

# 复查测验提交: 第1、2章 操作系统概论 作业

用户	工科试验班 (信息) 裴弈心
课程	操作系统
测试	第1、2章 操作系统概论 作业
已开始	19-9-18 下午4:33
已提交	19-9-20 下午6:59
截止日期	19-9-30 下午11:30
状态	已完成
尝试分数	得 96 分, 满分 102 分
已用时间	50 小时 25 分钟
显示的结果	所有答案, 已提交的答案, 正确答案

问题 1

得 4 分, 满分 4 分

Which of following activities is not what an operating system concerns?

- 所选答案: ☒ B. To provide users application software
- 答案: 

☐ A. To manage the computer hardware

☒ B. To provide users application software

☐ C. To manage system resources

☐ D. To provide an interface between the user and the system

问题 2

得 4 分, 满分 4 分

In a dual-mode (system mode and user mode) system, which of the following components are not necessary?

- 所选答案: ☒ C. Some user programs in the system mode.
- 答案: 

☐ A. Privileged instructions.

☐ B. A bit in the hardware to indicate the current mode.

☒ C. Some user programs in the system mode.

☐ D. Operating system running in the system mode.

问题 3

得 4 分, 满分 4 分

Which of the following system is a multi-user time-sharing system?

所选答案: ☒ B. Linux

答案: A. OS/2

☒ B. Linux

C. DOS

D. Windows XP

#### 问题 4

得 4 分, 满分 4 分

Operating system is a set of software for managing \_\_\_\_\_.

所选答案: ☒ B. Computer resources

答案: A. Computer hardware

☒ B. Computer resources

C. Application programs

D. Computer software

#### 问题 5

得 4 分, 满分 4 分

This type of program acts as an intermediary between a user of a computer and the computer hardware.

所选答案: ☒ B. operating system

答案: A. superuser thread

☒ B. operating system

C. application program

D. user thread

#### 问题 6

得 4 分, 满分 4 分

Which of the following statement is incorrect?

所选答案: ☒ B. Layered OS is more efficient than monolithic OS

答案: A. Micro-kernels allow some system services to be implemented just as user programs

☒ B. Layered OS is more efficient than monolithic OS

C. Monolithic OS is usually difficult to modify

D. Virtual machines improve OS development and testing process

#### 问题 7

得 4 分, 满分 4 分

我们知道,有些CPU指令只能授权给操作系统内核运行,不允许普通用户程序使用。但是在以下操作中,\_\_\_\_可以不必具有此种特权。

所选答案: ☒ A. 触发trap(系统调用)指令

答案: ☒ A. 触发trap(系统调用)指令

B. 设置定时器的初值

C. 内存单元复位

D. 关闭中断允许

### 问题 8

得 0 分, 满分 4 分

为了在通用操作系统管理下的计算机上运行一个程序,需要经历几个步骤。但是,\_\_\_不一定需要

所选答案: ☒ C. 用控制台监控程序执行过程

答案: A. 确定起始地址,并从这个地址开始执行

B. 将程序装入内存

C. 用控制台监控程序执行过程

☒ D. 向操作系统预定运行时间

### 问题 9

得 4 分, 满分 4 分

一个多道批处理系统中仅有P1和P2两个进程,P2比P1晚5ms到达,它们的计算和I/O操作顺序如下:

P1: 计算60ms, I/O80ms, 计算20ms

P2: 计算120ms, I/O40ms, 计算40ms

若不考虑调度和切换时间,则完成两个进程需要的时间最少是\_\_\_\_

所选答案: ☒ A. 260ms

答案: ☒ A. 260ms

B. 360ms

C. 240ms

D. 340ms

### 问题 10

得 4 分, 满分 4 分

\_\_\_\_\_ is not an advantage that the microkernel structure has compared with the monolithic structure?

所选答案: ☒ A. to make the system more efficient

答案: ☒ A. to make the system more efficient

B. no need to modify the kernel in order to add new services

C. to make the system more secure

D. to make the system more reliable

### 问题 11

得 4 分, 满分 4 分

The main disadvantage of the batch system is \_\_\_\_\_

所选答案: ☒ A. lack of interaction

答案: ☒ A. lack of interaction

B. none of the above

C. low CPU utilization

D. lack of concurrency

### 问题 12

得 4 分, 满分 4 分

Which is not the service that the operating system should provide?

