

## M.Sc. (CA & IT) Sem-III

### 303: Introduction to Algorithm

#### Assignment

1. What is data structure? Explain classification of data structure in detail?
2. What is Stack? Explain various operations of stack with example?
3. What is Queue? Explain types of queue with example?
4. What is Circular queue? Write an algorithm for insert and remove operations of circular queue?
5. Differentiate: linear search and binary search?
6. What is recursion? Write an algorithm for factorial problem using recursive algorithm?
7. What is searching? Write an algorithm for binary search?
8. What is sorting? Write an algorithm for quick sort?
9. Explain radix sort with example?
10. What is polish notation? Write an algorithm for evaluation of postfix string?