

**Bachelor of Computer Applications 2nd Semester**  
**Computer Organization**

Time : Three Hours]

[Maximum Marks : 65

Note. Candidate is required to attempt five questions in all, including question No.9 (Which is compulsory) and attempt remaining four questions by selecting one question from each Section.

**SECTION-A**

1. What are flip flops? Explain the working of RS FF and JK FF with truth tables.
2. What are half adder and full adder? Explain the working of each with the logic circuit

**SECTION-B**

3. Explain general internal architecture of an 8086/8088 microprocessor.
4. Classify interrupts with examples of each type (s) Explain the concept of interrupt cycle in detail.

**SECTION-C**

5. Elaborate the classification of memory in light the memory hierarchy
6. Explain the features of assembly language. Give examples of instructions for performing mathematical operations in assembly language.

**SECTION-D**

7. Differentiate between various internal and external cards highlight the functional description of each.
8. Discuss various types of computer viruses. Discuss the methods prevention and protection from viruses.

**(Compulsory Question)**

9. (i) Differentiate machine and assembly language.  
(ii) Define pseudo instructions.  
(iii) What is the need of PC diagnostics?  
(iv) Define a Latch.  
(v) What is the need of DMA based data transfer?  
(vi) List various types of instructions in a simple processor.