

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS- 2026

BCA-II SEMESTER

COURSE CODE (CREDITS): 25BC1CI211

MAX. MARKS: 25

COURSE NAME: DATA STRUCTURES

COURSE INSTRUCTORS:SRT

MAX. TIME: 1 Hour 30 Min

*Note: (a) All questions are compulsory.**(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems**(c) Use of calculator is not allowed*

Q.No	Question	CO	Marks
Q1	Write the algorithm for evaluating an infix expression to prefix (Polish Notation)?	CO-4	5
Q2	Write the code snippet that inserts a new node in a linked list at a specified position? Also explain the what every line code does?	CO-3	5
Q3	Convert the given infix expression to its prefix version using stacks? $P+Q*(R-S)$	CO-4	5
Q4	Explain the concept of dynamic memory allocation along with the functions used for implementing it?	CO-3	5
Q5	Explain queues and linked list in detail? Write a code snippet for queues using arrays for the following- • Front and rear are initialized and checked for overflow condition	CO-3	5