

ERRATUM TO “A SHORT NOTE ON QUASI-EXACT SEQUENCES”

B. DAVVAZ

ABSTRACT. In this note a modification of Proposition 3.10 of [1] is given.

According to the proof of Proposition 3.10 of [1], the corrected statement of this Theorem is as follows:

THEOREM. Suppose that we are given the sequences

$$0 \longrightarrow B \longrightarrow P \longrightarrow A \longrightarrow 0$$

$$0 \longrightarrow B' \longrightarrow P' \longrightarrow A' \longrightarrow 0$$

with the first sequence is U -exact, the second sequence is U' -exact, $U \cong U'$ and P and P' projective. If $A \sim_p A'$, then $B \sim_p B'$.

Note that when the condition $U \cong U'$ is eliminated from the theorem, then the theorem can not be true. For example consider the following sequences:

$$0 \longrightarrow U \longrightarrow P \longrightarrow P \longrightarrow 0$$

$$0 \longrightarrow 0 \longrightarrow P \longrightarrow P \longrightarrow 0$$

where U is an arbitrary submodule of projective module P and the first sequence is U -exact and the second sequence is $\{0\}$ -exact, then we get U is projective.

A similar remark applies for Proposition 3.12 of [1].

References

- [1] S. M. Anvariye and B. Davvaz, *On quasi-exact sequences*, Bull. Korean Math. Soc. **42** (2005), no. 1, 149–155.

DEPARTMENT OF MATHEMATICS, YAZD UNIVERSITY, YAZD, IRAN
E-mail: davvaz@yazduni.ac.ir