DECEMBER 2022 **P/ID 16302/PIT1B**

Time : Three hours Maximum : 80 marks

PART A — ($10 \times 2 = 20$ marks)

Answer any TEN questions.

1. Define pipeline register.

2. Differentiate between microprocessor and microprogram.

3. State the use of AND instruction.

4. Give an example for postfix and prefix notation.

5. State any two parts of division algorithm.

6. Describe $A \leftarrow A + B$

7. Define divide stop.

8. Expand CCW.

9. State any one difference between half-duplex and full-duplex.

10. Mention about data link escape character.

11. What is meant by valid bit?

12. Give short note on tag field.

PART B — (5 × 6 = 30 marks)

Answer any FIVE questions.

13. Summarize the ways of integer representation.

14. Give a detailed information about microinstruction code format-20 bits.

15. Give a survey on pipelining.

16. Explain about three types of CPU organizations.

17. Describe in detail about matrix multiplication on vector processing.

18. List the basic types of input output operations.

19. Give block diagram of associative memory.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Draw a neat sketch on 4 bit adder-subtractor with necessary explanation.

21. Explain in detail about three-segment instruction pipeline with an example.

22. Give a survey on division algorithm with suitable example.

23. Elaborate on CPU-IOP communication.

24. Outline the types of cache memory.

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