National University of Computer and Emerging Sciences, Lahore Campus **Course: Probability and Statistics Course Code: MT2005 Program: BS**(Computer Science) Spring-2025 **Semester: Duration:** 10 Minutes Total Marks: 12 **Quiz Date:** 29-01-2025 Weight 2% **Section:** BCS-4E Page(s): 1 Exam: **Assignment-1 Roll No: Attempt All Questions/Parts Instruction/Notes:**

QUESTION 1: (Marks=1+1+5+5)

Dataset Description: The following dataset captures the activity of users on an online coding platform. The platform recently ran a promotion offering bonus points for completing specific challenges. Data was collected from 8 users over a single day during the promotion period.

User	Type of	Challenges	Total Points	Utilized	Gender	Education	Age
ID	User	Completed	Earned	platform		Level	
1	Regular	1	39.50	Web Interface	Male	Bachelors	32
2	Promotional	2	102.40	Mobile App	Male	Masters	28
3	Promotional	1	22.50	Web Interface	Male	Bachelors	29
4	Regular	1	100.40	Web Interface	Female	Ph.D.	30
5	Regular	3	54.00	Mobile App	Female	Bachelors	31
6	Promotional	2	50.20	Mobile App	Male	Bachelors	31
7	Regular	1	25.50	Web Interface	Female	Masters	32
8	Promotional	2	28.70	Mobile App	Female	Ph.D.	33

Answer the following questions listed below:

- a) How many elements are in this data set?
- b) How many variables are in this data set?
- c) Which variables are qualitative and which variables are quantitative?
- d) Which type of measurement scale can be used for each of the variables tabulated below?

	Type of User	Challenges	Total points	Utilized platform	Education Level
		Completed	earned		
c					
d					