NOVEMBER 2024 **52504/125C2A**

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Find the decimal number for the following binary number : 1101.

2. Write a note on character codes.

3. What are the computer languages?

4. Define : "Microprocessor".

5. What is Opcode and operand?

6. What is an instruction set?

7. Mention the data transfer in microprocessor.

8. What is a flag?

9. State the four primary operations of a MPU.

10. What is the action of MOV B, A?

11. Write a note on interrupt.

12. What is program control?

PART B — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

13. Convert the decimal number 100 into binary, and octal.

14. Convert hexadecimal number E3FA to binary.

15. Explain the BCD-to-Binary conversion with example.

16. How will you perform BCD addition? Explain with simple example.

17. Elaborate the function calls in 8085 microprocessor.

18. Bring out the implementation of 8259 programmable interrupt controller.

19. Enumerate the arithmetic instruction of RISC.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

20. Find the octal and hexadecimal number for the following binary number : 1111011.

21. Discuss the functional block diagram of 8085 Microprocessor.

22. Illustrate the various addressing modes supported by 8085 microprocessor.

23. Explain the block diagram of DMA and how DMA is used to transfer data from peripherals.

24. Determine the vector processing and array processors.