

## Reference Book for GATE Computer Science and Information Technology

### Engineering Mathematics

1. Discrete Mathematical Structure- **Bernard Kolman, Robert C. Busby**
2. Discrete Mathematical Structure with Applications to Computer Science- **Tremblay & Manohar**
3. Discrete Mathematics and its Applications - **Kenneth H. Rosen**

### Theory of Computation

1. Introduction to Automata Theory, Languages and Computation - **John E. Hopcroft and Ullman**
2. Algorithms and Theory of Computation Hand Book - **Horwitz Sahaney**
3. An Introduction to Formal Languages and Automata - **Peter Linz**

### Graph Theory

1. Graph Theory with Applications to Engineering and Computer Science - **Narsingh Deo**

### Computer Hardware

1. Computer Organization and Architecture - **Carl Hamcher & Safat Zaky**
2. Computer Engineering Hardware Design- **M. Morris Mano**
3. Computer Architecture and Organization - **J. P. Hayes**

### Programming and Data Structure

1. Data structure using C- **M. Tenenbaum**

### Operating Systems with Unix

1. Operating System Concepts- **Galvin and Silberschatz**
2. Operating Systems Internals and Design Principles - **William Stallings**
3. Unix-Concepts and Applications - **M. J. Back, S. Das**

### Computer Networks

1. Computer Networks- **Andrew S. Tanenbaum**
2. Data and Computer Communications - **William Stallings**

### Computer Design

1. Compilers Principles, Techniques and Tools - **Ravi Sethi & Jeffrey Ullman**

### Programming Methodologies

1. Programming Languages Design and Implementation - **Terrance W. Pratt**
2. Let us C - **Yashvant P. Kanetkar**

### Algorithm Analysis

1. Introduction to Algorithms - **Thomas H. Cormen**
2. Introduction to Algorithms - **Sartaj Sahni**

#### **Computer Arithmetic**

1. Digital Logic and Computer Design - **M. Morris Mano**

#### **Programming in C and C++**

1. The C Programming Language - **Dennis M. Ritchie**

#### **Relational Design and Database**

1. Fundamentals of Database Systems - **Ramez Elmasri, Navathe**
2. Database System Concepts- **Henry Korth**
3. An Introduction to Database System - **Bipin C. Desai**

#### **System Software & Compilers (including Microprocessor)**

1. Microprocessor Architecture, Programming and Applications with the 8085 - **Ramesh S. Gaonkar**
2. Compilers: Principles, Techniques and Tools - **Aho, Lam, Sethi and Ullman**

#### **Software Engineering**

1. Software Engineering A Practitioner's Approach - **Roger S. Pressman**

#### **Computer Graphics**

1. Introduction to Computer Graphics - **Hearn and Baker, Rogers**

#### **Artificial Intelligence**

1. Artificial Intelligence - **Elaine Rich and Kevin Knight**

#### **Current Trends and Technologies**

1. Introduction to Parallel Computing - **M. J. Quinn**