

NOVEMBER 2019

50417/SAE5C

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. What is a power PC processor? How it evolved?
2. What is a cache memory? How is it organized?
3. What do you mean by cache mapping? Write down the ways of mapping.
4. What is a ROM? Why is it used?
5. Write the use of magnetic tape memory?
6. What are arithmetic operations? Write the basic forms of number data?
7. What do you mean by indirect memory addressing mode? Give an example.
8. What do you mean by interrupt? How is it best used in computers?
9. Write down any two advantages of RISC
10. Why is a large register file used in a computer?

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11. Give an example for data pipe lining.
12. What is a micro-operation? Give an example.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions

13. Explain briefly about Pentium.
14. What do you mean by memory hierarchy? Discuss.
15. Explain the types of DRAM briefly.
16. Write down the advantages of RAID organization of memory.
17. State and discuss the functions of an I/O Module.
18. What is Register optimization? Explain.
19. What do you mean by sequencing of Micro-Instructions?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions

20. What is associative mapping? Discuss in detail for cache page implementation.
21. Discuss about optical memory types in detail.

22. Discuss the Addition Algorithm for floating-point values.

23. Explain various Addressing modes used in instructions.

24. Write notes on

- (a) RISC vs. CISC anomaly.
- (b) Hardwired control implementation.