B.M.S COLLEGE FOR WOMEN AUTONOMOUS
BENGALURU – 560004

END SEMESTER EXAMINATION – SEPTEMBER / OCTOBER 2022

B.Voc I.T. - II Semester

Computer Architecture

Course Code: BVIT2DSC04 **QP Code: 2035**
Duration: 2 ½ Hours **Max marks: 60**

Instruction: Answer all the sections.

SECTION-A

Answer any TEN questions. Each question carries TWO marks (10x2=20)

1. Define and represent NAND gate with circuit diagram.
2. Write a circuit diagram for A'B+C'D.
3. What is multiplexer?
4. Define LDA operation.
5. Distinguish between FGI and FGO.
6. Define PSW.
7. Mention any four types of Micro operations.
8. Write register reference instruction format.
9. Define Memory –Mapped I/O. .
10. What is ROM? Mention its types.
11. Define DMA.
12. What is Instruction Level parallelism?

SECTION-B

Answer any FIVE questions. Each question carries FOUR marks. (5x4=20)

13. Explain Full adder circuit with truth table.
14. Simplify the following Boolean function using k-Map.
    $F(A,B,C)=\sum m(1,5,7,8,9,13)+ \sum d(3,12)$
15. Mention the applications of Encoder and explain in detail.
16. Explain any five Input Output Instructions.
17. Briefly explain the various Arithmetic Microoperations.
18. Explain Programmed I/O with a block diagram.
19. Write a short note on RAM.

SECTION-C

Answer any TWO questions. Each question carries TEN marks. (2x10=20)

20. With a neat diagram explain JK Flip Flop in detail. Mention its advantages and disadvantages.
21. Explain common bus organization in basic computer.
22. What are Addressing Modes? Explain its types.
23. Explain Strobe Asynchronous data transfer.

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