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|        | Binary Coded Decimal, 8-bit BCD System, 16-bit Unicode, Conversion of Numbers. Computer Arithmetic. Boolean Algebra. Logic Gates and Digital Circuits.   |    |
| Unit 4 | Computer Software: Types of Computer Software, System Management Program, System Development Programs, Standard Application Programs. Operating System: History of Operating System, Functions of Operating System, Process Management, Memory Management, File Management, Device Management, Security Management, Types of Operating System. | 8  |
| Unit 5 | Programming Languages: History of Programming Languages, Generation of Programming languages, Characteristics of Good Programming Language, Categorization of High-level languages. Internet and World Wide Web.   | 8  |
|        | Total  | 42 |

### Books:-

| S.No. | Name of Books/Authors/Publisher   |
|-------|---|
| 1.    | Fundamentals of Computer Science, Balaguruswamy, McGraw Hill Education (India) Private Ltd. |
| 2.    | Fundamentals of Computers, V. Rajaraman, PHI  |
| 3.    | Handbook of Computer Fundamentals, Nasib Singh, Khanna Books Publishing Co. (P) Ltd.        |
| 4.    | Computer Fundamentals, P.K. Sinha, BPB Publication.   |
| 5.    | Introduction to Computer, Norton Peter, McGraw-Hill.  |