

Started on	Monday, September 7, 2020, 11:45 PM
State	Finished
Completed on	Monday, September 7, 2020, 11:48 PM
Time taken	3 mins 7 secs
Grade	7.00 out of 7.00 (100%)

Question **1**
Correct
1.00 points out of 1.00

In the ADF test, φ (phi)= 1 implies:

- Select one:
- ☐ a. Series has an Autoregressive term
 - ☐ b. Series is stationary
 - ☐ c. None of the listed options
 - ☒ d. Series is a Random Walk ✓

Your answer is correct.
The correct answer is:
Series is a Random Walk

Question **2**
Correct
1.00 points out of 1.00

When using the ADF test, when should we conclude that a random walk is present?

- Select one:
- ☐ a. When one p-value is significant
 - ☐ b. When all p-values are significant
 - ☒ c. When at least one p-value is not significant ✓
 - ☐ d. None of the options listed

Your answer is correct.
The correct answer is:
When at least one p-value is not significant

Question 3

Correct

1.00 points out of 1.00

A trending time series is stationary.

Select one:

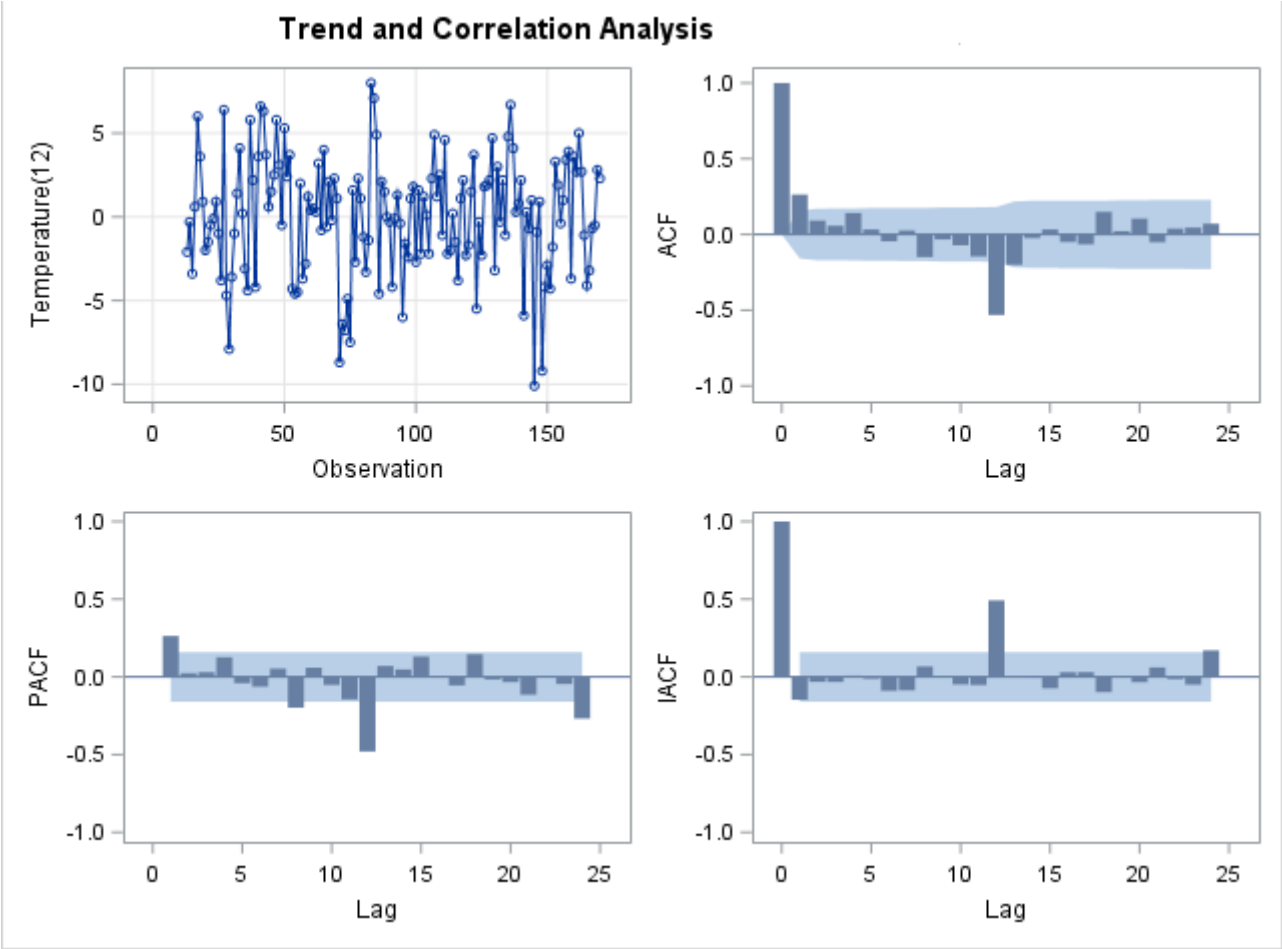
- ☐ True
- ☒ False ✓

The correct answer is 'False'.

Information

The following results were observed for a given time series data set. Use this information for Questions 4-6.

Augmented Dickey-Fuller Unit Root Tests							
Type	Lags	Rho	Pr < Rho	Tau	Pr < Tau	F	Pr > F
Zero Mean	0	-115.510	0.0001	-9.53	<.0001		
	1	-109.273	0.0001	-7.32	<.0001		
	2	-100.807	0.0001	-6.11	<.0001		
Single Mean	0	-115.532	0.0001	-9.50	<.0001	45.11	0.0010
	1	-109.306	0.0001	-7.30	<.0001	26.65	0.0010
	2	-100.886	0.0001	-6.10	<.0001	18.61	0.0010
Trend	0	-115.568	0.0001	-9.47	<.0001	44.83	0.0010
	1	-109.406	0.0001	-7.28	<.0001	26.49	0.0010
	2	-101.200	0.0001	-6.09	<.0001	18.52	0.0010



Question 4

Correct

1.00 points out of 1.00

For this time series which test should be performed?

Select one:

- ☐ a. None of the listed options
- ☒ b. Zero Mean ✓
- ☐ c. Single Mean
- ☐ d. Trend

Your answer is correct.

The correct answer is: Zero Mean

Question 5

Correct

1.00 points out of 1.00

Based on the output, what is your conclusion from the Augmented Dickey-Fuller test?

Select one:

- ☒ a. Reject H0 ✓
- ☐ b. Not enough information to decide
- ☐ c. Fail to reject H0

Your answer is correct.

The correct answer is: Reject H0

Question 6

Correct

1.00 points out of 1.00

What does this tell you about the time series with regard to stationarity?

Answer: ✖

The correct answer is: The series is stationary

Comment:

Question 7

Correct

1.00 points out of 1.00

Only the lag 0 test from Dickey-Fuller should be used to determine if a Random Walk exists.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.