F 3711

(Pages : 2)

Reg. No.....4.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch – Computer Science and Engineering

HIGH PERFORMANCE COMPUTING (R)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer **all** *questions.*

Part A

1. What is parallel processing? Explain.
2. Explain the concept of multiprogramming and time sharing system.
3. What are the classification of pipeline processors?
4. Short note on 'General pipeline'.
5. Differentiate between static and dynamic network.
6. Explain mesh connected network in detail.
7. What is meant by loosely coupled multiprocessors?
8. How parallelism in programs are detected?
9. Explain dynamic data flow computer.
10. How the data flow computers differ from the conventional computers?

(10 × 4 = 40 marks)

Part B

11. Explain the three architectural classification schemes briefly. (12 marks)

Or

12. Explain the Indian contribution to parallel processing. (12 marks)
13. Explain the classification of pipeline processors in detail. (12 marks)

Or

14. Explain the design of pipelined iinstruction unit. (12 marks)
15. Explain Associative array processing in detail. (12 marks)

Or

Turn over

16. Explain SIMD array processors in detail. (12 marks)

17. Explain all the process synchronisation mechanisms. (12 marks)

Or

18. Explain the tightly coupled multiprocessor in detail. (12 marks)

19. Explain the different data flow computer architecture. (12 marks)

Or

20. Explain static data flow computer in detail. (12 marks)

[5 × 12 = 60 marks]