

GSE/D-21

1190

## COMPUTER AND PROGRAMMING FUNDAMENTALS

Paper-BCA-111

Time : Three Hours]

[Maximum Marks (External) : 80

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

**Compulsory Question**

1. (a) Write short note on classification of computers. (4)
- (b) Elaborate on various types of software. (4)
- (c) Write short note on computer virus. (4)
- (d) Write short note on programming methodologies. (4)

**UNIT-I**

2. (a) Draw the block diagram of Computer. Explain its components. (8)
- (b) Explain the various memory devices. (8)
3. (a) Explain various applications of computer. (8)
- (b) Differentiate between primary memory and secondary memory along with suitable examples. (8)

**UNIT-II**

4. (a) Explain the various I/O Devices. (8)
- (b) Explain the functions of operating system. (8)
5. Define operating system. Explain the various types of operating system along with suitable examples. (16)

**UNIT-III**

6. Explain the various techniques of problem solving with examples. (16)
7. (a) Explain the various types of errors in programming. (8)
- (b) Define flowchart and algorithm. Explain by taking any suitable example. (8)

**UNIT-IV**

8. (a) Define searching and its types. Explain linear searching along with suitable examples. (10)
- (b) Elaborate on the concept of language translators. (6)
9. (a) Explain various types of computer languages. (8)
- (b) Explain the concept of bubble sorting with suitable example. (8)