## Glasgow Mathematical Journal

## CONTENTS

<ul> <li>D. S. Passman, Universal fields of fractions for polycyclic group algebras</li> <li>L. P. D. van den Dries, A. M. W. Glass, Angus Macintyre, Alan H. Mekler and John Poland, Elementary equivalence and the commutator subgroup</li> <li>F. Ghahramani, Isometric representation of M(G) on B(H)</li> <li>Francis Pastijn, Essential normal and conjugate extensions of inverse semigroups</li> </ul>	7
and John Poland, Elementary equivalence and the commutator subgroup  11  F. Ghahramani, Isometric representation of $M(G)$ on $B(H)$ 11  Francis Pastijn, Essential normal and conjugate extensions of inverse	3
subgroup 11  F. Ghahramani, Isometric representation of $M(G)$ on $B(H)$ 11  Francis Pastijn, Essential normal and conjugate extensions of inverse	
Francis Pastijn, Essential normal and conjugate extensions of inverse	5
	9
	3
W. A. Feldman and J. F. Porter, M-spaces with quasi-interior points 13	1
Mary Snowden and J. M. Howie, Square roots in finite full transformation semigroups 13	7
T. K. Mukherjee and W. H. Summers, Stability and closed graph theorems in classes of bornological spaces 15	1
Demetrios Koros, Superdiagonal forms for completely continuous linear operators 16	3
S. Al-Khezi, Analytic functions of a prespectral operator 17	1
Allan Gut, A contribution to the theory of asymptotic martingales 17	7
P. J. C. Lamont, Computer generated natural inner automorphisms of Cayley's algebra 18	7

© Glasgow Mathematical Journal 1982

SCOTTISH ACADEMIC PRESS LIMITED

33 MONTGOMERY STREET

EDINBURGH EH7 5JX

## GLASGOW MATHEMATICAL JOURNAL

The Glasgow Mathematical Journal is a continuation of the Proceedings of the Glasgow Mathematical Association, founded in 1952 by the late Professor T. M. MacRobert. It is published with the support of the University Court of the University of Glasgow. The Glasgow Mathematical Journal is published in Parts twice yearly, in January and July; two Parts complete a Volume of approximately 200 pages.

The prepaid subscription for each Volume is £19.50 in U.K., \$45.00 in U.S.A., post free. Single parts may be supplied at a cost of £10.00 in U.K., \$22.50 in U.S.A., net.

Copies may be ordered direct from the publisher or from any bookseller.

## Information for Contributors

While the Glasgow Mathematical Journal is intended primarily for Pure Mathematics, papers on Applied Mathematics will also be accepted. Manuscripts from all parts of the world will be welcomed and given careful consideration.

Manuscripts, preferably typed, should be prepared so as to conform with the practice in current numbers of the *Journal*, especially with regard to line illustrations, references, tables and summaries. The name of the author and the date of the receipt of the manuscript will be printed under the title. Text figures must be suitable for line block reproduction, lettered in pencil, numbered, and separated from the text but allocated clearly to sections of the text.

References should be placed at the end of the paper, arranged and numbered in alphabetical order. In the text, reference numbers should be enclosed in square brackets and underlined, to distinguish them from formula numbers, which should be quoted in round brackets. The following particulars should be given, in the order indicated:

for references to books—author, title, edition, place of publication, year of publication, page reference;

for references to articles in periodicals—author, title of article, short title of periodical, series no. (if any), volume no., year, pagination.

A proof is supplied once in galley form, together with an Order Form for offprints. Offprints are supplied free to the number of fifty; additional copies, if ordered prior to publication, will be supplied, at cost, at the request of the contributor. Excessive corrections may be charged to the author.

Manuscripts should be sent to:
THE EDITORS
GLASGOW MATHEMATICAL JOURNAL
DEPARTMENT OF MATHEMATICS
UNIVERSITY OF GLASGOW, GLASGOW G12 8QW