PAREF Southcrest

PERDUCERE SEMITAS AD ASTRA

STATISTICS 10
TOPIC OUTLINE

FIRST QUARTER
Brief history of Statistics Applications of Statistics
Definition of Terms ❖ Descriptive and Inferential Statistics ❖ Variables and types of data ❖ Scales of measurement
Data collection and Sampling techniques Other sampling methods Observational and Experimental Studies Uses and Misuses of Statistics
Organization of data ❖ Frequency distribution table (FDT) ❖ Histograms, Frequency polygons, Ogives
Continuation on Organization of Data ❖ Relative frequency graphs ❖ Stem and Leaf Plots
Sigma notation Fundamental Counting Principle
Permutation ❖ n things taken r at a time ❖ Circular permutation ❖ Permutations of things that are alike Combination

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STATISTICS 10
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SECOND QUARTER
Probability and its rules
Continuation on Probability
Probability using counting rules
Measures of Central tendency for ungrouped data Midrange Weighted mean
Measures of Central tendency for grouped data
Measures of Variation ❖ Range ❖ Mean absolute deviation (MAD) ❖ Standard deviation
Continuation on Measures of Variation ❖ Variance ❖ Coefficient of variation
Applications of the previous topics

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STATISTICS 10
TOPIC OUTLINE

THIRD QUARTER
Measures of Location/Position ❖ Standard score (z-score) ❖ Percentiles
Continuation on Measures of Location ❖ Deciles ❖ Quartiles Outlier Skewness and Kurtosis
Normal distribution Standard Normal Distribution ❖ Finding the areas under standard normal distribution curve A Normal distribution as a Probability distribution curve
Applications of Normal Distribution
Introduction to Hypothesis Testing ❖ Definition of terms ❖ Steps for Traditional method
Continuation on Hypothesis Testing
Z-test and T-test for a mean
Chi-square tests ❖ Chi-square Goodness of fit test ❖ Chi-square Test for Independence ❖ Chi-square Test for Homogeneity

*Fourth quarter is reserved for research-making.