
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)