Abstract
Results from Kenya National Examination Council (KNEC) indicate that there are schools that have had an upward trend in performance while others have continued to show a decline. This paper seeks to find out the principal components, in terms of subjects, that contribute to this performance. Principal Component Analysis (PCA), a data reduction procedure was applied to assess the performance of the national examination at the Kenya Certificate of Secondary Examination (KCSE) level for the last three years. The schools were purposively selected from Nyanza, Nairobi, Rift Valley and Eastern provinces. Secondary data from KNEC was used and analyzed using SPSS software. The PCA brought out the component loadings and the correlation structure between the different subjects; as a result one component was extracted. The results provided evidence that all the subjects are highly correlated and the first component having the highest variance. This principal component emerged to be English language. Being the subject with the highest sum of the squared loadings, it was concluded that it played the greatest role in performance of the examinations.