TKT20016 - Review questions 2

1. Threads

(a) Advantages of multithreading over multiple processes:

x lower overhead for creation and context switching.

x ease of data sharing within same adress space.

(b) Advantages of kernel-level threads over user-level threads

x true concurrency on multiprocessor system.

x better integration with OS.

(c) Blocking system call: ult vs. klt

x ult: blocking call in one thread blocks entire process.

x klt: only calling thread is blocked; others can continue.

x Which is better? klt is generally better in this scenario as it avoid blocking entire process.

2. Scheduling criteria

common short-term scheduling criteria include:

x CPU utilization

x throughput

x turnaround time