



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

QUIZ 2

Name : _____
Student ID : _____ Section : _____
Date : _____

Marks: _____
20

(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?