Course outline

How to access the portal

Week 0
Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9

Lecture 93: SECONDARY STORAGE DEVICES
Lecture 44: INPUT-OUTPUT ORGANIZATION
Lecture 45: DATA TRANSFER TECHNIQUES
Lecture 46: INTERRUPT HANDLING (PART 1)

Assignment 9

The due date for submitting this assignment has passed. Due on 2019-04-03, 23:59 IST.
As per our records you have not submitted this assignment.

1) Which of the following statements are true for data organized on a hard disk?
   a. Hard disk consists of a collection of platters.
   b. Each platter has only one surface for storing information.
   c. A track in a surface is the smallest unit that can be read and written.
   d. Disk heads over all the connected surface may not move together.

   □ a
   □ b
   □ c
   □ d

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   a

2) Maximum and average rotational delays for a disk rotating at 12,000 rpm are:
   a. 3 msec and 6 msec
   b. 2 msec and 1.5 msec
   c. 5 msec and 2.5 msec
   d. 6 msec and 3 msec

   □ a
   □ b
   □ c
   □ d

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
4) Consider a hard disk with sector size 512 bytes, 6000 tracks per surface, 128 sectors per track and 12 surfaces. If the disk platter rotates at 12,000 rpm and one track of data be transferred per revolution, the average data transfer rate is ________ Mbytes/revolution.

5) Which of the following are true for input/output ports?
   a. Tristate buffers are used in designing input ports.
   b. PIPO registers are used in designing input ports.
   c. The inputs of registers used for output ports are connected to the data bus.
   d. The outputs of input port are connected to the data bus.

6) Which of the following statements are false?
   a. Memory transfer instructions can be used for data transfer in I/O mapped device.
   b. Memory-mapped device use separate address decoder for memory and I/O p
   access.
   c. I/O mapped device cannot utilize complete memory address space.
   d. Memory mapped device cannot utilize complete memory address space.
7) In asynchronous data transfer, which of the following is/are true?
   a. Can be used for slow devices like keyboard to get improve CPU performance.
   b. Use handshaking to verify the status of I/O module.
   c. I/O device interrupt CPU when the device is ready for data transfer.
   d. CPU never waits for data transfer.

No, the answer is incorrect.  
Score: 0
Accepted Answers:
   a  b  c  d

8) Which of the following is/are false regarding data transfer techniques?
   a. Synchronous data transfer cannot be used for transferring large data.
   b. Interrupt-driven data transfer slower than DMA mode of data transfer.
   c. Asynchronous data transfer can be used for high-speed devices.
   d. Interrupt-driven data transfer waste more CPU time than asynchronous data transfer.

No, the answer is incorrect.  
Score: 0
Accepted Answers:
   a  b  c  d
Which of the following statement is true about execution of interrupt service routine (ISR)?

a. Different devices may have different ISR’s that get executed when an interrupt request is arrived.
b. The return form ISR is similar to return after execution of normal program.
c. INTR signal is used to get the address of ISR routine.
d. INTA signal is used to get the address of ISR routing.

No, the answer is incorrect.
Score: 0
Accepted Answers: 

Which of the following statements is/are true?

1. All hardware interrupts are maskable.
2. Non-maskable interrupt can be delayed by the CPU.
3. Trap is software interrupt that request service from CPU.
4. Exceptions are unplanned software interrupt.

No, the answer is incorrect.
Score: 0
Accepted Answers: 

End