

TRIBUVAN UNIVERSITY  
FACULTY OF MANAGEMENT  
Office of the Dean  
**2006**

full Mark: 40

Time: 2 hrs

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

*Candidate are required to answer the question in their own words as far as practicable*

**Attempt ALL question:**

**Group A**

[10×1=10]

**1. Give Brief Answer:**

- a) What do you mean understand by Indirect Addressing?
- b) List and explain briefly about any five Data transfer instruction.
- c) What are the phases of Instruction cycle?
- d) Explain the JK flip flop with Excitation Table.
- e) What do mean by the r's and (r-1)'s Complements? Explain with example.
- f) Explain the Three address Instruction and two address instruction with examples.
- g) What do mean by Cache Memory? List the types of cache mapping.
- h) What do you mean by multiprocessor.? Explain briefly.
- i) What is parallel Processing? Why parallel processing is required?
- j) What do mean understand by Operating system? List its functions.

**Group B**

[6×5=30]

**Attempt any SIX question:**

1. Design a 2-bit counter. This is a sequential counter with two JK flip flops and one input x. When x= 1. the state of flip flops does not change. When x=0, the state sequence is 10 11. 01, 00, 10 and repeat.
2. What do you mean by Memory Hierarchy? Explain the memory Pyramid.
3. Define the common bus system for transferring information in system with appropriate block diagram.
4. What do you understand by Memory-Reference and Register Instruction? Explain with the instruction formats.
5. Compare the Micro-programmed and Hard-wired Control unit, with block diagram
6. What do you understand by Array Processor? Explain the types of array processor with example.

7. Explain the Addition and Subtraction operation of Signed-Magnitude Data with the flow chart.
8. What do you understand by priority Interrupt? Explain the Daisy-Chain Priority Interrupt.

**THE END**