

OSG_1**Question #1 (1 point)**

Which of the following statements about the CPU handling interrupts is incorrect?

- ☐ The processor ceases to execute the current sequence of instructions
- ☐ The hardware saves the old PC location
- ☐ The CPU branches to a new instruction sequence
- ☒ None of the other choices

Question #2 (1 point)

A special register that contains the address of the next instruction to be fetched is called:

- ☐ Instruction Register (IR)
- ☒ Program Counter (PC)
- ☐ Program Status Word (PSW)
- ☐ All of the other choices

Question #3 (1 point)

The ways that input/output can be done is?

- ☐ Busy waiting
- ☐ Interrupt
- ☐ DMA (Direct Memory Access)
- ☒ All of the other choices

Question #4 (1 point)

Which of the following actions generates an external interrupt?

- ☐ An input/output operation is completed.
- ☒ A page that does not exist in the main memory is accessed by the virtual storage management.
- ☐ A system call instruction is executed.

- ☐ Division by zero occurs.

Question #5 (1 point)

What is not a main function of an operating system?

- ☐ Provide the users with an extended (virtual) machine
- ☐ Manage the I/O devices
- ☒ Provide user interfaces
- ☐ Support virtual memory

Question #6 (1 point)

Where is the position of the operating system in computer system:

- ☒ Above the hardware and under the user interface program
- ☐ Between the user interface program and the application Program
- ☐ In user space
- ☐ None of the other choices

Question #7 (1 point)

Which of the following instructions should be allowed only in kernel mode?

- ☒ Disable all interrupts
- ☐ Read the time-of-day clock
- ☐ AND of two numbers
- ☐ ADD of two numbers

Question #8 (1 point)

Which of special register in the CPU points to the top of the current stack in the memory?

- ☐ IR
- ☐ PC
- ☐ PSW

☒ SP

Question #9 (1 point)

Information that must be saved prior to the processor transferring control to the interrupt handler routine includes:

- ☐ PSW
- ☒ PSW and PC
- ☐ PSW and Contents of processor registers
- ☐ None of the other choices

Question #10 (1 point)

The language of the CPU is known as its

- ☒ Instruction set
- ☐ Register set
- ☐ Control unit set
- ☐ None of the other choices

Question #11 (1 point)

A CPU may have two or more complete processors, so that can carry out multiple threads in the same time is called:

- ☐ Pipeline
- ☒ Superscalar
- ☐ Multicore
- ☐ None of the other choices

Question #12 (1 point)

The two basic types of processor registers are:

- ☒ General and special registers
- ☐ Control and Status registers
- ☐ User-visible and user-invisible registers

- ☐ None of the other choices

Question #13 (1 point)

The general role of an operating system is to:

- ☐ Act as an interface between various computers
- ☒ Provide a set of services to system users
- ☐ Manage files for application programs
- ☐ None of the other choices

Question #14 (1 point)

Booting a general purpose computer involves the following steps except

- ☐ Execution of a ROM-based POST sequence
- ☐ Loading one or more bootstrap loaders
- ☐ Loading the OS
- ☒ Loading the command interpreter

Question #15 (1 point)

Which of the following statements is incorrect about the CMOS?

- ☒ Is volatile
- ☐ Interrupt
- ☐ To contain BIOS
- ☐ To hold the configuration parameters

Question #16 (1 point)

A CPU may have multiple execution units, so that can carry out multiple instructions in the same time is called:

- ☐ Pipeline
- ☒ Superscalar
- ☐ Multicore
- ☐ None of the other choices

Question #17 (1 point)

An operating system

- ☐ Manages hardware resources in a computer system
- ☐ Manages software resources in a computer system
- ☐ Deals with complex hardware resources and provides the user a virtual/extended machine that is much easier to deal with than the physical machine
- ☒ All of the other choices

Question #18 (1 point)

Which of the following is not a step in the boot process?

- ☐ Configuration and customization settings are checked.
- ☐ The BIOS is activated by powering on the CPU.
- ☒ The antivirus program checks all files for viruses.
- ☐ The operating system is loaded into RAM.

Question #19 (1 point)

The four main structural elements of a computer system are:

- ☐ Processor, Registers, I/O Modules, Main Memory
- ☐ Processor, Registers, Main Memory, System Bus
- ☒ Processor, Main Memory, I/O Modules, System Bus
- ☐ None of the other choices

Question #20 (1 point)

What is interrupt vector?

- ☐ A signal an I/O device sends to CPU
- ☐ The addresses of interrupt handlers
- ☒ Part of memory which contains the addresses of interrupt handlers
- ☐ None of the other choices

Question #21 (1 point)

Which of the following statements about Random Access memory (RAM) is correct?

- ☐ Is typically faster than cache memory
- ☒ Is volatile
- ☐ Can only be read sequentially
- ☐ Stores all the files on the computer

Question #22 (1 point)

A CPU may have separate fetch, decode and execute units, so that can carry out three steps of the three instructions in the same time is called:

- ☐ Pipeline
- ☒ Superscalar
- ☐ Multicore
- ☐ None of the other choices

Question #23 (1 point)

Which of the following is not a operating mode of CPU

- ☐ User mode
- ☐ Kernel mode
- ☒ Management mode
- ☐ None of the other choices

Question #24 (1 point)

As one proceeds down the memory hierarchy (from inboard memory to offline storage), the following conditions apply:

- ☐ Decreasing cost per bit
- ☐ Increasing capacity
- ☐ Increasing access time
- ☒ All of the other choices

Question #25 (1 point)

Which of the following statements about Electrically Erasable PROM (EEPROM) is correct?

- ☒ Can be erased and rewritten
- ☐ Volatile
- ☐ Unprogrammable
- ☐ None of the other choices

Question #26 (1 point)

Which is not an example of a resource that is commonly space-multiplexed?

- ☐ CPU
- ☐ Video RAM
- ☒ Hard drive
- ☐ Main memory

Question #27 (1 point)

List of memory location, that contains the executable program, the program's data, and its stack is called:

- ☐ set of resources
- ☐ address space
- ☒ address memory
- ☐ All of the other choices

Question #28 (1 point)

As one proceeds down the memory hierarchy (from inboard memory to offline storage), which of the following conditions is correct?

- ☐ Increasing cost per bit
- ☐ Decreasing capacity
- ☒ Increasing access time
- ☐

None of the other choices

Question #29 (1 point)

Which of special register contains the condition code bits, the CPU priority, the mode bit and other control bits?

- ☐ Instruction Register (IR)
- ☐ Program Counter (PC)
- ☒ Program Status Word (PSW)
- ☐ None of the other choices

Question #30 (1 point)

Examples of general purpose stored program computers include the following except

- ☐ Personal computers
- ☐ Network servers
- ☐ Workstations
- ☒ MP3 player