#### **Work sheet 2 Answers**

# • Statistics Answers Worksheet 2

Ans 1 - (C) Both

Ans 2 - (C) 12

Ans 3 - (B) A measure of variability

Ans 4 - (C) Both of these

Ans 5 - (b) Summarizing and explaining a specific set of data

Ans 6 - (B) Data set

Ans 7 - (A) 2 or more

Ans 8 - (C) Bar Graph

Ans 9 - (D) Analysis of variance

Ans 10 - (A) Z-Score

Ans 11 - (C) Mean

Ans 12 - (D) 400005.2

Ans 13 - (D) Mean

Ans 14 - (A) Descriptive and inferences

Ans 15 - (D) H-L

### SQL Answers Worksheet 2

Ans 1 - (D) Unique

Ans 2 - C) Null

Ans 3 - (A) Each entry in the primary key uniquely identifies each entry or row in the table.

Ans 4 - (A) There should not be any duplicate entries

Ans 5 - (B) foreign Key

Ans 6 - (B) 3

Ans 7 - (C) one to one

Ans 8 - (B) many to one

Ans 9 - (A) Delivery id

Ans 10 - (D) 2

Ans 11- (B) many to one

Ans 12 - (C) Table

Ans 13 - (A) Insert into

Ans 14 - (B) Unique, and (C) Primary key

Ans 15 - (A) A blood group can contain one of the following values - A, B, AB and O.,

(C) A blood group cannot have null values

### Machine Learning Answer Worksheet 2

Ans 1 - (D) 2 and 3

Ans 2 - (D) 1,2 and 4

Ans 3 - (A) True

Ans 4 - (A) True

Ans 5 - (B) 1

Ans 6 - (B) No

Ans 7 - (A) Yes

Ans 8 - (D) All of above

Ans 9 - (A) K-means clustering algorithm

Ans 10 - (D) All of above

Ans 11 - (D) All of above

**Ans 12** – The K- means clustering is sensitive to outliers because mean is easily influenced by extreme value.

## Question 13 – Why is K means better?

**Answer 13** – K-means is a unsupervised machine learning algorithm which is highly sensitive to noise and outliers. It also does not work with non-circular cluster shape – number of cluster and initial seed value need to be specified beforehand.

## **Question 14 – Is K means a deterministic algorithm?**

**Answer 14 -** K-Means is a non-deterministic algorithm. This means that a compiler cannot solve the problem in polynomial time and doesn't clearly know the next step. This is because some problems have a great degree of randomness to them. These algorithms usually have 2 steps - 1) Guessing step 2) Assignment step. On similar lines is the K-means algorithm.