S-biquasigroups and its properties

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The concept of bi-semigroups and S-bisemigroups are very recent, defined in 2003. Here we define some more special classes which are generalizations of bi-semigroups and biquasi groups. S-biquasi group is defined as a set with two binary operations + and $\bullet$ such that $S = S_1 \cup S_2$, S_1 and S_2 are proper subsets and $(S_1, +)$ is S-semigroup and $(S_2, \bullet)$ is just a semigroup. S-normal sub bi-quasi group and S-p-sylow sub bi-quasi groups are defined and some interesting results analogus to classical theorems are obtained on these new algebraic structures.

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