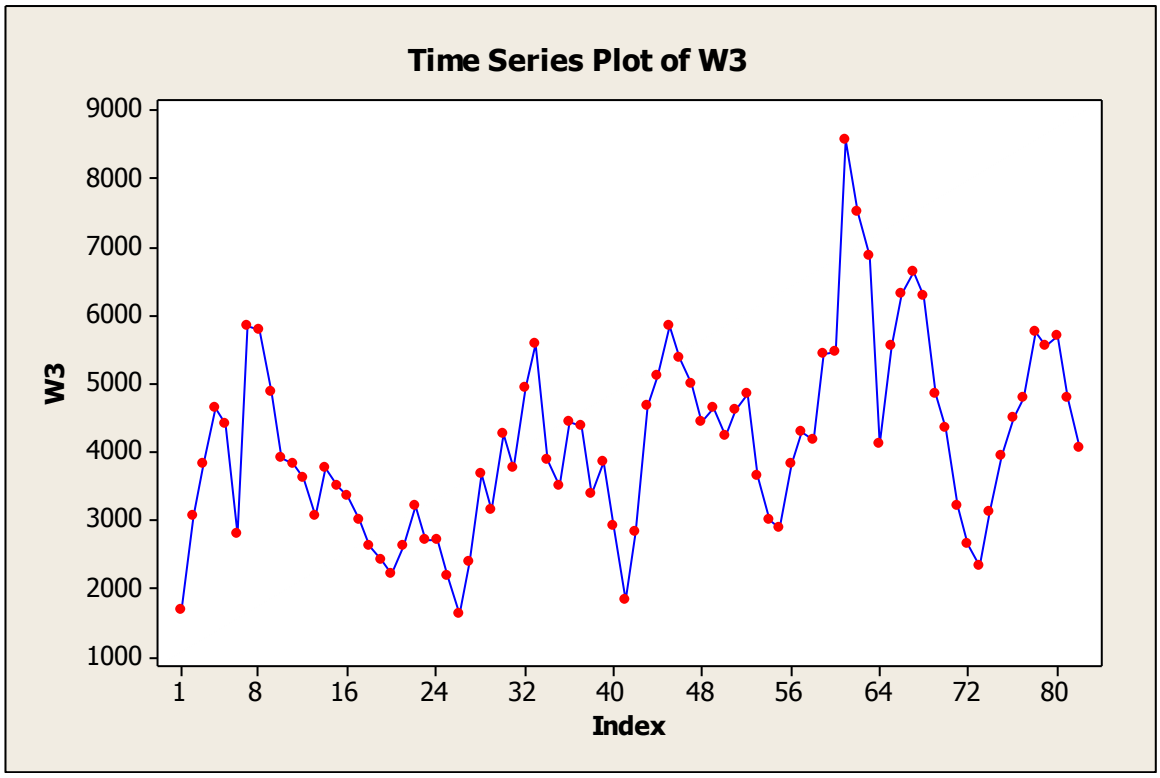
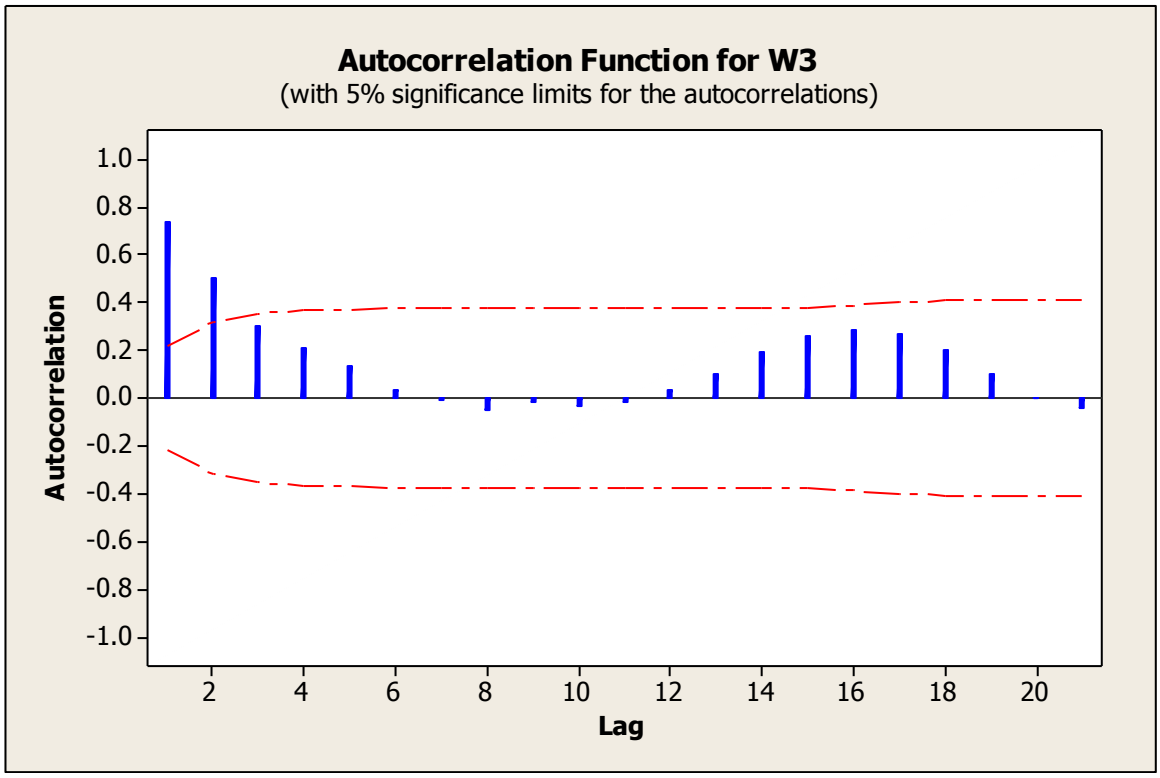
TIME SERIES (W3)

