

CSD102 Data Structures

Quiz #02

Date: 16-02-2023

Time: 2:15PM to 3:15PM

Total Marks: 05

All questions are compulsory

Name: -

Roll No: -

1. Describe the process of pushing an item onto a stack, and explain what happens to the stack's size and contents as a result.
2. How does the "pop" operation work in a stack, and what is the result of performing this operation on an empty stack?
3. Convert into Prefix expression.
 - a) $(ab-(c+d/e^f)-g)h$
 - b) $A+B*C^D$
 - c) $A^B^C^D$
 - d) $(a+(b/c)*(d^e)-f)$
4. Find the output of the following prefix expression.
 - a) $*+2-2\ 1/-42+-5\ 3\ 1$
 - b) $+ -9\ 2\ 7$
 - c) $-+7*45+20$
 - d) $-+8/632$
5. Draw the queue structure in each case when the following operations are performed on an empty queue.
 - (a) Add A, B, C, D, E, F
 - (b) Delete two letters
 - (c) Add G (d) Add H
 - (e) Delete four letters
 - (f) Add I