Tribhuwan University
Institute of Science and Technology
2075(New Course)

Bachelor Level / Third Semester / Science — Full marks: 60
Computer Science and Information Technology(CSC208) — Pass marks: 24
((TU CSIT) Computer Architecture) — 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.

Long Questions:

Attempt any Two questions:(2 x 10=20)

1. In the RISC architecture, what is meant by over lapping register window? Explain the relationship among register windows with over lapping register windows.

2. Explain the Flynn's classification of computer architectures with diagrams.

3. What are the different types of pipe line hazards? Explain each pipe line hazard with example.

Short Questions:

Attempt any Eight questions:(8 x 5 = 40)

4. Explain the computer components.

5. Explain the stored-program concept with example.

6. Differentiate between CISC and RISC architectures.

7. Differentiate between instruction pipe line and an arithmetic pipe line.

8. Divide 10/4 using non-restoring division.

9. Define associative memory. Explain with block diagram how it can be implemented.

10. Differentiate between hardwired control unit and a micro programmed control unit.

11. How does DMA controller work? Give an example of DMA data transfer.

12. Explain an inter connection network and its use.