AFNAN AHMED

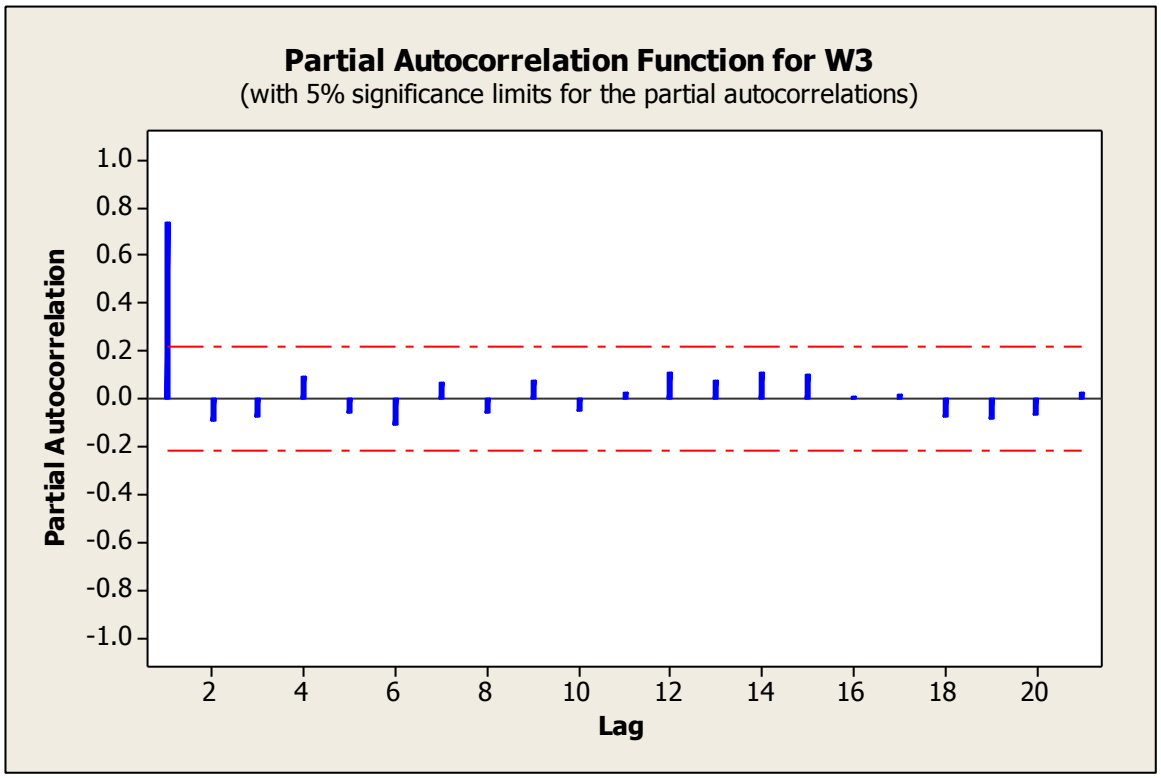
Time Series Plot



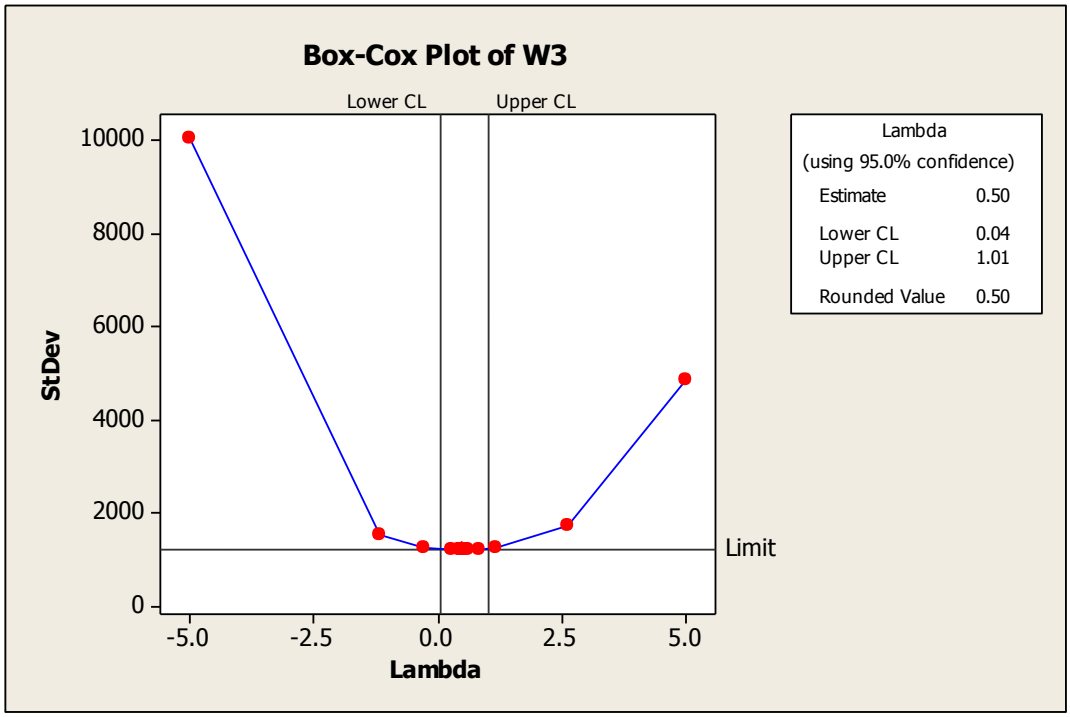
ACF



PACF

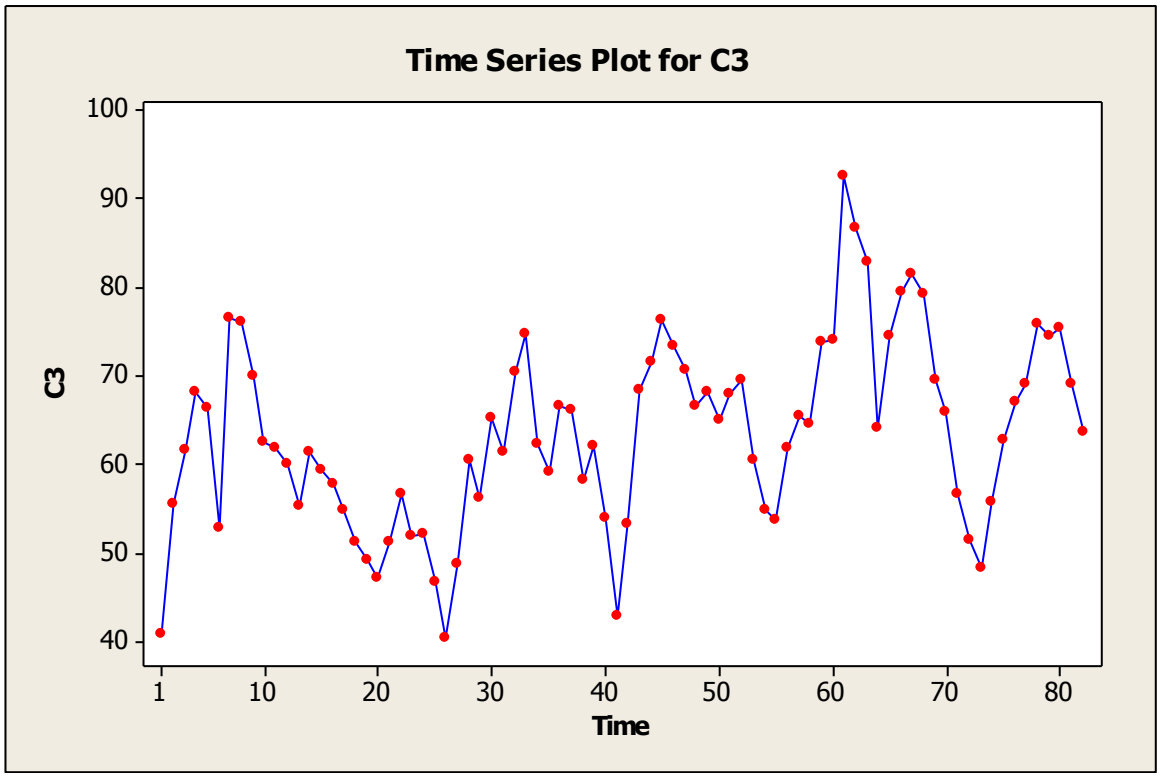

Partial Autocorrelation Function for W3
(with 5% significance limits for the partial autocorrelations)
Partial Autocorrelation
1.0
0.8
0.6
0.4
0.2
0.0
-0.2
-0.4
-0.6
-0.8
-1.0
2
4
6
8
10
12
14
16
18
20
Lag

