Week 4

1) If a process is swapped out, all of its threads are necessarily swapped out because they all share the address space of the process.

**True**

2) In a multithreaded environment, a \_\_\_\_\_\_\_\_\_\_ is defined as the unit of resource allocation and a unit of protection.

a. strand

b. trace

c. string

**d. Process**

3) A \_\_\_\_\_\_\_\_\_\_ is a dispatchable unit of work that executes sequentially and is interruptible so that the processor can turn to another thread.

a. port

**b. thread**

c. token

d. Process

4) It takes less time to terminate a process than a thread.

**False**

5) A \_\_\_\_\_\_\_\_\_\_ is an entity corresponding to a user job or application that owns resources such as memory and open files.

a. task

**b. process**

c. token

d. Thread

6) A \_\_\_\_\_\_\_\_\_ is a single execution path with an execution stack, processor state, and scheduling information.

a. message

**b. thread**

c. domain

d. Strand

7) In a multithreaded environment there are separate stacks for each thread, as well as a separate control block for each thread.

**True**

8) \_\_\_\_\_\_\_\_\_\_ are characterized by the presence of many single-threaded processes.

**a. Multiprocess applications**

b. Java Applications

c. Multithreaded native applications

d. Multi instance applications

9) The principal disadvantage of the \_\_\_\_\_\_\_\_\_ approach is that the transfer of control from one thread to another within the same process requires a mode switch to the kernel.

Select one:

a. LWP

b. VAX

**c. KLT**

d. ULT

10) The blocked state in which the process is waiting for an event, such as the end of an I/O operation, the availability of a resource, or a signal from another process is the \_\_\_\_\_\_\_\_\_ state.

a. Times and timers

b. Uninterruptible

**c. Interruptible**

d. Stopped

11) The \_\_\_\_\_\_\_\_\_ are the fundamental entities that can be scheduled and dispatched to run on one of the system processors.

**a. Kernel threads**

b. ULTs

c. LWPs

d. Processes

12) A thread enters the \_\_\_\_\_\_\_\_\_ state, after waiting, if it is ready to run but the resources are not available.

a. Waiting

b. Standby

**c. Transition**

d. Terminated

13) Any alteration of a resource by one thread affects the environment of the other threads in the same process.

**True**

14) In a pure ULT facility, all of the work of thread management is done by the application, and the kernel is not aware of the existence of threads.

**True**

15) The traditional approach of a single thread of execution per process, in which the concept of a thread is not recognized, is referred to as a \_\_\_\_\_\_\_\_\_\_ .

a. lightweight process

**b. single-threaded approach**

c. resource

d. Task

16) The \_\_\_\_\_\_\_\_\_\_ state is when the thread has terminated.

**a. ZOMBIE**

b. SLEEP

c. FREE

d. STOP