

CAVITE STATE UNIVERSITY

Imus Campus

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Assignment #4

Direction: Handwritten:

On a yellow pad paper/bond paper, kindly solve for the following questions or given problem

NOTE: You need to provide your solution and also write the given (sample space, event outcome/s, proper conversion and round of the answers in 2 decimal places).

Name:	Date:
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Yr&Section: Subject code: ITEC 95

Bayes' Theorem Probability

- 1. In a study regarding some suspects for different crimes, it is found that 45% of the subjects were sent to prison. Among those sent to prison, 43% chose to plead guilty while 31% of those who were not sent to prison are plead guilty. If a suspect was randomly selected, find the probability that the suspect was sent to prison given that he/she was not entered a guilty plea.
- 2. Of the students in the college, 63% of the students reside in a dormitory. Previous year results report that 32% of all students who stay in the dorm scored A Grade while 20% of residing in their respective homes scored A grade. At the end of the year, one student is chosen at random and found that he/she has an A grade. What is the probability that the student is a hosteler?
- 3. In the first box, there are 4 white and 6 black balls. While on the second box, contains 4 white and 3 black balls. One ball is drawn at random from one of the bags, and it is found to be black. Find the probability that it was drawn from the first box.

Prepared by:

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