

## Set 1 Statistics assignment 8

Q1 a

Q2 a

Q3 a

Q4 b

Q5 a

Q6 a

Q7 b

Q8 a

Q9 a

Q10 c

Q11 a

Q12 c

Q13 What is ANOVA in SPSS?

Analysis of Variance, i.e. ANOVA in SPSS, is used for examining the differences in the mean values of the dependent variable associated with the effect of the controlled independent variables, after taking into account the influence of the uncontrolled independent variables

Q14 There are three primary assumptions in ANOVA: **The responses for each factor level have a normal population distribution. These distributions have the same variance. The data are independent.**

Q15

- One way ANOVA is a hypothesis test, used to test the equality of three or more population means simultaneously using variance.
- One Independent Variable
- Three or more levels of one factor.
- Need not to be same in each group.
- Need to satisfy only two principles.

Two way ANOVA

- Two way ANOVA is a statistical technique wherein, the interaction between factors, influencing variable can be studied.
- Two Independent Variable
- Effect of multiple level of two factors.
- Need to be equal in each group.
- All three principles needs to be satisfied.