



**SECI2143: PROBABILITY & STATISTICAL DATA ANALYSIS**  
**2020/2021 – SEMESTER 2**

**QUIZ 2**

Name : \_\_\_\_\_  
Student ID : \_\_\_\_\_ Section : \_\_\_\_\_  
Date : \_\_\_\_\_

Marks: \_\_\_\_\_  
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(Note: Do calculations in 3 decimal places).

**QUESTION 1**

**[10 MARKS]**

M&N sell chocolate drink known as Chocodup in bottles labelled 33 ml. The Audit Co., an auditor company randomly selects 60 of these bottles, measures their content and obtains a sample mean of 32.8 ml and a sample standard deviation of 0.85 ml. Use  $\alpha = 0.01$ , test the auditor claims that the M&N is cheating consumers. The M&N is cheating if the bottles that they sell containing less than 33 ml.

**QUESTION 2**

**[10 MARKS]**

In a study of computer use, 25 randomly selected users were asked how much time they spend using a computer in a typical week. The time is assumed normally distributed and the sample standard deviation was 5 hours. At  $\alpha = 0.05$ , is there enough evidence to reject the claim that the population variance is more than 35 hours?