ABSTRACT
Tourism demand forecasting plays important role in public and private sector officials’ future planning activities. The aim of this study is modeling inbound tourism demand to Turkey by Feed Forward-Back Propagation (MLP), Radial Basis Function (RBF) and Time Delay (TDNN) artificial neural network architectures and forecasting monthly tourism demand for 2013 via the model providing the highest accuracy. In this study, it is used the total number of foreign tourist arrivals as a measure of inbound tourism demand and monthly foreign tourist arrivals to Turkey in the period of January 1987 – December 2012 were utilized. In the process of modeling the data by ANN’s, it is analyzed the forecasting performance of different network architectures constituted by both unpreprocessed raw data and seasonally adjusted data taking into account of the distinct viewpoints in related studies. As a consequence of several attempts, it has been observed that 12 lagged MLP model which has [4-5-1-] architecture has presented best forecasting performance. By this model it has been produced monthly inbound tourism demand forecasts to Turkey for year 2013.