NOTES

Firstly, we state some open problems.

1. Is every simple pli-ring a pri-ring?

2. Is every primary pli-ring with a small prime radical an epimorphic image of a primary pli-ring with large prime radical?

3. Is every primary pli-ring with large prime radical an epimorphic image of a prime pli-ring?

4. Let R be a prime pli-ring. If $R \cong M_n(A)$ and $R \cong M_n(B)$ where A, B are domains, is it true that $A \cong B$?

5. Let R be a prime pli-ring and let Q be the simple Artinian l.q. ring of R. If there exists a monomorphism $\rho\colon Q \to R$, it is true that $R \cong M_n(A)$ where A is a pli-domain?

6. Let A be a domain such that $M_n(A)$ is a prime pli-ring. Is A a ipli-ring?

7. Is every ideal in a prime pli-ring a product of prime ideals?

8. Does every primary pli-ring (with large prime radical) have a l.q. ring?

If the reader has read the monograph before reading these notes, he will have noticed that we have not given any illustrative examples. Here are a few references: to see that most of the complications in chapters II and III are necessary, take a glance at Jategaonkar [3,4]. To get some feeling for twisted polynomial rings, consult examples in Jacobson [3, chapter 3] and examples in Divinski [1]. For an example of a nasty pli-domain, see Cohn [3]. For some reasonable left Noetherian ipli-rings, see Clark [1]. To get convinced that general left Noetherian rings are appalling, consult Small [4].

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