Transformation

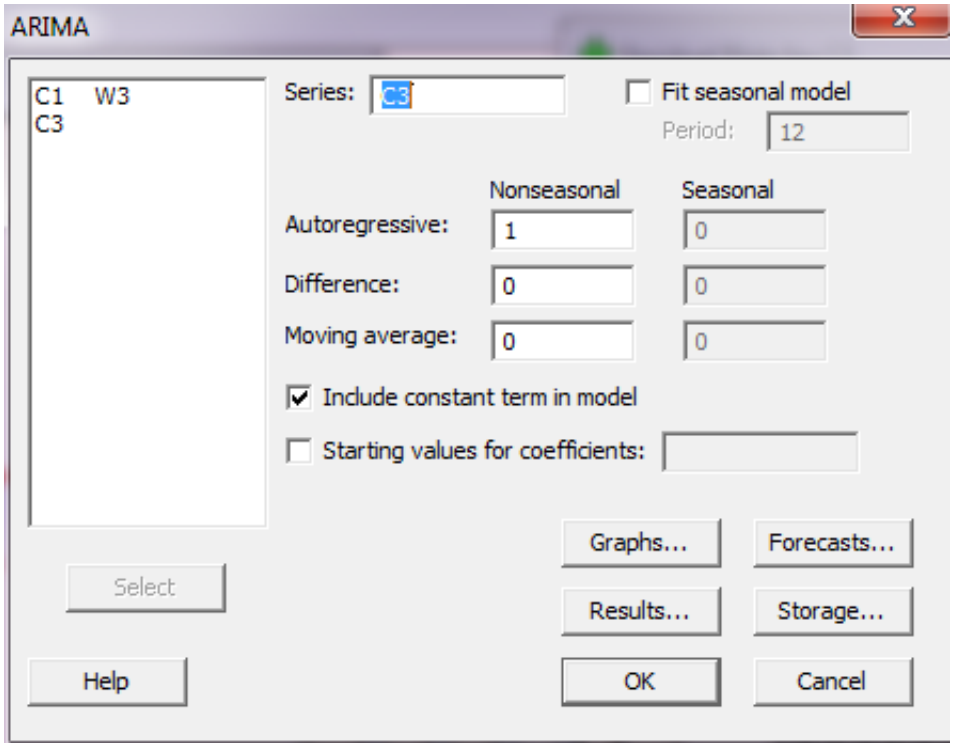


Lambda is 0.5

**** Transformation is SORT(W3)**



FITTING THE MODEL



ARIMA MODEL ARIMA(1,0,0) (AR(1))

Estimates at each iteration

Iteration	SSE	Parameters	
0	7769.48	0.100	57.217
1	6248.08	0.250	47.673
2	5108.29	0.400	38.125
3	4349.99	0.550	28.571
4	3972.97	0.700	19.002
5	3929.13	0.755	15.403
6	3926.31	0.768	14.549
7	3926.09	0.772	14.309
8	3926.07	0.773	14.240
9	3926.07	0.773	14.220

Final Estimates of Parameters

Type		Coef	SE Coef	T	P
AR	1	0.7729	0.0716	10.80	0.000
Constant		14.2200	0.7637	18.62	0.000
Mean		62.623	3.363		

