National University of Computer and Emerging Sciences, Lahore Campus

Course:	**Advance Database Concepts**	**Course Code:**	**CS4064**
Program:	**BS (Computer Science)**	**Semester:**	**Spring 2025**
Date:	**Tue 11-Mar-2025**	**Total Marks:**	**10**
Section:			
Roll No:			
Quiz:	**3 (Hashed Files)**		

Q. Suppose that we are using extendable/dynamic hashing on a file that contains records with the following search-key values: 19, 14, 21, 8, 23, 15, 31, 25. Show the extendable hash structures for this file if the hash function is h(k) = k mod 4 and buckets can hold **three** records. Use higher bits (i.e., left to right) of hash value to determine a directory entry.