Statistics Practical Semester 2

Descriptive statistics. (Use Excel and SPSS)

Practical 1. Select the sample of size 500 from given data and construct the frequency distribution with

appropriate class Size for age.

Practical 2. Calculate all possible descriptive statistics from the selected sample Mean median mode standard

deviation coefficient of variation skewness kurtosis, Quartiles., interquartile range. Minimum value

maximum value number of observation range.

Practical 3. Use the data constructed in practical one. To present the given data in bar diagram, pie chart,

histogram and locate median and mode graphically.

Practical 4. Calculate central tendency dispersion skewness and kurtosis from the class interval constructed in

the practical one.

Practical 5. Present the given Data using box and whisker plot and also present the sample selected using box

and whisker plot according to different types of respondents separately,

Practical 6. Use the sample selected data and reselect the sample of size 50 from the Selected sample For

Respondent type one and present the data using steam and leaf plot.

Correlation and Regression. (Use Excel or SPSS or STATA)

Practical 7. Find Karl Pearson's correlation between age and weight in the given data and sample size 500 selected and test its significance, also find the limits of population correlation coefficient.

Practical 8. Calculate Spearman's correlation between age and weight for given data and sample size 50 selected and test its significance.

Practical 9. Find the regression equation of weight on age from given data and sample size 50. Test the significance of regression coefficient calculated. Also find the standard error and coefficient of determination. Present the data in sample of size 50 using scatter diagram with regression equation and coefficient of determination. Conduct residual analysis.