Ahmed 3la2

1) **OpenMP is a ..... level programming model which is ..... programming abstraction.**
   a) low, shared memory
   b) low, distributed memory
   c) high, shared memory
   d) high, distributed memory
2) **Multi-thread programs have .... entry point(s) and .... exit point(s).**
   a) single, single
   b) single, multiple
   c) multiple, single
   d) multiple, multiple
3) **In Java, a low-priority thread that runs in the background to perform tasks such as garbage collection is called ....**
   a) orphan Threads
   b) Daemon Threads.
   c) Zombie Threads
   d) Confused Threads
   e) Lonely Threads
4) **Directives are handled in ..... stage.**
   a) Prepossessing
   b) Compilation
   c) Assembling
   d) Linking
   e) Runtime

5) **In shared memory systems, any access from any processing element to the same address has equal latency** (……..…..)
6) **In general, Master thread must be the last thread to be terminated, however, in openMP, Master thread can be terminated before their user threads.** (……..…..)
7) **PThreads is a distributed memory system.** (……..…..)

Answers:

1) **c**
2) **b**
3) **b**
4) **a**
5) **T**
6) **F**
7) **F**

Ahmed hosney

Salem

1) **Which of the following is not considered work sharing construct?**
   a) Single
   b) Master
   c) Section
   d) Critical
   e) For
2) **there is implicit barrier at the end of master construct**. (……..…..)

Answers:

1) **d**
2) **F**

Nour

1) **Variables: A=1 ; B=1 ; C=1**
   #pragma omp parallel private(B) firstprivate(C)
   Are A,B,C local to each thread or shared inside the parallel region?
   What are their initial values inside?

Answers:

Fawzy

1) **The master region can be executed by any thread including the master thread.** (……..)

Answers:

1) **F**
2)

Madbouly

1) **the thread can change its own ID (THREAD_NUM) during execution.** (……..…..)
2) **can multiple threads have same ID (THREAD_NUM) in Nested parallelism.** (……..…..)
3) **the expected output if we call function omp_get_num_threads() in serial region is .....**
   a) runtime error
   b) compile error
   c) 1
   d) 0

Answers:

1) **T**
2) **T**
3) **c**

Mennatallah

8) **Which of the following decides when a task is executed?**
   a) runtime system
   b) programmer
   c) thread
9) **A thread generates a task when it encounters:**
   a) task construct
   b) parallel construct
   c) single construct

3) In the flowing 2 versions of a program to execute 2 tasks:

```
#pragma omp parallel
{
        #pragma omp single nowait
        {
                #pragma omp task
                b = beta();

                a = alpha();
        }
}
```

```
#pragma omp parallel
{
        #pragma omp single nowait
        {
                #pragma omp task
                b = beta();
                #pragma omp task
                a = alpha();
        }
}
```

a) Why in the second pragma, nowait is used ?
b) What is the difference between the 2 versions ?

4) **What does the nowait clause do?**
   a. Skips to the next OpenMP construct
   b. Prioritizes the following OpenMP construct
   c. Removes the synchronization barrier from the previous construct
   d. Removes the synchronization barrier for the current construct

Answers:

1) **a**
2) **a**
3) **a) To eliminate implicit barrier**
   b) is that the program on the left generates task beta() and immediately executes alpha() on the same thread, while the program on the right simply generates beta() and alpha() for execution by any thread

4) d

Yusuf Saeed