


 MANJARA CHARITABLE TRUST
 RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI
 Department of Applied Sciences & Humanities
 INTERNAL ASSESSMENT (IA) - I

Date: 21/02/2025

Max. Marks: 2	Duration: 60 minutes		
Name of the Course: Data Structure (PCC2011)			
Branch: Computer. AIDS, IT			
Instructions:			
1. Question 1 (i,ii,iii) is compulsory for 10 marks. 2. From Question 2 to 4 (solve any two) 3. Figures to the right of the question indicate full marks. 4. Assume the suitable data wherever necessary. 5. Illustrate your answers using neat diagrams wherever necessary.			
Questions	Max Marks	Bloom's Taxonomy Level	Course Outcomes
Q.1 Compulsory.			
i) If the sequence of operations- push (1), push (2), pop, push (1), push (2), pop, pop, pop, push (2), pop are performed on a stack. write the sequence of popped out values.	3	2	CO1,2
ii) Define data structure and explain its different types in brief.	3	1	CO1
iii) Convert given below infix expression to postfix expression using stack . Infix expression: $(a * (b + c) / d) - (e \wedge f)$	4	3	CO6
From Question 2 to 4 Solve any Two.			
Q2) Explain ADT in detail with an example.	5	1	CO1
Q3) Write a function for search (). [to find the largest element in the array.]	5	2	CO2
Q4) Write an algorithm to evaluate prefix expression.	5	2	CO3