

MARWARI COLLEGE RANCHI

Subject : Data structure

Full Marks : 30

Paper : VIII

Time : 1Hr.

MCA SEMESTER 2

Mid semester examination 2017

1. Fill up the blanks 2 x 5 = 10
 - a. A stack is a ----- data structure.
 - b. A queue is a ----- data structure.
 - c. A linked list is a linear collection of -----.
 - d. Each node in a linked list consists of two parts and
2. Answer any **TWO** questions. 5 x 2 = 10
 - a. What is a stack? What are the different operations that can be performed on a stack? Explain them.
 - b. Write the algorithm to insert an element in a queue.
 - c. What are the differences between an array and a linked list?
3. Answer any **ONE** question. 10 x 1 = 10
 - a. Write a C program to implement push and pop operation on a stack.
 - b. Write a C program to delete an element from an array.