

BCA/D-16
COMPUTER AND PROGRAMMING FUNDAMENTALS
PAPER-BCA-111

Time Allowed: 3 Hours

Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

1. Compulsory Question

1. (a) Differentiate between Primary and Secondary Memory.
(b) What are the symbols used for Input, Decision, Processing, Start in Flow-chart?
(c) Differentiate between Machine Language and Assembly Language.
(d) Define Computer, Interpreter and their difference.

Unit-I

2. Explain the block diagram of Computer and its essential parts.
3. (a) What is Primary Memory? Discuss types of Primary Memory.
(b) Write the working of Magnetic Disk.

Unit-II

4. (a) Define Software and types of software.
(b) Define Operating system and differentiate between Single User and Multi-user Operating system.
5. Write notes on the following :
(a) Multiprogramming vs. Multiprocessing.
(b) Real Time vs. Time Sharing Operating system.

Unit-III

6. (a) What is Debugging? Discuss the various types of Errors.
(b) Discuss Programming Methodologies.
7. (a) Make a Flow-chart to find average of 10 numbers.
(b) Write an Algorithm to search an element.

Unit-IV

8. What is Sorting? Discuss Selection and Bubble Sort with example.
9. Write notes on the following:
(a) HLL and LLL.
(b) Characteristics of a good Programming Language.