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Daffodil International University

Department of Computer Science and Engineering

Quiz1 Summer 2026

Course Code: CSE 123, Course Title:Data Structure

Marks: 15

Time: 30 Minutes

ID:

Imagine organizing vintage books using two methods. **Method A** locks books into a rigid crate with fixed, numbered slots, allowing instant access to any specific book but requiring you to shift all subsequent books to insert a new one. **Method B** scatters books across random shelves, where each book contains a sticky note pointing to the location of the next, allowing effortless insertions but requiring you to trace the chain from the beginning to find a specific book.

(a) Identify the methods mentioned in the scenario and differentiate between them .

(b) If anyone wants to insert a book at the end of method 2 which steps he /she needs to take, explain with necessary code .

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(c) Which method is dynamic and why ? Explain the difference between malloc() and calloc() function with examples.