2008AIML600

Ans 1.

(a)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | |  | | --- | | Continuous or Discrete | | |  | | --- | | Scale of Measurement | |
| |  | | --- | | Amount of sugar in a Coke bottle. | | Continuous | Ratio |
| |  | | --- | | Birth place of BITS university students | | Discrete  Assuming either with PIN, or birthplaces are known by name not with longitude and altitude | Nominal |
| |  | | --- | | The size of Easter eggs represented as Small, Medium, Large, Extra Large, Jumbo | | Discrete | Ordinal |
| |  | | --- | | Pan card number | | Discrete | Nominal |
| |  | | --- | | Dates | | Discrete | Interval/Ordinal  Depends upon the interpretation, two dates can be ordered, as well as interval b/w two dates can also be determined. |
| |  | | --- | | Number of defective shirts in packs of 100 manufactured by color plus | | Discrete | Ratio |

(b)

No, as the initial dataset, there is no way to detect this noise, and no way to measure actual noise until and unless there is some precise tire gauge again, so initial dataset is considered as noise free.

(C)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | Student ID | | |  | | --- | | Height(cm) | | |  | | --- | | Weight(kg) | |
| S1 | 169 | 60 |
| S2 | 171 | 70 |
| S3 | 150 | 80 |
| S4 | 180 | 75 |
| S5 | 150 | 60 |

An appropriate data transformation method to scale both the variables in the range of [0,1] is Min Max Method. Which is defined as below: -

Scaled Weight of S4