## A WEB BASED STUDY PACKAGE DESIGNED FOR STATISTICS AND PROBABILITY UNIT OF G.C.E. ADVANCED LEVEL COMBINED MATHEMATICS SYLLABUS IN SRI LANKA

### A THESIS PRESENTED BY D. S. N. WIJEGUNARATHNE

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#### Abstract

Along with the introduction, and expansion of the use of computers use during the latter part of the 20<sup>th</sup> century, there has been a stuff of emphasis from teacher-centered education to learner-centered education. Understanding its importance to students, developing countries like Sri Lanka have increased the provision of computer facilities in schools. However, there is a dearth of incorporating syllabus materials of different subject fields, due to shortages and at times, due to lack of specific study materials at all levels even for G.C.E.A/L students.

Hence an attempt has been made to prepare a web based study package, which could also be put in the Compact Disk (CD) format for the Descriptive Statistics and Probability units of the G.C.E.A/L Combined mathematics syllabus. Preparation of this web site serves a dual purpose through the Internet and CD-Rom. These units were specifically selected as many students feel that they require a thorough knowledge of these sections. When designing this study material for web based teaching and learning, considerable attention was given to the G.C.E. A/L Combined Mathematics syllabus, attitudes of G.C.E. A/L Mathematics teachers and students and their English language proficiency. A modification and redesigning of the content was done in accordance with the general objectives laid down by the Ministry of Education. As far as possible, the contents were blended with information gained from texts books, Internet, Journals, etc. The prepared website contains seven web pages namely, Home Page, Historical background of Statistics and Probability,

The Syllabus of Statistics and Probability units of A/L Combined Mathematics, Introduction to Descriptive statistics, Introduction to Probability, Resource page and Question and answer page. As and when required, sub-topics have been included to the web pages to be viewed through simple linking.

In spite of the constraints prevailing in Sri Lankan schools, this website would be very useful for teachers in improving teaching – learning process which may also motivate them to evoke more interest and prepare websites for other sections in Combined Mathematics as well, especially in all the other G.C.E.A/L subjects.

#### **Key Words:**

G.C.E. Advanced Level Combined Mathematics Syllabus, Statistics and Probability, HTML. Web Site.