Q1)

Ans : True

Q2)

Ans : a: central limit therom

Q3)

Ans : b) Modeling bounded count data

Q4)

Ans : d) All of the mentioned

Q5)

Ans : c) Poisson

Q6)

Ans : b) False

Q7)

Ans : b) Hypothesis

Q8)

Ans : a) 0

Q9)

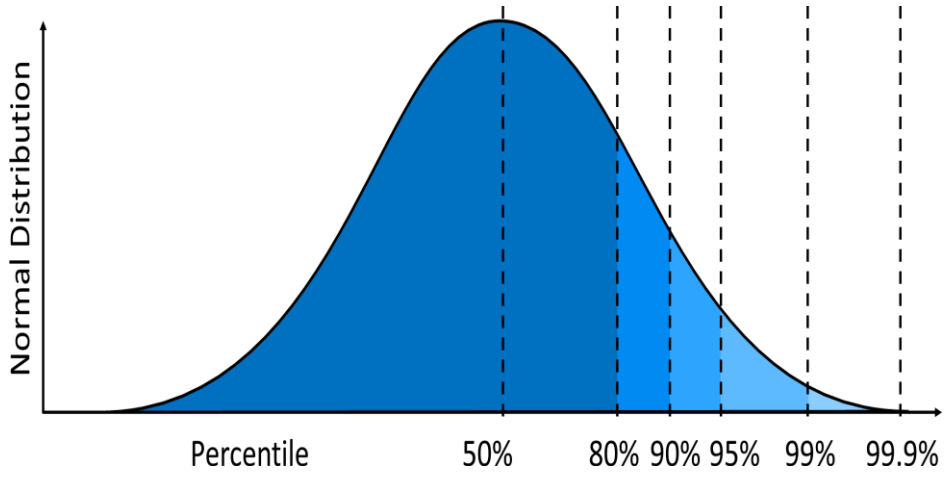
Ans : c) Outliers cannot conform to the regression relationship

Q10)

Ans : Normal distribution represents the behaviour of most of the situations in the univers.

- The mean, median, mode of the distribution coincide
- The curve of the distribution is bell-shaped and symmetrical about the line x=u
- The total area under the curve is 1
- Exactly half of the values are to the left of the center and other half to the right.
- Many things closely follow normal distribution
    1. Height of people
    2. Size of things produce by machine
    3. Errors in measurements
    4. Blood pressure

5. Marks on a



Q11)

Ans : In statistics missing data occure when no data value is storedfor the variable in an observation and it can have a significant effect on conclusion that can be get from the data .

Understanding the resons why data are missing is important for handelling the remaining data correctly.

- Missing completely at random
- Missing at random
- Missing not at random

There are some techniques of dealing with missing data

- Imputation
- Omission
- Analysis

Some imputation techniques

- Complete case analysis
- Arbitrary value imputation
- Frequent category imputation

Q12)

Ans : like any other scientific testing , A/B testing is basically statistical hypothesis testing .

It is an analytical method for making decision that estimates population parameters based on sample statistics.

A/B testing process can be simplified as follows:

- We start the A/B testing process by making a claim (Hypothesis)
- We launch our test to gather statistical evidence to accept or reject a hypothesis about our website visitors.
- The final data shows you weather your hypothesis was correct,incorrect or inconclusive.

Q13)

Ans: Yes true imputing the mean preserves the mean of the observed data. So iif the data are missing completely at random , the estimate of the mean remains unbiased. That's good thing. By imputing mean,we are able to keep our sample size up to the full sample size.

Q14)

Ans : In statistics linear regression in linear approach for modelling the relationship between a scalar response and one or more explanatory variables .

- The case of one explanatory variable called simple linear regression
- For more than one process called multiple linear regression
- Linear regression has many practical uses.

Q15)

Ans : There are main 2 branch of statistics

- Descritriptive statistics : Which works on entire data set which is available. It is using when there is small data set available .
- Inferential statistics : It works on first sample of population and then generalize them to entire or larger population.It is use when there is larger population.