所选答案: ☒ A. Game engine

答案: ☒ A. Game engine

B. I/O operation

C. Inter-Process Communication

D. File-system manipulation

### 问题 13

得 4 分, 满分 4 分

The first program that a computer runs when it is powered on or rebooted is a \_\_\_\_ ?

所选答案: ☒ C. bootstrap program

答案: A. kernel

B. monitor program

☒ C. bootstrap program

D. application program

### 问题 14

得 4 分, 满分 4 分

A system call is \_\_\_\_ ?

所选答案: ☒ B. an interface provided by OS for user program

- 答案:
- A. a library program in advanced language
  - ☒ B. an interface provided by OS for user program
  - C. a user written sub-program
  - D. a command in operating system

**问题 15**

得 4 分, 满分 4 分

A program can be executed as a process only after it is loaded into \_\_\_\_?

所选答案: ☒ D. main memory

- 答案:
- A. cache
  - B. hard disk
  - C. floppy disk
  - ☒ D. main memory

**问题 16**

得 4 分, 满分 4 分

Which of the following functionalities in an operating system does not need special hardware support?

所选答案: ☒ B. process scheduling

- 答案:
- A. interrupt system
  - ☒ B. process scheduling
  - C. address mapping
  - D. clock management

**问题 17**

得 4 分, 满分 4 分

The main disadvantage of the batch system is \_\_\_\_ ? (best answer)

所选答案: ☒ D. lack of interaction

- 答案:
- A. lack of concurrency
  - B. none of the above
  - C. low CPU utilization
  - ☒ D. lack of interaction

**问题 18**

得 4 分, 满分 4 分

\_\_\_\_ is not an advantage that the microkernel structure has compared with the monolithic structure?

所选答案: ☒ D. to make the system more efficient

- 答案:
- A. to make the system more reliable
  - B. to make the system more secure
  - C. no need to modify the kernel in order to add new services
  - ☒ D. to make the system more efficient

**问题 19**

得 10 分, 满分 10 分

Describe three general methods for passing parameters to the operating system

所选答案: 1、 Pass the parameters by registers: Simplest, can't pass parameters that more than number of registers.  
2、 Store parameters in a block in memory, pass the address of block as parameter in a register.  
3、 Place or push parameters onto the stack by program, then pop it off by OS.

正确答案: ☒  
a. Pass parameters in registers  
b. Registers pass starting addresses of blocks of parameters  
c. Parameters can be placed, or pushed, onto the stack by the program, and popped off the stack by the operating system.

**问题 20**

得 8 分, 满分 10 分

Which of the following instructions should be privileged(in kernel mode)?

- a. Set value of timer.
- b. Read the clock.
- c. Clear memory.
- d. Issue a trap instruction.
- e. Turn off interrupts.
- f. Modify entries in device-status table.
- g. Switch from user to kernel mode.
- h. Access I/O device.

所选答案: a, c, e, f, g, h


正确答案: ☒  
The following operations need to be privileged: Set value of timer, clear memory, turn off interrupts, modify entries in device-status table, access I/O device. (a,c,e,f,h)  
The rest can be performed in user mode.(b,d,g)

**问题 21**

得 10 分, 满分 10 分

What is the difference between kernel mode and user mode? Why is the difference important to an operating system?

所选答案: (1) Kernal mode can interview all system resource and control device, user mode can only interview user's memory and register.  
Kernal mode also has privileged instructions.  
(2) Kernal mode runs OS kernal program, user mode runs normal user program and kernal service program.  
(3) Kernal mode uses kernal stack, user mode uses user stack.  
The difference is important to an OS, it allows OS to protect itself and other system components.

正确答案: 

In Kernel mode, the executing code has complete and unrestricted access to the underlying hardware. It can execute any CPU instruction and reference any memory address .

In User mode, the executing code has no ability to directly access hardware or reference memory. Code running in user mode must delegate to system APIs to access hardware or memory.

The difference rather protect the computer system resources, while preventing from errant users.

2020年1月4日 星期六 下午03时58分01秒 CST

← 确定