**ERRATUM TO : “LOCAL SPLITTING PROPERTIES OF
 ENDOMORPHISM RINGS OF PROJECTIVE
 MODULES” [HONAM MATH. J. 35(2013), NO.4, PP. 747-755]**

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The following lemma is well-known, but we record it for our references.

Lemma 0.1 ([1], Exercise 33 in Sec.7.3). *Let A be a commutative ring with identity. Let $p(x) = a_0 + a_1x + \cdots + a_{n-1}x^{n-1} + a_nx^n$ be an element of the polynomial ring $A[x]$. Then $p(x)$ is a unit in $A[x]$ if and only if a_0 is a unit and $a_1, a_2, \dots, a_n$ are nilpotent in A .*

Let A be a commutative ring with identity, and let $A[x]$ be a polynomial ring over A with indeterminate x . Consider the following

$$1 = (1 + xf(x))(1 + xg(x))$$

in $A[x]$. Then we cannot get

$$\begin{cases} f(x) + g(x) &= 0 \\ f(x)g(x) &= 0 \end{cases},$$

but these two conditions hold if and only if $g(x) = -f(x)$ and $f(x)^2 = 0$. However, since $1 + xf(x)$ is a unit in $A[x]$, we can see that $f(x)$ is nilpotent by Lemma 0.1.

(1) See p.749. ↑ line 8 - ↑ line 5. The statement “So, we get $\dots$ From these equations, we can get $f(x)^2 = 0$ ” should be replaced by the statement “ So, $1 + xf(x)$ is a unit in $A[x]$. By Lemma 0.1, $f(x)$ is nilpotent in $A[x]$.” Notice that Lemma 2.1 itself in the paper is still true.

(2) See p.753. ↑ line 14 - ↑ line 11. This should be deleted.

(3) See p.751. ↓ line 7 - ↓ line 8. The statement is not true in general. We can construct a counterexample: Let $s_1 = s_2 = 1$, and consider $A_{s_1} = A_{s_2} = A_{s_1s_2}$. Then $id \circ \sigma = \sigma = \sigma \circ id$ and $id \neq \sigma$. However, the readers may disregard the statement because we do not use it in the later discussions.

References

- [1] David S. Dummit and Richard M. Foote, *Abstract Algebra*, Prentice-Hall, Inc., 1991.

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