National University of Computer and Emerging Sciences **Lahore Campus**

Advance Database Ouiz #03 (B) **Concepts**

Date: 08-04-2025

Instructor(s)

Mr. Muhammad Naveed

Roll No Section

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Course	code:	CS4064

Total marks: 10

Questions: 1

Student Signature	

Attempt all the questions.

CLO 2#: Apply the models and approaches in order to become enabled to select and apply appropriate methods for a particular case

Q1: Consider a disk with block size B=2048 bytes. A block pointer is P=6 bytes long. A file has r=1,000,000transaction records of fixed length. Record length R is 115 bytes long and customerID field is 10 bytes long. Suppose the file is ordered by the non-key field customerID and we want to construct a clustering index on customerID field that uses block anchors (i.e., every new value of customerID starts at the beginning of a new block). Assume there are 2500 distinct values of customerID, and that the transaction records are evenly distributed among these values. Calculate: