



COMSATS University Islamabad, Lahore Campus

Quiz # 3 – SPRING 2021

Course Title:	Design and Analysis of Algorithms	Course Code:	CSC301	Credit Hours:	3(3,0)
Course Instructor:	Dr. Hasan Jamal	Date:	26/05/2021	Maximum Marks:	10

Important Instructions / Guidelines:

- Submit your solution on Google Classroom.
- Any form of cheating or copying will result in zero marks.
- One mark will be deducted per two minutes of late submission over the submission deadline.

Question:

[Marks: 10]

Given a hash table of size 17 and a hash function $H(k) = K \bmod 17$, draw the contents of the hash table if open addressing with quadratic probing is used to resolve collisions. What values will be in the hash table after the following sequence of insertions? Show your work for partial credit.

21, 17, 11, 6, 32, 3, 4, 15, 57, 9, 23, 34