Tribhuvan University

Institute of Science and Technology

2079

Bachelor Level / second-semester / Science	Full Marks: 60 + 20 + 20
Computer Science and Information Technology(CSC162)	Pass Marks: 24 + 8 + 8
Microprocessor	Time: 3 Hours

Candidates are required to give their answers in their own words as far as practicable.
The figures in the margin indicate full marks.

Group A

Attempts any TWO questions (2 x 10 = 20):

1 What is instruction cycle? Draw timing diagram of MOV A, B. Make necessary assumptions.

2 Explain the architecture of of 80386 with required figure. Highlight on its register organization.

3 Write an assembly language program to find the largest number of an array using 8 bit microprocessor. (Assume appropriate array data and address where minimum array size of 15 should be considered)

Group B

Attempts any EIGHT questions (8 x 5 = 40):

4	Write an assembly language program for 8086 to read two strings and check whether they are same or not.
5	Explain different types of instruction group of 8085.
6	Explain different addressing modes of 8086.
7	Explain the concept of multitasking in 80286.
8	What are the practical implications of asynchronous serial communication? Explain DTE-DCE connection according ti RS-232 serial communication standard.
9	What is the purpose of Programmable Peripheral Interface 8255A? Explain about its different ports.
10	Explain memory read operation with suitable figure.
11	What are the different kinds buses? How and why de-multiplexing of buses is carried out in 8085.
12	Write short notes on (Any TWO): a. LDT b. DMA c. Assemble directives