Note: Answer four questions only

Q1) Having a Queue of size (10), write complete program to split the even values of the queue into other queue of size (5) and the odd values into stack of size (5). **(12.5 marks)**

Q2) Draw BST for the following sequence of keys: **(12.5 marks)**

60, 86, 12, 40, 20, 35, 90, 7, 73, 99

And perform the following in sequence:

  a. Insert **65, 10, 75**
  b. Delete **86, 7, 99**
  c.   Write a function to print the tree using the postorder method.

Q3) Given a link list called (**plist**) contains five nodes, by using functions perform the following: **(12.5 marks)**
  a. Create the list.
  b. Insert two nodes at the beginning of the list.
  c. Find the max and min values in the list.
  d. Delete the third node in the list

Q4) Given a circular queue of size (10) contains (10) elements, write complete program to convert the even values to an array of size (10).   **(12.5 marks)**

Q5) A- write complete program by using functions to construct a circular link list of size (10), and then put the negative values into an array of size (10) and then print the result.
                                                                                      (7.5 marks)

  B- List all the sort algorithms and then write one algorithm of them.   **(5 marks)**

Good Luck

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