National University of Computer and Emerging Sciences, Lahore Campus

Course: Bioinformatics Course Code: CS4049

Program: BS(Computer Science) Semester: Spring 2025   **Section: BCS-8A**

Duration: 15 Minutes   **Total Marks: 10**
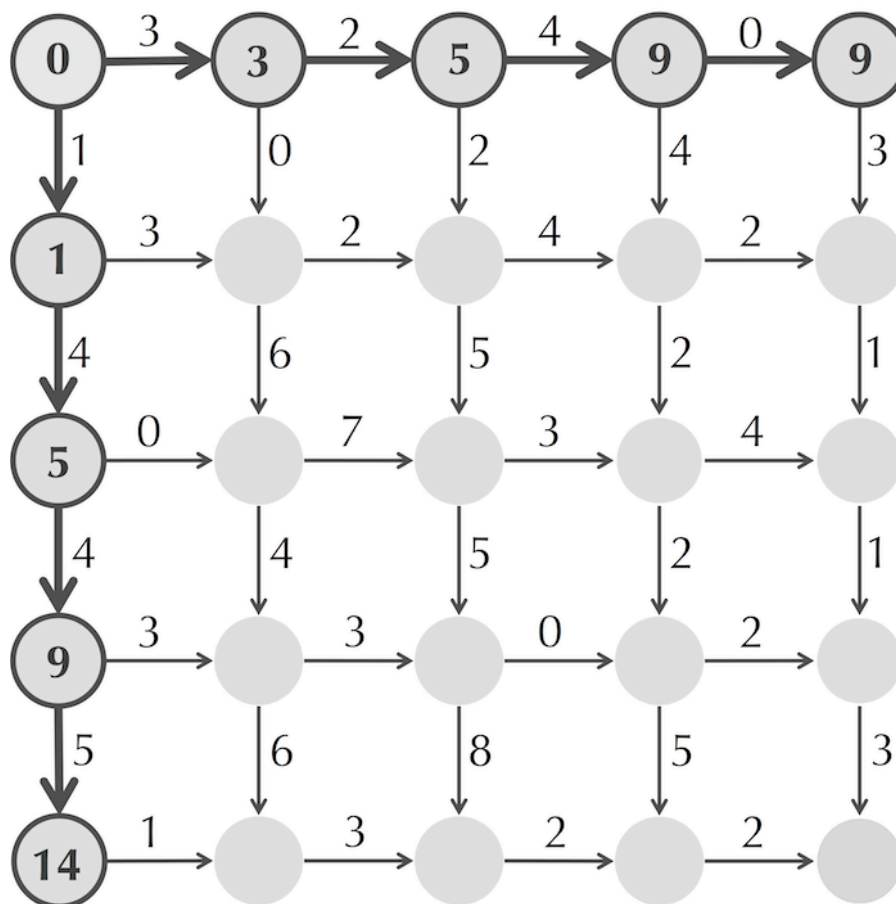**Paper Date: 26-Mar-2025**   **Page(s): 2**

<u>Exam: Quiz 1</u>

Q1 Fill in the values of each node to find the shortest path between the Source and Sink nodes in the graph shown below.   **(2)**

Q2 Given two DNA sequences **ACGGACT** and **ATCGGATCT**, draw the alignment graph. Find the longest common subsequence and sequence alignment for the two sequences.   **(8)**