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# Rings Characterized by Classes of Rad-plus-Supplemented Modules

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**Abstract :** In this paper, we introduce and give various properties of weak* Rad-plus-supplemented and cofinitely weak* Rad-plus-supplemented modules over some special kinds of rings, in particular, artinian serial ring and semiperfect ring. Also prove that ring R is artinian serial if and only if every right and left R-module is weak* Rad-plus-supplemented. We provide the counter example which proves that weak* Rad-plus-supplemented module is the generalization of plus-supplemented and Rad-plus-supplemented modules. Furthermore, as an application of above finding results of this research article, our main focus is to characterized the semisimple ring, artinian principal ideal ring, semilocal ring, semiperfect ring, perfect ring, commutative noetherian ring and Dedekind domain in terms of weak* Rad-plus-supplemented module.

**Keywords :** cofinitely weak* Rad-plus-supplemented module , Dedekind domain, Rad-plus-supplemented module, semiperfect ring
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