

Time : Three Hours Maximum Marks : 70 . Minimum Pass Marks : 22 (D Grade)

Note : Attempt one question from each Unit. All questions carry equal marks.

Unit—I

1. (a) What is the purpose of memory in a computer ? What are volatile and non-volatile memories ? Explain.

(b) Discuss the application of computer in e-Business.

Or

2. (a) What is a bus in Computer System ? What is bus width ? If the number of bits in an instruction is 32 bits. What is the width of data bus ?

(b) Explain system and application software ?

Unit-II

3. (a) What is operating system ? Explain the functions of operating system.

(b) Discuss the generation of computers.

Or

4. (a) Discuss the features and merits of OOPs.

(b) Explain procedure oriented programming with example.

Unit-III

5. (a) Explain inheritance. Explain various types of inheritance with example.

(b) Explain various structures in C 4- 4- with examples.

Or

6. (a) What is operator overloading ? Explain it with examples.

(b) What are constructors ? Explain copy constructor with example.

Unit-IV

7. (a) Explain DBMS. Compare it with file oriented approach.

(b) Explain what is data independence.

Or

8. (a) What are data models ? Explain the importance of E-R model.

(b) Explain the following keys :

- (i) Primary keys
- (ii) Candidate keys
- (iii) Foreign key
- (iv) Composite keys

Unit-V

9. (a) Explain OSI model.

(b) Write a note on the following :

- (i) World Wide Web
- (ii) Network security

Or

10. (a) Explain LAN, MAN and WAN.

(b) What is peer to peer computing ? How is it different from client-server computing ?