

Roll No.

Total Pages : 02

GSE/D-21

807

COMPUTER SCIENCE

Paper I

Computer and Programming Fundamentals

Time : Three Hours]

[Maximum Marks : 40

Note : Attempt *Five* questions in all, selecting *one* question from each Unit in addition to compulsory Q. No. 1. All questions carry equal marks.

Compulsory Question

1. (a) What are the applications of computers in different fields ? 2
- (b) Write a short note on various types of software. 2
- (c) Discuss errors and debugging. 2
- (d) Write various types of sorting techniques. What is their common purpose ? 2

Unit I

2. Define Computer. Explain various components of computers along with a suitable diagram and compare its functioning with human being. 8

(2)L-807

3. Define secondary memory. How does it differ from primary memory ? Explain any *two* secondary storage devices ? **8**

Unit II

4. Define operating system. Write any *four* examples of operating system software. Explain various functions of operating system. **8**
5. Explain multiprogramming, timesharing and multiprocessing operating system. Give examples. **8**

Unit III

6. Define algorithm. How does it differ from flowchart ? Explain with example. **8**
7. Explain the concept of structured programming and programming methodologies by taking suitable examples. **8**

Unit IV

8. Differentiate between linear searching and binary searching. Explain with example. **8**
9. Elaborate on the following : **8**
- (i) Compiler *versus* Assembler
 - (ii) High Level language *versus* Low Level language.