COP3610 Operating Systesm
TEST1 STUDY QUESTIONS

Chapter 1

1-1. Explain why an operating system can be viewed as a resource allocator.

Feedback: 1.1.2
Difficulty: Medium

1-2. Explain the purpose of an interrupt vector.

Feedback: 1.2.1
Difficulty: Medium

1-3. What is a bootstrap program, and where is it stored?

Feedback: 1.2.1
Difficulty: Medium

1-4. What role do device controllers and device drivers play in a computer system?

Feedback: 1.2.1
Difficulty: Medium

1-5. Describe the operating system's two modes of operation.

Feedback: 1.5.1
Difficulty: Medium

1-6. Why is main memory not suitable for permanent program storage or backup purposes? Furthermore, what is the main disadvantage to storing information on a magnetic disk drive as opposed to main memory?

Feedback: 1.2
Difficulty: Hard

1-7. Computer systems can be divided into four approximate components. What are they?

Ans: Hardware, operating system, application programs, and users.
Feedback: 1.1
Difficulty: Easy

1-8. Distinguish between system and application programs.

Feedback: 1.1.3
Difficulty: Easy

1-9. Explain the difference between singly, doubly, and circularly linked lists.

Feedback:1.10.1
Difficulty:Easy

1-10. What two operating systems currently dominate mobile computing?

Feedback:1.11.2
Difficulty:Easy

Feedback:1.11.7
Difficulty: Hard

Chapter 2

2-1. There are two different ways that commands can be processed by a command interpreter. One way is to allow the command interpreter to contain the code needed to execute the command. The other way is to implement the commands through system programs. Compare and contrast the two approaches.

Feedback: 2.2
Difficulty: Hard

2-2. Describe the relationship between an API, the system-call interface, and the operating system.

Feedback: 2.3
Difficulty: Hard

2-3. What are the advantages of using a higher-level language to implement an operating system?

Feedback: 2.6.3
Difficulty: Medium

2-4. Describe some requirements, or goals, when designing an operating system.

Feedback: 2.6.1
Difficulty: Medium

2-5. What are the advantages and disadvantages of using a microkernel approach?

Feedback: 2.7.3
Difficulty: Medium

2-6. Explain why a modular kernel may be the best of the current operating system design techniques.

Feedback: 2.7.4
Difficulty: Hard

2-7. Describe how Mac OS X is considered a hybrid system.

Feedback: 2.7.5
Difficulty: Medium

2-8. Describe how Android uses a unique virtual machine for running Java programs.

Feedback: 2.7.5
Difficulty: Medium