

Assignment : MTech KE Unit 7 – Group Exercise – Time Series Forecasting – 10 Marks

Due Date : 15th September, 2018 : **Please mention the name of the group members and the name of the group in your submission cover page.** Output should be in Word or PDF. The name of the word file should be your group name and in the format XXUnit7_AsnTS where XX is your group name. Please do not put the word “Team” before the group name as I know you are a team. **Also please put the team name (including members’ name) on the cover page.**

Use the data in the file ActualRatings_weeklyGRP.xls. This is a TV channel rating data (actual) of an **Indian** network. Please use the data up to 26th Oct 2008 and fit a time series model and perform weekly forecast from Nov 2008 – 15Mar 2009.

Try the following methods :

- 1) Exponential Smoothing 2) ARIMA 3) Decomposition Methods 4) Time series Regression
- A) While choosing the method, if you find any of the above technique is inappropriate for the given series please articulate why it is so.
- B) If you are doing forecasting using multiple methods, please recommend one solution which you think is best and provide the reason for it.
- C) In case there are points in the **entire** series where the model is over/under predicting significantly (>10% error) find a possible reason as the ratings are greatly affected by special events like festival/ sports match etc.

Please keep the report limited to 10 pages. Shorter is the report (≤ 10) (with all points covered) higher is the final CA score.