Abstract

In this paper we prove some properties of ideals that are preserved under localization. Also, we establish several one to one correspondences between certain types of ideals in the ring and its localization at multiplicative systems. We introduce two concepts such as S-prime radical and S-minimal prime ideals and the relations of S-prime radical with the prime radical and Jacobson radical of a ring under localization are determined. Also, we prove a one to one correspondence between S-minimal primal ideals of a given ideal A of a ring R and the minimal prime ideals of the ideal A_P of R_P, where P is a prime ideal of R.

References


**Index Terms**

Computer Science  
Applied Mathematics

**Keywords**

Multiplicative system, Localization of a ring, S-prime radical, S-minimal prime ideal, S-semisimple ring and S-Jacobson radical (Srad(R)).