Bachelor Level / third-semester / Science   Full marks: 80
Computer Science and Information Technology(CSC208)   Pass marks: 32
(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:

1. Write down the non-restoring division flowchart algorithm and divide 5/3 using non-restoring division.

2. Explain the mapping process. Differentiate between direct mapping and associate mapping.

3. What is input output interface? Differentiate between Input-output bus and memory bus?

Short Questions:

Attempt any ten questions:(10 x 6 = 60)

4. Explain the error detection codes with example.

5. Explain the logic micro instructions with practical example.

6. Explain the input-output interrupt with example.

7. Differentiate between hardwired control unit and microprogrammed control unit.

8. Explain the CISC architecture with example.

9. Describe the steps of multiplication process using Booth algorithm with example.

10. Differentiate between I/O bus and interface modules.

11. Differentiate between I/O bus and interface modules.

12. What are the major differentiate between Input-output processor (IOP) and direct memory Access (DMA).

13. Explain the data transfer instructions with example.

14. What are the main characteristics of memory system? Explain.

15. What are the main characteristics of memory system? Explain.

16. Write short notes on:

(a) Data communication processor

(b) Computer Instructions