

Course: 0504 Time Series Analysis
Assessment: Time Series Analysis R and Python Questions
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Correct answers: 13 / 13
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Attempt#: 2

What is the purpose of the R function `ts`?

- ☐ To make a time series stationary
- ☐ To check if a time series is stationary
- ☒ To create a time series object

Correct answer

To create a time series object

The function in R which helps to determine the number of times time series should be differenced to make it stationary is:

- ☐ `diff`
- ☒ `ndiff`

Correct answer

`ndiff`

Select the correct order for an ARIMA model with $d=1$, AR (2), MR(1) in R.

- ☐ order = c (1,1,2)
- ☒ order = c (2,1,1)
- ☐ order = c (1,2,1)

Correct answer

order = c (2,1,1)

For the command in R

```
model- arima (timeseries, order=c(1,2,1))
```

```
coef (model)
```

The output will display the values of:

- ☒ Estimated parameters
- ☐ Predicted values

Correct answer

Estimated parameters

In R, interpretation of the output Best model: ARIMA(0,1,1) is:

- ☒ Differencing is accompanied by MA term
- ☐ Differencing is accompanied by AR term

Correct answer

Differencing is accompanied by MA term

A seasonal ARIMA model in R is built using the function:

- ☒ arima

- ☐ sarima

Correct answer

arima

Is the following statement true or false?

In R, one can specify the value of number of AR terms in the arima function as a number between 1 and 3.

- ☐ True
- ☒ False

Correct answer

False

Feedback

- That is correct! Well done!

Is the following statement true or false? The diff function in Python creates a new time series of lagged values.

- ☐ True
- ☒ False

Correct answer

False

Feedback

- That is correct! Well done!

Is the following statement true or false? In the Python ARIMA function, the order of differencing should be at least one.

- ☐ True
- ☒ False

Correct answer

False

Feedback

- That is correct! Well done!

Is the following statement true or false?

Python has the built in function “forecast”, which gives predicted values using the AR IMA model.

- ☒ True
- ☐ False

Correct answer

True

Feedback

- That is correct! Well done!

Is the following statement true or false? The ARIMA function in Python requires a minimum of 24 values to fit the model.

- ☐ True
- ☒ False

Correct answer

False

Feedback

- That is correct! Well done!

Is the following statement true or false?

In Python, second order differencing is obtained by applying the diff function on first order differenced time series.

☒ True

☐ False

Correct answer

True

Feedback

- That is correct! Well done!

Is the following statement true or false?

The diff function applied on first order differenced time series gives a lag of order 2 in Python.

☐ True

☒ False

Correct answer

False

Feedback

- That is correct! Well done!