

## Fifth Semester B.C.A. Degree Examination, March/April 2022 COMPUTER SCIENCE (CBCS)

## Computer Architecture

Time: 3 Hours Max. Marks: 100

Instruction : Answer all questions.

## SECTION - A

Answer any ten questions.

 $(10 \times 2 = 20)$ 

- 1) Write the symbol, truthtable and logical expression for NAND gate.
- 2) What is parity bit?
- 3) Define min term and max term with an example.
- 4) What is bidirectional register?
- 5) Define interrupt.
- 6) What is BUN instruction?
- 7) What is PSW?
- 8) Find the 10's compliment of 1267.
- 9) Distinguish between FGI and FGO.
  - 10) Mention the types of ROM.
  - 11) What is polling?
  - 12) Define virtual memory.



## SECTION - B

II. Answer any five of the following questions.

 $(5 \times 5 = 25)$ 

- 13) Explain octal to binary encoder with a neat diagram.
- 14) Design 4 ×1 line multiplexer.
- 15) Explain any five register reference instructions.
- 16) Explain the different addressing modes with example.
- 17) Explain the interrupt cycle of computer.
- 18) Write a short note on virtual memory.
- 19) Difference between memory mapped I/O and isolated I/O.
- 20) Distinguish between RAM and ROM.