Sri Lanka Institute of Information Technology

B. Sc (Hons) in Information Technology

Year 02 – Semester II – 2023

Probability and Statistics – IT2110

Lab Sheet 09

The amounts of solids removed from a particular material when exposed to drying periods of different lengths are as shown below. Use the data set to provide answers to the following questions.

Drying Period (hours)	Solids Removed (grams)	
4.4	13.1	14.2
4.5	9.0	11.5
4.8	10.4	11.5
5.5	13.8	14.8
5.7	12.7	15.1
5.9	9.9	12.7
6.3	13.8	16.5
6.9	16.4	15.7
7.5	17.6	16.9
7.8	18.3	17.2

1. Draw the scatterplot for the above observations and comment on the plot.
2. State the sample correlation coefficient.
3. Test the hypothesis that there is no correlation between the two variables and interpret the result.
4. Find the fitted regression model.
5. Use the output to the ANOVA test to find whether the slope of the regression is zero.

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