

## **Abstract**

Stock market prediction paved ways of minimizing the risk perception associated with portfolio investment. Prior studies evaluate multiple methods to find the best predictive model for future stock prices, but all are concluded that there is not a single model appropriate for all the stock markets. So, for the investor there is|immense need to find the best predictive model for the rational investment decision. In this context, several models such as Autoregressive integrated moving average (ARIMA), Exponential Smoothing, Artificial neural networks (ANN), Hybrid (Neural Network and ARIMA), Hybrid (ARIMA and Exponential Smoothing) and Hybrid (Neural Network and Exponential Smoothing) are tested for Pakistan Stock market for the daily closing, open, high and low price of KSE 100 Index from 2000 to 2022 to explore the best predictive model. Results shows that ARIMA is best method for the prediction of stock prices base on the KSE 100 index and suggests the stakeholder to follow the pattern predicted by ARIMA.