

ON AN EFFICIENT MODEL TO FORECAST SENSEX DATA

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Bombay Stock Exchange Limited (BSE), established in 1875, is the oldest stock exchange in Asia with a rich heritage..It is the first stock exchange in the country. The Exchange's pivotal and pre-eminent role in the development of the Indian capital market is widely recognized and its index, *SENSEX*, is tracked worldwide. *SENSEX* is calculated using the "Free-float Market Capitalization" methodology. With the advent of globalization, capital markets have started playing a prominent role in the Economy of all countries. *SENSEX* had touched 8000 and 9000 in the months of September and November (and is on way to touching 10000 landmark soon) and has come within the first three indices in the world in terms of rapid up-down movement. So far as the authors are aware, appropriate powerful models to generate accurate forecasts of *SENSEX* values are not available in the literature. In this paper the *SENSEX* monthly highest time-series data from the period, January 1999 to July 2005 have been used to model the monthly highest values of the *SENSEX* and to generate future forecasts for the next eighteen months. The special features of this model ([ARIMA (1,1,6)x(1,1,4)₁₂] selected from among fifty competitive models)) are that the forecasts are very close to the future values realised later in September and November, 2005. It had predicted that the *SENSEX* would touch 8000 and 9000 landmarks in September and November, 2005 respectively which, indeed, was the scene.

