

**BIM / Fourth Semester / ITC 220: Computer Organization**

*Candidates are required to answer the questions in their own words as far as practicable.*

**Group "A"**

**1. Brief Answer Questions:**

**[10 × 1 = 10]**

- i. Write the major advantage of floating point representation.
- ii. What will be the solution of resource conflict pipeline hazard?
- iii. What is opcode?
- iv. Why the size of data register is 16 bit in Basic computer?
- v. Why daisy chaining is required?
- vi. Differentiate between strobe and handshaking.
- vii. Define locality of reference.
- viii. What is associative memory?
- ix. Define process.
- x. Explain loosely coupled multiprocessor.

**Group "B"**

**Short Answer Questions:**

**[5 × 3 = 15]**

2. How hardwired CU is better than micro-programmed CU?
3. Explain common bus system of basic computer.
4. What is instruction pipeline? Explain.
5. Explain cache mapping techniques.
6. Explain Cache coherence.

**Group "C"**

**Long Answer Questions:**

**[3 × 5 = 15]**

7. Differentiate between combinational and sequential circuit. Draw circuit diagram for each of them.
8. What do you mean by addressing mode? Explain some of the available addressing mode.
9. Multiply  $(-13) \times (+40)$  using Booth multiplication algorithm.

