APRIL 2024 **52504/125C2A**

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. State the purpose of fixed point representation.

2. What is microcomputer?

3. List out the types of number system.

4. What are the functions of microprocessor?

5. Define : "BCD".

6. What is 9's complement for decimal?

7. Mention the functions of data bus.

8. Define : "Addressing Mode".

9. What is DMA?

10. Comment on pipelining.

11. What is a flag?

12. Define the term "RISC".

PART B — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

13. Describe the floating point representation with an example.

14. Convert the binary number 11011110 into its decimal equivalent.

15. How will you perform BCD subtraction? Explain with simple example.

16. Highlight the overview of the 8085 instruction set.

17. Elaborate the arithmetic and JMP instructions in 8085 Microprocessor.

18. Distinguish between the RIM and SIM instructions.

19. Write down the characteristics of RISC pipeline.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

20. Convert the $(0.513)_{10}$ to octal number.

21. Examine the general architecture of 8085 microprocessor.

22. Outline the function calls in 8085 Microprocessor.

23. Elaborate the use of DMA controllers in a computer system.

24. Discuss the general architecture and functions of array processors.

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