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MATHEMATICAL SKILLS NEEDED FOR G.C.E.(ADVANCED LEVEL) PHYSICS

A PROJECT REPORT PRESENTED

BY

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to the

POSTGRADUATE INSTITUTE OF SCIENCE

in partial fulfillment of the requirement

for the award of degree of

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ABSTRACT

A STUDY ON MATHEMATICAL SKILLS NEEDED FOR G.C.E. (ADVANCED LEVEL) PHYSICS

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It is generally accepted that mathematics is an essential part of learning physics. Though mathematics is being learnt from the junior level, there is lack of required mathematical skills in students. This is the main obstacle in learning physics. This study was focused on the mathematical skills needed for Advanced Level physics.

In this study an attempt was made to seek whether there is any relationship between achievement in physics and achievement in mathematics. Hundred and twenty five advanced level students in Kandy district were participated in the study. Also an analysis of mathematical skills needed for physics was done. Further, the difficulty levels of mathematical items related to the above mathematical skills were determined.

The study showed a considerable positive correlation between achievement in mathematics and achievement in physics. A number of mathematical skills required for Advanced Level physics were found at the end of the study. Among those skills some were found to be in need of more attention.