

June 2022

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. What is Register Transfer Language?
2. What is stack limit? Explain.
3. Define I/O interface.
4. Define handshaking.
5. What is sequential access memory?
6. Define address space and memory space.
7. Define parallel processing.
8. What is vector processing?
9. Define SMP.
10. What is a NUMA system?

PART – B

11. A) Explain the functioning of a single stage ALU with a neat block diagram.

(OR)

- B) Explain the function of control unit and draw its structure.

12. A) Explain strobe control data transfer in detail.

(OR)

- B) Explain DMA controller.

[Turn over.....]

13. A) Explain in detail about main memory.

(OR)

B) Explain about ROM and RAM chip with a diagram.

14. A) With a neat block diagram, explain the architecture of 8086 microprocessor.

(OR)

B) Explain in detail about array processing.

15. A) Explain SMP organization with a diagram.

(OR)

B) With neat block diagram, explain the organization of i7 processor and list down its features.
