Roll No.					

Paper Code :DCS-104

DCA-4, ADCA-4, BCA-3 1st Year Examination, Calendar Batch 2017 Data Structure Through C

Time: 3 Hours [Max. Marks: 100

Note. Attempt any *five* questions. Each questions carry equal marks.

- **Q.1** Which of the sorting algorithm has best performance in terms of storage and time complexity your answer?
- Q.2 Draw the tree from the following
 - a) IN- EACKFHDBG PRE- FAEKCDHGB
 - b) IN DBFEAGCLJHK POST- DFEBGLJKHA
- **Q.3** Explain various heap sort methods?
- **Q.4** Write down the non recursive algorithm of binary tree traversal in in-order.
- Q.5 Explain the term data structure. Also differentiate between built-in and user defined data structure
- **Q.6** Explain the concept of pointer & static variables?
- Q.7 What is a stack? Write algorithm to insert and delete an item from the stack.
- **Q.8** Differentiate between the concept of top-down & bottom-up programming?