MS4218 Assignment

Source your own time series data from: **http://datamarket.com**.

No two students can use the same dataset.

Click on Explore Data tab.

Your time series should have at least 70 observations.

To download data, you will need to register your name and UL address.

Download file as excel file(.xls) to your working directory by clicking on the Export tab.

Remove redundant cells in any given column by select the cell(s), right click, delete, shift cells, OK.

From here, save to a text file in your working directory.

Column headings cannot contain spaces.

Read into R using

```
read.table("filename",header=T)
class(filename)
```

If not of time series class, convert to time series object.

Only one data column will be required, as the date information will be included in the conversion. If the date is in the first column and the data is in the second column, then type into R:

```
Filename<-ts(filename[,2],frequency=,start=c(year,month),end=c(year,month))
class(Filename)
```

filling in the start and finishing dates as appropriate.

You are required to withdraw the last 10 observations from your time series.

You should build a statistical model based on the remainder of your time series and use this statistical model to make forecasts of the withheld data.

You should compare your forecasts against the withheld data.

The submission should include:

- the name of the data file from datamarket.com;
- the data itself in a separate file;
- the nature of the series in context;
- brief summary statistics;
- steps involved in model selection (including diagram commentaries);
- model decision;
- parameter estimation;
- model prediction;
- conclusion.

Assignment to be submitted electronically to joseph.lynch@ul.ie by the **end of Week 13.**

30 marks