

## Sri Lanka Institute of Information Technology Year 02 – Semester II – 2022 Probability and Statistics – IT2110 Tutorial 01

- 1. Determine whether the following variables are categorical or quantitative.
  - a) Color of a randomly selected beetle
  - b) Birth weight
  - c) Hometown
  - d) Life of a battery measured in hours
- 2. State whether each of the following variables is quantitative (numerical) or qualitative (categorical). If quantitative, is it discrete or continuous? If qualitative, is it nominal or ordinal?
  - a) Number of donors at a blood drive.
  - b) Letter grade in a statistics class.
  - c) Air pressure in pounds per square inch in an automobile tire.
  - d) Method of payment (cash, check, debit card, credit card).
- 3. For each of the following variables indicate whether it is quantitative or qualitative and specify the measurement scale that is employed when taking measurements on each.
  - a) Admitting diagnosis of patients admitted to a mental health clinic
  - b) Weights of babies born in a hospital during a year
  - c) Gender of babies born in a hospital during a year
  - d) Range of motion of elbow joint of students enrolled in a university health sciences curriculum
  - e) Under-arm temperature of day-old infants born in a hospital
- 4. Indicate whether the following variables are categorical or quantitative:
  - a) Favorite food.
  - b) Favorite profession.
  - c) Number of goals scored by your favorite team last season.
  - d) Number of students at your school.

- e) The eye color of your classmates.
- f) IQ of your classmates
- 5. Indicate whether the following variables are discrete or continuous:
  - a) Number stocks sold every day in the stock exchange.
  - b) Hourly temperatures recorded at an observatory.
  - c) Lifetime of a car.
  - d) The diameter of the wheels of several cars.
  - e) Number of children from 50 families.
  - f) Annual Census of Americans.
- 6. Classify the following variables as categorical, quantitative, discrete or continuous:
  - a) The nationality of a person.
  - b) Number of liters of water contained in a tank.
  - c) Number of books in a library shelf.
  - d) Sum of points tallied from a set of dice.
  - e) The profession of a person.
  - f) The area of the different tiles on a building.