

Only for 2021 to
2024 AD
admitted
Students

TRIBHUVAN UNIVERSITY
FACULTY OF MANAGEMENT
Office of the Dean
May 2026

Full Marks: 60
Pass Marks: 30
Time: 3 Hrs.

BIM / Third Semester / IT 236: Microprocessor and Computer Architecture

Candidates are required to answer the questions in their own words as far as practicable.

Group "A"

Brief Answer Questions:

[10 × 1 = 10]

- ✓ 1. List out the components of microprocessor.
- ✓ 2. What is vectored interrupt?
- ✓ 3. If the content of register R1 = $(1001)_2$, what will be its content after Arithmetic Right Shift operation?
- ✓ 4. Define Data Transfer Instruction.
- ✓ 5. What do you mean by normalization of floating-point number?
- ✓ 6. Define Peripheral Device.
- ✓ 7. Mention any one advantages of Associative memory.
8. What do you mean by cache mapping?
9. Why 8085 microprocessor is also known as accumulator-based microprocessor?
10. Define Input-Output Processor.

Group "B"

Short Answer Questions: (Attempt any FIVE Questions)

[5 × 3 = 15]

- ✓ 11. Design 4-bit binary Incrementor.
12. Explain any two types of Instruction Format.
13. Mention any three differences between paging and segmentation.
- ✓ 14. Describe any three flags present in 8085 microprocessors.
- ✓ 15. Mention any three features of SAP1.
- ✓ 16. List out any three characteristics of CISC Architecture.

Group "C"

Long Answer Questions: (Attempt any THREE Questions)

[3 × 5 = 15]

- ✓ 17. Define Mapping process. Explain the concept of direct mapping.
- ✓ 18. Write an Assembly language program to multiply two number for 8085 microprocessor.
19. Illustrate and explain Arithmetic pipeline system to add two floating point number.
- ✓ 20. Explain any five types of Addressing mode for basic computer.

Group "D"

Comprehensive Answer / Case / Situation Analysis Questions:

[2 × 10 = 20]

- ✓ 21. Mention any five characteristics of 8085 microprocessor. Explain any three types of Instruction Available in 8085 microprocessors.
- ✓ 22. Design a Hardware organization for signed magnitude multiplication. Divide $(+85)_{10}$ by $(-5)_{10}$ using any one Division algorithm.

