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Mahmoud H. Annaby*, Department of Math., Stat. & Phy., Qatar University, Doha, 2713, Qatar, and **Hassan A. Hassan** and **Zeinab S. Mansour**. *Sampling theorems associated with Singular Basic Sturm Liouville Problems.*

Sampling theorems for transformations defined in terms of Jackson q -integration when the kernels of the transformations are solutions or the Green's functions of singular q -Sturm–Liouville problems are investigated. We consider the problem when the q -Sturm–Liouville problem is singular either at infinity or zero with detailed investigations when the singular point is infinity. An example involving combinations of Jackson q -Bessel function is given. (Received September 19, 2010)