

COMPUTER & PROGRAMMING FUNDAMENTALS

Time : Three Hours

Maximum Marks : 80

Note : Total *five* questions are to be attempted. Select *one* question from each section. Question No. 1 is compulsory.

Compulsory Question

1. (a) Name two pointing devices.
(b) Name the types of ROM.
(c) What are the units of memory?
(d) Write two characteristics of good programming language.
(e) Define Interpreter.
(f) Name the various computer networks.
(g) Write two applications of Internet.
(h) Define Real time operating system.

2×8=16

SECTION-I

2. (a) What are the characteristics of a computer? 7
(b) Classify computers on the basis of size, speed and memory. 9
3. (a) What is the difference between Primary and Secondary memory? 9
(b) Explain the characteristics of Magnetic disk. Also explain various types of magnetic disks. 10

SECTION-II

4. (a) Distinguish between Application software and System software.
(b) Explain:
(i) Multithreading (ii) Time-sharing (iii) Multitasking

5. What is a virus ? Explain various types of viruses. Explain the Antivirus software utility. 16

SECTION-III

6. (a) Explain the Program design methodologies. 8
(b) Explain the advantages and disadvantages of Structured programming. 8
7. (a) Draw a flow chart to find the HCF and LCM of two given nos. 8
(b) Explain:
(i) Pseudocode (ii) Decision table 8

SECTION-IV

8. (a) Write an algorithm of merging. 10
(b) Compare Linear and Binary Search. Which one is better and why?
9. What do you mean by Network topology ? Discuss various topologies. How would you decide about selecting a particular topology? 16