

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021
(Regular/Improvement/Supplementary)

COMPUTER SCIENCE
FCSS1C05 – COMPUTER ORGANIZATION & ARCHITECTURE

Time: 3 Hours

Maximum Weightage: 30

Section A: Short answer questions. Answer any *four* questions. Each carries *two* weightage.

1. With suitable example explain the Multiplexers.
2. Indicate the basic computer organization.
3. Describe Cache memory.
4. Demonstrate Daisy Chaining.
5. Explain the functions of DMA controller.
6. Define Instruction format of 8085.
7. Illustrate fetch and execute operations of 8085.

(4 × 2 = 8 weightage)

Section B: Short essay questions. Answer any *four* questions. Each carries *three* weightage.

8. Illustrate working of any two flipflops.
9. How to perform arithmetic and logic operations using register transfer?
10. List out the procedure to add and multiply the positive numbers.
11. Explain about restoring and non-restoring algorithms.
12. Describe Cache memory.
13. Exemplify programmable interrupt controller.
14. Explain in detail about 8086 addressing mode.

(4 × 3 = 12 weightage)

Section C: Essay questions. Answer any *two* questions. Each carries *five* weightage.

15. Explain the floating point representation of data in detail.
16. Write about the Control Unit.
17. What is fast multiplication? Explain it with an example.
18. Discuss the architecture of 8086 CPU in detail.

(2 × 5 = 10 weightage)