



Vavuniya Campus of the University of Jaffna

First Examination in Information and Communication Technology - 2014

Second Semester - February/March 2016

ICT1262 Practical for Operating Systems

Answer All Questions

Allowed Time: Three hours

1. Write a shell script file and name it with your index number (e.g. *IT1234.sh*) to perform each of the following tasks:

- (a) Print the current time. [05%]
- (b) Print proper Greeting message (If current time is between 0.00 a.m - 12.00 noon, then *Good Morning* else *Good Evening*). [20%]
- (c) Read a name and year of birth from the user and print it. [05%]
- (d) Print a welcome message with the name and the age. [20%]

2. Write two C programs namely A and B to implement each of following requirements using message queues:

- (a) First run the program A that needs to send a message "*Hello B!*" to program B using the message queue and print it in program A.
- (b) Next run the program B and if it has received the message "*Hello B!*" then send a message "*Hello A, How are You?*" to A, else send "*Hello A, Can you hear me?*" and print it in Program B.

[This question is continued on next page]

- (c) Run Program A again and if it has received *"Hello A, How are You?"* then print *"Fine. Thank you."*, else if it has received *"Hello A, Can you hear me?"* then print *"Loud and Clear!"*, else if no messages have been received then send a message *"Hello B!"* using the message queue and print it.

(50%)