ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
Department of Computer Science and Engineering (CSE)

QUIZ II   **SUMMER SEMESTER, 2019-2020**
DURATION: 40 Minutes   **FULL MARKS: 20**

HUM 4441: Engineering Ethics
Programmable calculators are not allowed. Do not write anything on the question paper.
Figures in the right margin indicate marks.

1. Consider the following Private Table (PT).

Name	Zip	Age	Nationality	Salary
Alister	13053	28	Russian	50K
Brian	13068	29	American	50K
Clark	13068	21	Japanese	75K
Dwayne	13053	23	American	75K
Evin	14853	50	Indian	100K
Flintoff	14853	55	Russian	50K
Gordon	14850	47	American	75K
Herschelle	14850	49	American	75K
Ian	13053	31	American	100K
Jayasuria	13053	27	Indian	100K
Kieron	13068	36	Japanese	100K
Liton	13068	35	Bangladeshi	100K

Here, Name is the unique identifier and {Zip, Age, Nationality} are quasi-identifiers and Salary is the sensitive information.

Apply data anonymization techniques on PT such that the release table (RT) satisfies 2-anonymity model. (15 marks)

Further, if someone knows everything about Liton, what is the probability to identify Liton based on your release table, i.e. anonymized dataset? (5 marks)