MAY 2022 **P/ID 16302/PIT1B**

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Mention about alphanumeric representation.

2. How to express floating point number?

3. Define SIMD.

4. List any two characteristics of RISC.

5. Write short notes on BCD adder.

6. State the use of register.

7. Define the term biased exponent.

8. List the types of peripherals.

9. Mention the two handshaking lines.

10. Define PSW.

11. What is meant by auxiliary memory?

12. Write short notes on short memory.

PART B — ($5 \times 6 = 30$ marks)

Answer any FIVE questions.

13. Explain about arithmetic micro operations and draw a neat sketch of 4-bit binary adder.

14. Write short notes on second pass of assembler.

15. Summarize the representations on reverse polish notation.

16. Explain about array processors which are used large arrays of data.

17. Mention about dividend alignment and its steps.

18. Draw a neat sketch of priority interrupt hardware.

19. What is the relation between address and memory space in virtual memory system?

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

20. Give step by step procedure for programming the multiplication operation.

21. Explain in detail about the methods on data dependency.

22. Elucidate booth multiplication algorithm.

23. Elaborate on direct memory access.

24. Discuss in detail about memory protection.

———————