(Pages : 3)

Maximum : 200 marks

Time : 1½ hours

PART A

4 mark each

(Each answer should be limited to one sentence)

1. What are the major components in a software process?

2. List the different registers used in a computer.

3. What are the different types of coupling exist in object oriented systems?

4. What are the parameter passing techniques used in programming languages?

5. What are the different types of CPU organizations?

6. What are the storage classes used in C?

7. What are the different types of assembly language statements?

8. Distinguish between constructor and destructor.

9. What are the data type qualifiers used in C?

10. How do you create a sharable objects?

11. Perform the following conversions:
    (a) 11010.101_2 to decimal
    (b) CAD to binary
    (c) 453_8 to decimal
    (d) BAD to octal

12. What are the events pertaining to a process?

13. What are the different CPU scheduling policies?

14. Implement basic logic gates using NAND gate.

15. What are the different types of Internet connections?

16. What are the components of LAN?

17. What are the different categories of wireless networks?

18. Write any two data link protocols.

19. What are the major components of E-R diagram?

20. What are the aggregate functions used in SQL?

21. What are the applications of XML?

22. What are the different load effective address instructions in microprocessor instruction set?

23. What is interrupt vector?

24. What are the different interrupt instructions to microprocessor?

25. What are web folders?

26. What is data dictionary?

27. What are the different types of structure charts?

28. What are the functions of DBMS?

29. What is vector image?

30. What is secure server?

PART B

10 mark each

(Answer should be limited to one paragraph)

31. What are the components of software requirements specification?

32. Explain any four application areas in which computers with vector processing capabilities are used.

33. Write a recursive function to reverse a string.

34. What are the different phases of compilation?

35. Write a C++ program to convert a time in 24 hour format to a time in 12 hour format using data conversion routine.

36. State and prove the rules and laws of Boolean algebra.

37. What are the functions of paging software?

38. Discuss the different technologies used in mobile phones.