explain types of logic gate.
5. Perform the following Binary Subtraction:
110101–10111

Unit 2

1. Discuss Combinational Circuits. Explain Half Adder and Full Adder with logic diagrams and truth tables.
2. Explain Decoder and Encoder with block diagram and applications.

Unit 3

1. Explain Instruction Cycle in detail.
2. Explain Input-Output organization and Interrupt handling.

3. Write Short Note On: -
- (a) Design of Accumulator Unit
 - (b) Timing and Control Unit

Unit 4

1. Differentiate between Compiler and Interpreter.
2. Compare Machine Language, Assembly Language and High Level Language.

Unit 5

1. Explain Random Access and Sequential Access memory.
2. Explain Classification of Memory in detail.
3. Discuss Cache Memory, Associate memory, auxiliary memory and Virtual Memory.