JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2026

BCA-II SEMESTER

COURSE CODE (CREDITS): 25BC1CI211 MAX. MARKS: 15

COURSE NAME: DATA STRUCTURES

COURSE INSTRUCTORS:SRT MAX. TIME: 1 Hour

Note: *(a) All questions are compulsory.*

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculators is not allowed

Q.No	Question	CO	Marks
Q1.	Define the following terms: • Linear and Non-Linear data structures • Abstract Data Type • Static memory allocation and Dynamic memory allocation	CO-1	3
Q2.	Define algorithmic complexity and asymptotic notations with proper explanation and graphical interpretation?	CO-1	3
Q3.	Highlight the key differences between array and stack data structures on the basis of – • allowed operations • real -life applications / use case • memory representation	CO-3	3
Q4.	[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16] Target Element=16	CO-2	3
Q5.	Perform quicksort on the following list- [5, 3, 8, 4, 2, 7, 1]	CO-2	3

JUIT TEST-1 EXAMINATION- FEB-2026

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