Quiz 03

Due Jan 14, 2019 at 23:59 **Points** 10 **Questions** 10
Available Jan 11, 2019 at 11:00 - Jan 14, 2019 at 23:59 4 days
Time Limit 30 Minutes

Instructions

Quiz 03 covers the material in lectures 7 - 9 (pages 47 - 59 of the Course Notes)

This quiz is no longer available as the course has been concluded.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	13 minutes	10 out of 10

Score for this quiz: **10** out of 10
Submitted Jan 14, 2019 at 13:16
This attempt took 13 minutes.

Question 1

1 / 1 pts

What is the most common use of moving averages?

- To determine whether there is any seasonal pattern in the series
- To estimate each seasonal component in the series
- To determine if any given observation is above or below the overall trend
- Correct! To create a seasonally adjusted series to analyse

Question 2

1 / 1 pts

If we build a model of a transformed and deseasonalised series, our predictions ...

can only be seasonally adjusted predictions

Correct!

require that we add back the seasonal component before back-transforming to the original scale

cannot contain any seasonal component

require that we add back the seasonal component after back-transforming to the original scale

Question 3

1 / 1 pts

The advantage of using the seasonal trend lowess method to create a deseasonalised series is ...

we do not need to average adjacent deseasonalised values as we usually have to do with moving averages

we do not lose any observations from our deseasonalised series

Correct!

All other options are correct

the trend is often smoother than when using moving averages

Question 4

1 / 1 pts

If a series has no seasonal component, will the moving average and seasonal trend lowess procedures in R find a seasonal component?

Only if the seasonal component is irregular

Correct!

Yes

Only in the seasonal trend lowess procedure

No

Question 5

1 / 1 pts

Why is exponential smoothing a better method of smoothing or filtering a time series?

It uses all the information in the series

Most weight is on the most recent information we have

We do not lose any observations as with moving averages

Correct!

All other options are correct

Question 6

1 / 1 pts

Exponential smoothing ...

is the best smoothing method for any time series

can be used on any time series

Correct!

is not appropriate for series that have trends or cycles

can only be used when we have a seasonal component in the series

Question 7

1 / 1 pts

Differencing a Time Series is a method of ...

Correct!

creating a stationary series from a non-stationary series before we model the data

- can only be used when we have monthly data
- modelling a stationary Time Series
- can only be used when we have quarterly data

Question 8

1 / 1 pts

Forecasting Time Series data ...

- can be done on a model with a year of data removed so predictions can be compared to actual values
- requires that we have at least 50 degrees of freedom

Correct!

- All other options are correct
- should report the forecasts to the same level of accuracy as the original data values

Question 9

1 / 1 pts

What additional components are present in a non-stationary Time Series?

- Trend

Correct!

- All of the other options or any combination of them
- Seasonal
- Cycle

Question 10

1 / 1 pts

What components are usually present in any Time Series, stationary or non-stationary?

- autocorrelation and cycle
- trend and autocorrelation
- random and autocorrelation

Correct!

- seasonal and random

Quiz Score: **10** out of 10