**Year 2 Semester 1 (2025)**

IT2120 - Probability and Statistics Lab Sheet 08



**FacultyofComputing**

# Exercise

**Instructions**: Create a folder in your desktop with your registration number (Eg: “IT.......”). You need to save the R script file and take screenshots of the command prompt with answers and save it in a word document inside the folder. Save both R script file and word document with your registration number (Eg: “IT........”). After you finish the exercise, zip the folder and upload the zip file to the submission link.

1. Calculate the population mean and population standard deviation of the laptop bag weights.

A screenshot of a computer

AI-generated content may be incorrect.

A close up of a word

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A close-up of numbers

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1. Draw 25 random samples of size 6 (with replacement) and calculate the sample mean and sample standard deviation for each sample.

A screenshot of a computer code

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1. Calculate the mean and standard deviation of the 25 sample means and state the relationship of them with true mean and true standard deviation.

A computer screen shot of a computer code

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A screenshot of a computer code

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