QUESTION 1

1. Assuming the current working directory is "/usr/peter/documents", the relative path name of the file "/usr/peter/documents/os/lecture_slides.ppt" is:

   - ○ a. "documents/os/lecture_slides.ppt"
   - ○ b. "lecture_slides.ppt"
   - ◉ c. "os/lecture_slides.ppt"

QUESTION 1

1. Assuming the absolute path name of a file is "/usr/peter/documents/os/lecture_slides.ppt" and the relative path name of the same file is "os/lecture_slides.ppt", the current working directory must be:

   - ○ a. "/usr/peter"
   - ◉ b. "/usr/peter/documents"
   - ○ c. "/usr/peter/documents/os"

QUESTION 2

1. Which of the following statement regarding symbolic and hard link is incorrect?

   - ◉ a. Accessing a file using hard link takes longer time than using symbolic link.
   - ○ b. Using either a symbolic or a hard link, a file can have different names.
   - ○ c. Accessing a file using symbolic link takes longer time than using hard link.

QUESTION 2

1. Which of the following statement regarding symbolic and hard link is incorrect?

   - ◉ a. Symbolic link duplicates all information about a file in multiple directories.
   - ○ b. If a file has a symbolic link, it can be accessed using two absolute path names.
   - ○ c. Using either a symbolic or a hard link, a file can have different names.

QUESTION 3

1. Protection bits of a file are set as "r w x r- x r - -" in a UNIX system. What are the permissions granted to the users who are in the owner's group?

   - ◉ a. Read, Write, and Execute
   - ○ b. Read and Write
   - ○ c. Read and Execute

QUESTION 3

1. Protection bits of a file are set as "r - x r- x - - x" in a UNIX system. What are the permissions granted to the owner of this file?

   - ○ a. Read and Write
   - ○ b. Read only
   - ◉ c. Read and Execute

QUESTION 3

1. If a user using a UNIX system allows only herself to read and write and other users in the same group to read a file, what are the corresponding protection bits of the file?

   - ○ a. r w -r w - - - -
   - ◉ b. r w - r - - r -
   - ○ c. r w - r - - - - -

QUESTION 4

1. Assuming data are updated infrequently and accessed frequently in random order, what is the most appropriate file allocation method to optimize efficiency in terms of speed of access, use of storage space, and ease of updating?

    ◉ a. Contiguous Allocation

    ○ b. Linked Allocation

    ○ c. Indexed Allocation

QUESTION 4

1. Assuming data are updated frequently and accessed frequently in random order, what is the most appropriate file allocation method to optimize efficiency in terms of speed of access, use of storage space, and ease of updating?

    ○ a. Contiguous Allocation

    ◉ b. Indexed Allocation

    ○ c. Linked Allocation

QUESTION 4

1. If most of the files are accessed in a sequential manner, what is the file allocation method that would be most appropriate for allocating storage space for files in such a system?

    ○ a. Indexed Allocation

    ◉ b. Linked Allocation

    ○ c. Contiguous Allocation

QUESTION 5

1. Some file systems use two block sizes for disk storage allocation in order to:

    ○ a. Improve disk space utilization

    ○ b. Increase data rate

    ◉ c. Both (a) and (b)

QUESTION 5

1. Disk block size may affect both performance and space utilization of a file system. What is the problem that may arise when the block size is very small?

    ○ a. Low disk space utilization

    ◉ b. Low data rate

    ○ c. Both (a) and (b)

QUESTION 5

1. Disk block size may affect both performance and space utilization of a file system. What is the problem that may arise when the block size is very big?

    ◉ a. Low disk space utilization

    ○ b. Low data rate

    ○ c. Both (a) and (b)