Name:

Reg. No.:

END TERM EXAMINATION – November/December-2022/January-2023

SEMESTER – VII

(B.Tech. CSE, 2019, 2020 and 2021)

Subject Code:CS2007/21CS2007 **Duration: 3 hours**
Subject: Computer Architecture And Organization **Max. Marks: 100**

Instructions

- All Questions are compulsory
- The Question paper consists of 2 sections - Part A contains 10 questions of 2 marks each. Part B consists of 5 questions of 16 marks each.
- There is no overall choice. Only Part B question include internal choice.

PART – A

*(2 * 10 = 20 Marks)*

1. Give example of evolution of computer systems
2. Give an example of computer types and functional units.
3. Draw a diagram of arithmetic logical unit.
4. Explain fixed point arithmetic with an example.
5. What are the components of control unit design?
6. Give examples of fetch cycle.
7. What are the examples of semiconductor memory?
8. Explain levels of cache memory.
9. Give overview and challenges of I/O processing.
10. What is data transfer techniques?

PART – B

*(16 * 5 = 80 Marks)*

11. a) Explain with examples, difference between RISC and CISC (8+8)

OR

b) With examples, explain instruction set sequencing. (8+8)

12.a) What are the concepts of pipelining?

OR

b) How a complete instruction is executed?

13.a) How microprogrammed control works? Explain with examples. (8+8)

OR

b) How hardwired control works? Explain with examples (8+8)

14. a) Show working of optical magnetic tape.

OR

b) How does virtual memory work? Also give examples.

15.a) Give overview and challenges of direct memory access. (8+8)

OR

b) Give detailed explanation of I/O processor.