**Chapter 12 – File Management**

**TRUE/FALSE QUESTIONS:**

T F 1)  All types of UNIX files are administered by the OS by means of inodes.

T F 2)  A preallocation policy requires that the maximum size of a file be declared

at the time of the file creation request.

T F 3)  File systems do not maintain the attributes associated with the files.

T F 4)  A field is characterized by its length and data type.

T F 5)  The cluster is the fundamental unit of allocation in NTFS.

T F 6)  Records may only be of fixed length.

T F 7)  The superuser is exempt from the usual file access control constraints and

has system wide access.

T F 8)  Typically, the only way that a user or application may access files is through

the file management system.

T F 9)  Device drivers are not part of the operating system.

T F 10)  The least-complicated form of file organization is the indexed file.

T F 11)  The sequential file organization is the only one that is easily stored on

tape as well as disk.

T F 12)  A partial index contains one entry for every record in the main file.

T F 13)  A file directory contains information about the files, including attributes,

location, and ownership.

T F 14)  Indexed allocation supports both sequential and direct access to the file and

thus is the most popular form of file allocation.

T F 15)  A file allocation table (FAT) is used to keep track of the portions assigned to a file.

**MULTIPLE CHOICE QUESTIONS:**

1)  A \_\_\_\_\_\_\_\_\_ is the basic element of data.

A)  database   B)  field

C)  file   D)  record

2)  A \_\_\_\_\_\_\_\_\_\_ is responsible for starting I/O operations on a device and processing the

completion of an I/O request.

A)  basic I/O supervisor   B)  basic file system

C)  device driver   D)  logical I/O

3)  A \_\_\_\_\_\_\_\_\_ is a collection of related fields that can be treated as a unit by some

application program.

A)  file   B)  field

C)  record   D)  database

4)  An objective of the \_\_\_\_\_\_\_\_\_\_ is to provide a standardized set of I/O interface routines

to user processes.

A)  working directory   B)  file management system

C)  indexed file allocation   D)  file directory

5)  A \_\_\_\_\_\_\_\_\_\_ is a collection of similar records.

A)  file   B)  database

C)  record   D)  field

6)  The \_\_\_\_\_\_\_\_\_\_ level is the primary interface with the environment outside of the

computer system.

A)  logical I/O   B)  basic I/O supervisor

C)  physical I/O   D)  access method

7)  \_\_\_\_\_\_\_\_\_ are used mostly in applications where timeliness of information is critical and

where data are rarely processed exhaustively.

A)  Indexed files   B)  Indexed sequential files

C)  Sequential files   D)  Hashed files

8)  A \_\_\_\_\_\_\_\_\_ is a collection of related data.

A)  record   B)  file

C)  database   D)  field

9)  The \_\_\_\_\_\_\_\_\_ is concerned with scheduling disk and tape accesses to optimize performance.

A)  device driver   B)  basic I/O supervisor

C)  access method   D)  logical I/O

10)  The term \_\_\_\_\_\_\_\_\_ refers to the logical structuring of the records as determined by the

way in which they are accessed.

A)  file organization   B)  access method

C)  working directory   D)  database

11)  The most common form of file structure is \_\_\_\_\_\_\_\_\_\_ .

A)  the indexed file   B)  the sequential file

C)  the pile   D)  the indexed sequential file

12)  The \_\_\_\_\_\_\_\_\_ file exploits the capability found on disks to access directly any block

of a known address.

A)  direct   B)  sequential

C)  indexed sequential   D)  indexed

13)  A \_\_\_\_\_\_\_\_\_ is a contiguous set of allocated blocks.

A)  key   B)  pathname

C)  pile   D)  portion

14)  The \_\_\_\_\_\_\_\_\_ contains the core parts of the operating system, including system binaries, system libraries,

and configuration files.

A)  data directory   B)  system directory

C)  cache directory   D)  mnt/sdcard directory

15)  \_\_\_\_\_\_\_\_\_\_ represents an open file associated with a process.

A)  Dentry object   B)  Inode object

C)  File object   D)  Superblock object

**SHORT ANSWER QUESTIONS:**

1)  A UNIX file system resides on a single logical disk or disk partition and is laid out with

the following elements: superblock, inode table, data blocks, and \_\_\_\_\_\_\_\_\_\_ .

2)  The \_\_\_\_\_\_\_\_\_\_ level provides a standard interface between applications and the file systems

and devices that hold the data.

3)  In the \_\_\_\_\_\_\_\_\_\_ form of file structure all records are of the same length, consisting of the

same number of fixed-length fields in a particular order.

4)  The essential aspects of a \_\_\_\_\_\_\_\_\_\_ are that the relationships that exist among elements

of data are explicit and designed for use by a number of different applications.

5)  The physical organization of the file on secondary storage depends on the blocking

strategy and the \_\_\_\_\_\_\_\_\_\_ strategy.

6)  \_\_\_\_\_\_\_\_\_\_ provides a general purpose record I/O capability and maintains basic data about files.

7)  An \_\_\_\_\_\_\_\_\_ is a control structure that contains the key information needed by the

operating system for a particular file.

8)  An objective of the \_\_\_\_\_\_\_\_\_\_ is to meet the data management needs and requirements of

the user, which include storage of data and the ability to perform related operations.

9)  The \_\_\_\_\_\_\_\_\_\_ is responsible for all file I/O initiation and termination.

10)  Because there is no structure to the \_\_\_\_\_\_\_\_\_ form of file organization, record access is

by exhaustive search.

11)  \_\_\_\_\_\_\_\_\_\_ are often used where very rapid access is required, where fixed-length records

are used, and where records are always accessed one at a time.

12)  The \_\_\_\_\_\_\_\_ is a balanced tree structure with all branches of equal length, and has become

the standard method of organizing indexes for databases.

13)  Linux makes use of a \_\_\_\_\_\_\_\_\_\_ , which presents a single, uniform file system

interface to user processes.

14)  Three methods of file allocation commonly used are: chained, indexed and \_\_\_\_\_\_\_\_\_ .

15)  A \_\_\_\_\_\_\_\_\_ is a collection of addressable sectors in secondary memory that an OS or

application can use for data storage.