

Unit IV

8. Explain the sorting techniques. Define the following sorting techniques : 14
- (i) Bubble-sorting
 - (ii) Selection-sorting
 - (iii) Insertion-sorting
 - (iv) Merge-sorting.
9. Explain Computer Networking. Explain various terms of Networking : 14
- (i) LAN
 - (ii) MAN
 - (iii) WAN.

Roll No.

Exam Code : M-21

Subject Code—52849

B.C.A. EXAMINATION

(Main/Reappear Batch 2017 Onwards)

(First Semester)

COMPUTER AND PROGRAMMING
FUNDAMENTALS

BCA-111

Time : 3 Hours

Maximum Marks : 70

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory.

1. (a) Define Computer. Explain block diagram of computer with its components.
- (b) Differentiate between Primary and Secondary Memory.
- (c) What is Operating System ? Explain the concept of Multi-programming.

- (d) Define Computer virus. Explain various Anti-virus software.
- (e) What is Algorithm ? Explain the concepts of structured programming.
- (f) Differentiate between Machine Language and Assembly Language.
- (g) Explain the concept of sorting and searching. 2×7=14

Unit I

- 2. Explain the following terms : 14
 - (i) RAM
 - (ii) ROM and its types
 - (iii) Flash Memory.
- 3. Define Secondary Storage devices ? Differentiate the following terms : 14
 - (i) Magnetic-Tape vs. Magnetic-Disc
 - (ii) CD-R and CD-RW.

Unit II

- 4. Explain the following terms : 14
 - (i) Multi-tasking

- (ii) Multi-threading
- (iii) Multi-processing
- (iv) Time-sharing
- (v) Real-time-sharing system
- (vi) Single user system
- (vii) Multi user system with example.

- 5. How computer virus is affected our computer system ? What are symptoms occurs in our system due to virus ? Explain in detail. Give names of Anti-virus Softwares. 14

Unit III

- 6. What do you mean by Structured Programming ? Explain the concept of Top-Down Approach and Bottom-Up Approach programming. 14
- 7. Define Computer Language. Explain the concept of various computer languages : 14
 - (i) Natural-Language
 - (ii) High-Level-Language
 - (iii) Machine-Language.