**010** [**计算机科学与技术学院**](http://cs.tiangong.edu.cn/)

**科目名称：计算机专业英语**

**参考书目：Essentials of Computer Organization and Architecture**

考点：

第1章 Introduction

1.2 Computer Systems

1.4 Standards Organizations

1.6 The Computer Level Hierarchy

1.8 The Fragility of the Internet

1.11 Parallel Processors and Parallel Computing

第2章 Data Representation in Computer Systems

2.2 Positional Numbering Systems

2.3 Converting Between Bases

2.4 Signed Integer Representation

2.5 Floating-Point Representation

2.7 Error Detection and Correction

第 3 章 Boolean Algebra and Digital Logic

3.2 Boolean Algebra

3.3 Logic Gates

3.5 Digital Components

第 4 章 An Introduction to a Simple Computer

4.1 Introduction

4.2 CPU Basics and Organization

4.3 The Bus

4.4 Clocks

4.5 The Input/Output Subsystem

4.6 Memory Organization and Addressing

4.7 Interrupts

第 6 章 Memory

6.1 Introduction

6.2 Types of Memory

6.3 The Memory Hierarchy

6.4 Cache Memory

6.5 Virtual Memory

第 7 章 Input/Output Systems

7.1 Introduction

7.2 I/O and Performance

7.4 I/O Architectures

7.5 Data Transmission Modes

7.6 Disk Technology

7.7 Optical Disks

第 8 章 System Software

8.1 Introduction

8.2 Operating Systems

8.4 Programming Tools

**参考书目：Algorithms and data structure**

考点：

第1章 Introduction

1.2 Running Time of Algorithms

第2章 Sorting and Searching

2.1 Quicksort

2.2 Heapsort

第3章 Hashing

3.1 Basic Terms

3.4 Analysis of Hashing

第4章 Trees

4.1 Rooted Trees

4.2 Binary Search Trees

4.3 Balanced Trees

4.4 Randomized Binary Search Trees

第5章 Graphs

5.1 Modeling Problems with Graphs

5.2 Basic Definitions and Properties

5.3 Representations of Graphs

5.4 Basic Graph Algorithms

第6章 Weighted Graphs

6.1 Basic Algorithms