(A

Register No.: [ ]

1795

April 2025

Time – Three hours
(Maximum Marks: 100)

[*N.B.* 1. Answer all questions under Part-A. Each question carries 3 marks.

2. Answer all the questions either (a) or (b) in Part-B. Each question carries 14 marks.]

PART – A

1. Define fetch cycle.
2. List the components of CPU.
3. Define strobe control.
4. List out any three I/O commands.
5. Differentiate primary memory and secondary memory.
6. Write the need for cache memory.
7. Write any three applications of microprocessor.
8. Define parallel processing.
9. What is uniform memory access?
10. Define multithreading.

[Turn over....

PART – B

11. (a) Describe the operations of binary adder, subtractor circuit with neat diagrams.

(Or)

(b) Discuss about various addressing modes.

12. (a) Explain about the asynchronous communications interface with a diagram.

(Or)

(b) Discuss about the function of DMA controller.

13. (a) Discuss about main memory and its types.

(Or)

(b) Explain the operational principle of virtual memory.

14. (a) Draw and explain block diagram of 8086 microprocessor.

(Or)

(b) Discuss about vector processing and array processing.

15. (a) Describe about Symmetric Multi Processor (SMP) organization.

(Or)

(b) Discuss about multi core organizations.
