E 9259 (Pages : 2) Reg. No.....

Name.....

B.C.A. DEGREE (C.B.C.S.S.) EXAMINATION, OCTOBER 2014

Third Semester

Core Course—COMPUTER ORGANISATION AND ARCHITECTURE

(2013 admissions)

Time : Three Hours Maximum : 80 Marks

Part A (Short Answer Questions)

Answer **all** *questions.*
1 *mark each.*

1. Define RAM.
2. What is an instruction format ?
3. What do you mean by a bus ?
4. What is the purpose of instruction register ?
5. Define addressing modes.
6. Expand MIMD.
7. Define parallel processing.
8. What do you mean by space time diagram ?
9. What is an opcode ?
10. What do you mean by associative mapping ?

(10 × 1 = 10)

Part B (Short Answer Questions)

Answer any **eight** *questions.*
2 *marks each.*

11. What do you mean by stack ?
12. What do you mean by instruction stream and data stream ?
13. Differentiate RAM and ROM.
14. Define a control word.
15. How system buses is classified ?
16. How instructions can be classified ?
17. Explain MIMD system.

Turn over

18. What is the use of pipelining ?
19. Explain the use of cache memory.
20. How to evaluate an arithmetic expression ?
21. How can an instruction be executed ?
22. How data dependency can be handled ?

(8 × 2 = 16)

Part C (Short Essay)

Answer any **six** *questions.*
4 marks each.

23. Explain Bus structure.
24. Explain different types of instructions.
25. How ROM can be classified ?
26. Explain Flynn's classification of computers.
27. Explain use of array processors.
28. Explain parallel processing.
29. Which are the different addressing methods ?
30. Explain page replacement.
31. Explain memory hierarchy.

(6 × 4 = 24)

Part D (Long Essay)

Answer any **two** *questions.*
15 marks each.

32. Explain functional units of computer.
33. Define addressing mode and explain various addressing mode techniques.
34. Explain various memory mapping techniques.
35. Explain vector processing in detail.

(2 × 15 = 30)