130X

COMPARISION OF PERFORMANCE AT SOLVING CONVENTIONAL AND CONCEPTUAL PROBLEMS IN PHYSICS OF G.C.E. (A/L) STUDENTS

A PROJECT REPORT PRESENTED

BY

AHAMED LEBBE SEYETH ABTHUS SATHAR

to the

Board of Study in Science Education of the

POSTGRADUATE ISTITUTE OF SCIENCE

in partial fulfillment of the requirement for the award of the degree of

MASTER OF SCIENCE

of the

UNIVERSITY OF PERADENIYA SRI LANKA

2004

ABSTRACT

The study involved in testing the A/L students offering Physics with question papers A and B with which the individual and group test were conducted. Each paper was of the same type containing three major areas namely Mechanics, Waves & Optics and Fields comprising conventional and conceptual problems in G.C.E. (A/L) Physics. For this study two National schools and two 1AB schools were selected as samples for the test. A sample of 112 students were selected of whom there were 68 urban and 44 rural students and of whom there were 60 male and 52 female students following Biological and Physical Science streams each having 56 and 56 students

Evaluated marks were analyzed with the help of a tool called Mann-Whitney confidence interval test. Eventually it was found that the urban male students lead the rural students in conventional and conceptual problems, male and female students counterbalance in both conventional and conceptual problems and Physical Science students lead the Biological Science students in both conventional and conceptual problems. Total marks attained by the groups of students in papers at the group test are more than that obtained by individual students.