

Bachelor Program
Computer Engineering Department
Faculty of Intelligent Electrical and Informatics Technology ITS



Assignment 3

Course : Probability and Statistics
Instruction : Hand in your solutions by the deadline
(Either in english or bahasa)
Deadline : 15/11/2022, 23.59pm GMT+7
Lecturer : Atar F. Babgei

1. Determine the Z-test score for the 4th student ($x = 65$) of based on the marks scored by the students out of 100: 55, 67, 84, 65, 59, 68, 77, 95, 88, 78, 53, 81, 73, 66, 65, 52, 54, 83, 86, 94, 85, 72, 62, 64, 74, 82, 58, 57, 51, 91. What is the percentage of students scored less than the 4th student as per the Z- score table?
2. From 100 randomly taken samples, the average proportion (μ) of a normal distribution of sucrose concentrations is found to be 85 mg / 50 ml with a standard deviation of 25 mg / 50 ml. Calculate the 90%, 95%, 99% confidence interval for μ .