I-Mid Semester Exam April 2024
Branch: CSE/AIML Semester: II
CS-205: Data Structure

.Time 1:30 Hrs   Max. Marks 20

Note: All questions are compulsory and have internal choice.

Ques.1: (a)What is data structure. Differentiate between linear and non linear data structure.   (CO1 10 Marks)

(b) Write the algorithm of insertion sort with example.

OR

Ques.2: (a) Write the algorithm of linear search with example.

(b) Explain and implement a single linked list with an example.

(CO1 10 Marks)

Ques 3: (a) Define stack. Discuss the algorithms for push and pop operations on a stack.

(b) Convert infix expression into postfix expression

$A+(B*C-(D/E^F)*G)*H$ (CO2 10 Marks)

OR

Ques 4(a) Sort the following elements using quick sort

50,30,60,10,40,20,80,70,100,90

(b) Write the procedure to convert infix expression into postfix expression.