

# Operating System- Course in English

## Assignment 2

2021/04/14

**This is a *hand writing* assignment. Answer the following questions in an A4 sheet and turn it in on April 28, 2021. For those who cannot turn in the assignment on time, please turn in your assignment to instructor's mailbox with a penalty of 20 scores per day.**

1. Show the layout of a process in memory.
2. What is context switch in operating system? When will it occur?
3. How does an operating system to represent a process? What kinds of contents does it contain?
4. Give the definition of zombie process and orphan process. How are these processes handled?
5. Compare direct and indirect communication in message passing.
6. Give two common forms of client-server communication and briefly describe them.
7. Consider the “exactly once” semantic with respect to the RPC mechanism. Does the algorithm for implementing this semantic execute correctly even if the ACK message sent back to the client is lost due to a network problem? Describe the sequence of messages, and discuss whether “exactly once” is still preserved.
8. How to dynamically bind client and server port for remote procedure calls?