

THE CANBERRA UNIVERSITY COLLEGE

Department of Mathematics

ANNUAL REPORT, 1956

STAFF

The department came into existence in February, 1956, with the arrival of myself as Professor. The scheduled appointment of a lecturer for 1956 was delayed on account of the withdrawal of the original appointee; as it happened I was able to carry out the duties unassisted.

Dr. W.A. O'N. Waugh, of the Royal Military College of Science, Shrivenham, was appointed as Lecturer, commencing in 1957.

COURSES

Lectures, practice classes and tutorials were held in the courses Pure Mathematics I and Pure Mathematics IIA, the examination being ultimately taken by 8 and 2 students, respectively. In addition, a number of non-examination students attended, mostly graduates or the holders of higher degrees.

Though attendance at lectures was reasonably good, few students seemed to appreciate the need for additional work on their own part. In addition, there was a reluctance to attend lectures held on Friday from 7 to 9 p.m.; it is hoped that this period can be avoided in future.

EXAMINATIONS

Three students passed the examination in Pure Mathematics I, and one in Pure Mathematics IIA. Though these pass figures represent somewhat low proportions of the gross number of candidates, they constitute much higher percentages of those who conscientiously worked the course.

EXTRA-MURAL ACTIVITIES

Throughout the year I participated in the seminar held at the Department of Statistics at the Australian National University, and gave a lecture to it on the "Theory of Group Representations." I also lectured at the meeting of the Australian Mathematical Society in Melbourne in August, 1956, on "Differential Equations with Periodic Coefficients."

I was nominated a member of the Australian National Committee for the International Mathematical Union.

RESEARCH

Papers prepared for publication were entitled:

- (i) "Asymptotic Formulae for Second-order Oscillations".
- (ii) "Estimation of an eigen-value occurring in a stability problem", (a development of the above-mentioned lecture to the Australian Mathematical Society); and

2.

- (iii) "A uniqueness theorem for partial differential equations."

A paper appearing during the year was "On polynomials with least weighted maximum". (Proceedings of the American Mathematical Society, 7(2), 1956, 267-270).

Work in course of preparation deals with the asymptotic properties of non-linear differential equations.

#### LIBRARY

In addition to many new books, acquisitions included a set of "Mathematical Reviews". Considerable further expenditure will be needed to bring the mathematics section of the library to a satisfactory condition though the presence of the Australian National Library will enable some savings to be made.

F.V. Atkinson,  
Professor of Mathematics.

1st February, 1957.