

SYLLABUS FOR CHALLENGE TEST - CSCI015

CHALLENGE TEST WILL BE BASED ON THE FOLLOWING TOPICS:

Syllabus: Text Book Chp 1 - 10.

Computers: Tools for an Information age
Applications Software: Getting the Work Done
Operating Systems: Software in the Background
Central Processing Unit: What Goes on Inside the Computer
Input & Output Devices: The User Connection
Storage and Multimedia: The Facts and More
Networking: Computer Connections
The Internet: At Home And In The Workplace
Social Computing & Security

Format: MCQS and/or Short answers.

Minimum 60% in the challenge test is required to be exempted from CSCI015

SYLLABUS FOR CHALLENGE TEST - MATH015

CHALLENGE TEST WILL BE BASED ON THE FOLLOWING TOPICS:

Lecture and Tutorial Topics
Sets and Numbers Polynomials and Factors Exponents and Radicals Inequalities, Absolute values and Linear equations
Solving linear equations and inequalities in one variable. Functions (domain and range), operation with functions, composite functions. Linear functions: equation of a line, slope, graphing, Solution of a system of two equations in two variables
Solving quadratic equations: Parabolas. Curve sketching (parabolas, rational functions, cubic functions)

Text Books to refer:

1. Mathematical Applications: For the Management, Life, and Social Sciences (8th edition) by [Ronald J. Harshbarger](#) (Author), [James J. Reynolds](#) (Author)
2. Stewart, Redlin, Watson, 1999, (3rd Ed), *College Algebra*, Brooks/Cole Thomson Learning, U.S.A

Minimum 60% in the challenge test is required to be exempted from MATH015

SYLLABUS FOR CHALLENGE TEST - STAT015

CHALLENGE TEST WILL BE BASED ON THE FOLLOWING TOPICS:

What is Statistics? Why Statistics?

Definition and overview of the role played by Statistics in daily life.

Producing and organizing data

Tables and graphs.

Frequency distributions. Histograms and polygons.

Analyzing data

Measuring average: mean, median and mode.

Measuring variability: range, interquartile range, quartiles, variance, standard deviation and coefficient of variation.

Probability

Terminology and notation.

Estimating probability. Probability laws.

Normal Distribution

Probability distribution of normal curve.

Standard Normal Distribution

Standard scores. Normal distribution table. Critical values.

Sampling and Sampling distribution

Samples and populations; random, and non-random samples.

Sampling distribution of sample means. Standard error.

Estimation

Point estimates.

Interval estimates of population mean

Text Ref.:

Douglas A. Lind, William G. Marchal, Samuel A. Wathen, Statistical Techniques in Business and Economics, International Edition, Twelfth Edition, McGraw – Hill.

Minimum 60% in the challenge test is required to be exempted from STAT015