

Tribhuvan University
Institute of Science and Technology
2081
☆

Bachelor Level / Second Year/ Third Semester/ Science
Computer Science and Information Technology (CSC 208)
(Computer Architecture)
(OLD COURSE)

Full Marks: 60
Pass Marks: 24
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.

Section A

Attempt any TWO questions.

1. Explain Booth's multiplication algorithm with suitable flowchart and multiply using Booth's multiplication algorithm. (2×10=20)
(5+5)
2. Explain the various types of addressing modes with example of each. (10)
3. Explain general model of hardwired control unit and also explain the major steps when designing hardwired control unit. (5+5)

Section B

Attempt any EIGHT questions.

4. Discuss the logic microoperations with example. (8×5=40)
5. What do you mean by error detection codes? Explain with example. (5)
6. Explain about input-output interrupt with example. (5)
7. Differentiate between RISC and CISC architecture. (5)
8. Explain about data manipulation instruction with example. (5)
9. Compare between I/O bus and interface module. (5)
10. Explain about non-restoring division algorithm. (5)
11. Differentiate between associative and set associative mapping. (5)
12. Write short notes on : (2×2.5=5)
 - a) Gray code
 - b) Instruction format