**Chapter 1: Overview of Computer Architecture & Organization**

1. With the help of diagram, explain structure of computer defined by Sir Von Neumann.
2. Draw and explain Accumulator based computer with different blocks of it.
3. Distinguish between computer architecture and computer organization with the help of appropriate examples.
4. Define stored program concept and draw Von Neumann’s architecture.
5. What are the functions of following registers?

* PC
* SP
* MAR
* MDR
* IR

1. Explain the bus interconnection structure with the help of data, address & control lines.
2. List the features of 8086 MP.
3. Explain with suitable diagram the architecture of 8086.
4. Draw and explain register organization of 8086.
5. Discuss the segmented memory organization of 8086 MP. What is physical address?
6. Explain the necessity of a bus controller in 8086 maximum mode operation. Also explain the 8288 bus controller in detail.
7. What is segmented memory? State the advantages of segmented memory with reference to the 8086 microprocessor.
8. Differentiate between
   * Minimum & Maximum mode of 8086.
   * BIU & EU of 8086 MP
9. Tabularize the functions generated & control signals involved by the status signals of 8288 (S0, S1, S2).
10. Write a note on
    * 8288 bus controller.
    * 8284 clock generator.
    * Logical and physical address of 8086 with example
11. Explain the use of 8288 in 8086-based system.
12. Indicate the signals which are different when 8086 is in minimum mode & in maximum mode.
13. Draw timing diagrams for
    * Memory read operation in maximum mode
    * Memory write operation in maximum mode
    * Memory read operation in minimum mode
    * Memory write operation in minimum mode

**Chapter 2: Programming 8086**

1. Explain different addressing modes of 8086 MP with examples.
2. What do you mean by assembler directives? Explain any four assembler directive.
3. Instructions of 8086 MP.