P-VALUE<0.05

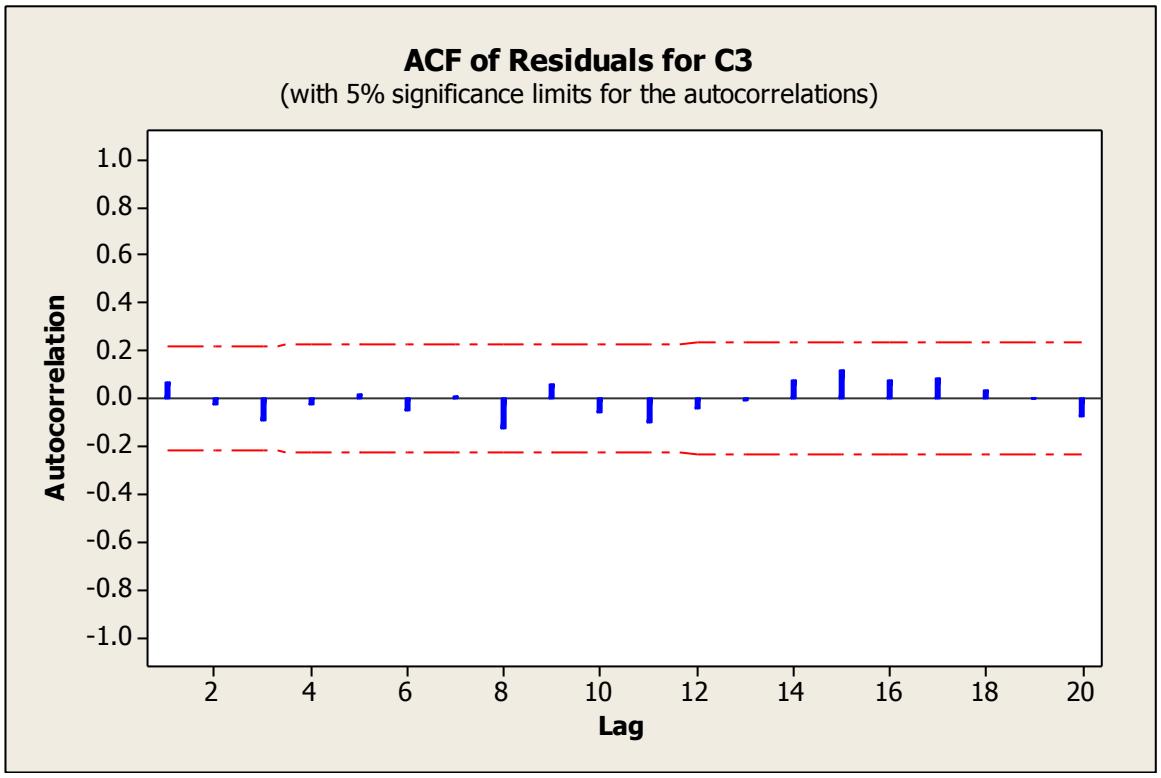
Number of observations: 82
Residuals: SS = 3812.98 (backforecasts excluded)
MS = 47.66 DF = 80

