



29 /5 / 2016

Date:

Time: 3 hours

Lecturer: Alaa A.H. Hashim

Subject: Data Structure

Class: 2nd

Branch: AI, SW, IS

Note: answer FOUR Questions only

Q1:) Write complete program to:

- a) read array contain (10) values ?
- b) Use function: construct circular link list (cplist) with nodes values taken from array?
- c) Use function: find the greatest value in the circular link list (cplist)?

Q2:) You have stack of size (10) contain (5) element , Write program segment with draw to:

- a) Add (7) elements to stack ?
- b) convert even values to another empty stack of size (6)?
- c) print the final state for new stack ?

Q3:) Having a circular Queue of size (10) , F=5 ,R=2 ,write program segment with draw to:

- a) convert all values of circular queue to empty queue of size (7)?
- b) Delete (3) elements from new queue?
- c) Print the final state of Queue?

Q4:) You have link list (plist), use recursion to:

- a) write function to find number of nodes?
- b) Write function to find largest value?
- c) Write function to delete the fourth node?

Q5:) Write complete program contain : function to construct binary tree and another function to find the sum of even values and print this tree by post order?