

Quiz 05

Due Jan 17, 2019 at 23:59

Points 10

Questions 5

Available Jan 15, 2019 at 11:00 - Jan 17, 2019 at 23:59 3 days

Time Limit 30 Minutes

Instructions

Quiz 05 covers the material in lecture 13 (pages 85 - 89 of the Course Notes)

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

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	18 minutes	8 out of 10

Score for this quiz: **8** out of 10

Submitted Jan 17, 2019 at 13:15

This attempt took 18 minutes.

Question 1

2 / 2 pts

If we had quarterly data with our first observation recorded for Quarter 3, the first seasonal estimate listed in R would be:

Quarter 2

Quarter 4

Quarter 1

Correct!

Quarter 3

Question 2

0 / 2 pts

What is the main advantage of using the stl decomposition function in R rather than using moving averages?

☐ The stl decomposition will always produce better predictions

☐ We do not lose seasonally adjusted observations at the beginning of our series

You Answered

☒ The stl decomposition will always produce a smaller residual standard error

Correct Answer

☐ We do not lose seasonally adjusted observations at the end of our series



Question 3

2 / 2 pts

In a set of Technical Notes on a seasonally adjusted model we begin by ...

☐ discussing whether we need to transform the seasonally adjusted data

☐ discussing whether the errors have similar variation for each of the seasons

Correct!

☒ discussing the seasonal estimates and comment on the plot of the deseasonalised series

☐ discussing the initial model fit

Question 4

2 / 2 pts

In order to model a seasonal series we had to transform our data before deseasonalising. When we calculate predictions, we ...

☐ only calculate deseasonalised predictions if we have transformed the data

☐ use the model to calculate a prediction, back-transform and then add back the seasonal component

Correct!

☒

use the model to calculate a prediction, add back the seasonal component and then back-transform

☐

need to multiply the deseasonalised prediction by the appropriate seasonal estimate before back-transforming

Question 5

2 / 2 pts

If we have monthly data and fit an additive seasonally adjusted model ...

☒ the seasonal estimates will sum to 0

☐ the seasonal estimates will sum to a negative number

☐ any of the other options are possible

☐ the seasonal estimates will sum to a positive number

Quiz Score: 8 out of 10