Modified Box-Pierce (Ljung-Box) Chi-Square statistic

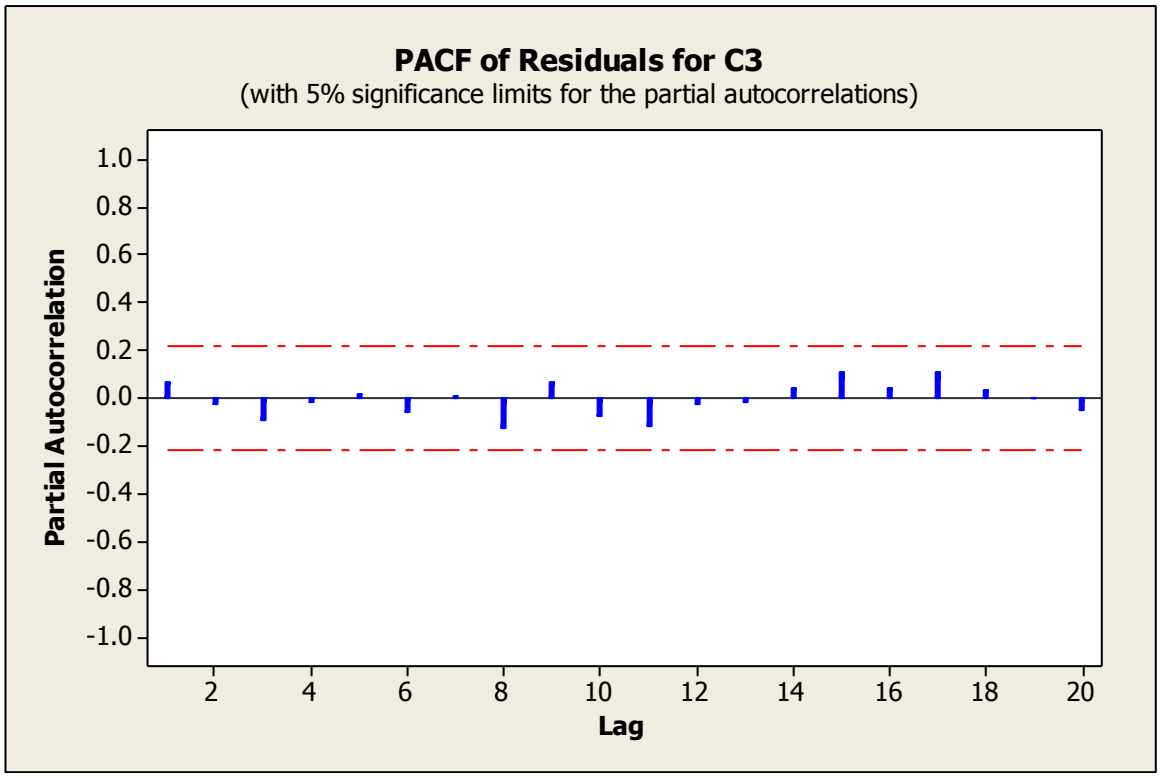
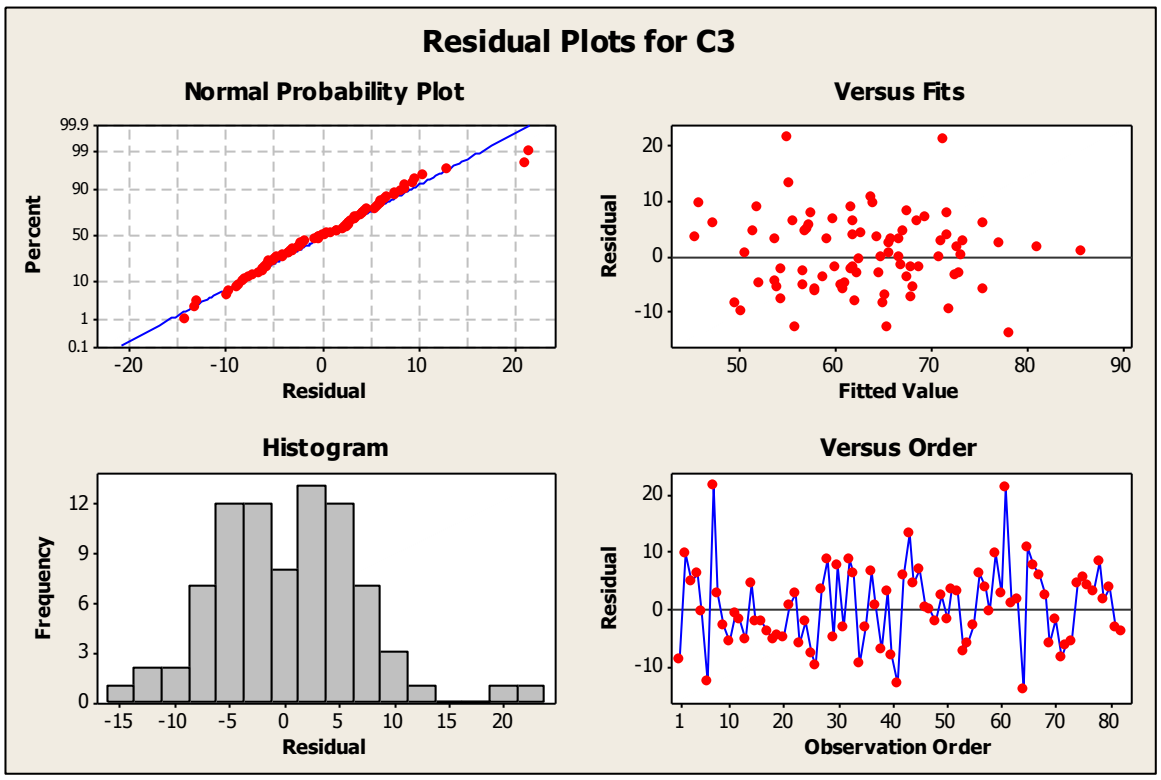
Lag	12	24	36	48
Chi-Square	4.6	10.8	26.5	30.7
DF	10	22	34	46
P-Value	0.916	0.978	0.817	0.960

P-VALUE>0.05

ACF OF RESIDUALS



PACF OF RESIDUALS



RESIDUALS PLOTS