

**UNIVERSITI TEKNOLOGI MARA**

**TECHNICAL REPORT**

**COMPARING FORECASTING METHODS USING  
PRICE OF RICE**

**P53S18**

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## **ABSTRACT**

Rice is the staple food of more than half of the world's population hence there are many types of rice produced worldwide with different prices. This research focus on the method in forecasting the price of rice and it is deemed to be important since the market price of rice will be unstable due to unexpected events such as natural disaster that can occur during the production of rice. Besides, increase in number of population also causes the demand for rice to increase. In this research, three methods are used to identify the most suitable method among the three methods in forecasting the price of rice. The methods used are Single Exponential Smoothing (SES) model, Holt's Method, and Box-Jenkins Model. Then Root Mean Squared Error (RMSE) is used as criteria to choose the best model and the chosen model were analyses for its validation. The chosen model is verified by comparing actual data and the forecast value. Model validation is done to determine the accuracy of the actual values. From this research it can be concluded that Single Exponential Smoothing Technique is the most suitable methods to forecast the price of rice compared to the other two methods. Since the forecast value is hardly different from the actual data therefore the model is reliable and can be used to forecast the price of rice for the following month.