

Erratum: A Characterization of Left Perfect Rings

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Abstract. An error in *A characterization of left perfect rings*, Canad. Math. Bull. (3) 38(1995), 382–384, is indicated and the consequences identified.

The Lemma in [1] is incorrect as stated, and consequently the validity of the Theorem in [1] is doubtful. Hence the question of Nashier and Nichols of whether any generating set of each left module over a left perfect ring contains a minimal generating set remains open. Any Von Neumann regular ring with an infinitely generated socle is a counter-example to the Lemma. The proof of the Theorem indicates that if any generating set of each left module over an artinian semisimple ring contains a minimal generating set, then the same holds for a left perfect ring. The Corollary in [1] is still correct since its proof only needs the known fact that a left perfect ring satisfies ACC on cyclic submodules of any given left module.

References

- [1] Y. Zhou, *A characterization of left perfect rings*. Canad. Math. Bull. (3) 38(1995), 382–384.

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Received by the editors January 24, 2001.
AMS subject classification: 16L30.
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