

ICS Part 2 Statistics Chapter 16 Online Test

| Sr | Questions | Answers Choice |
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| 1 | The straight line is fitted to a time series when the movements in the time series are | A. linear B. quadratic C. cubic D. constant |
| 2 | The systematic components of time series which follow regular pattern of variations are called: | A. Noise B. Signal C. Additive model D. Multiplicative model |
| 3 | The unsystematic sequence which follows irregular pattern of variations is called: | A. Noise B. Signal C. Linear D. Non-linear |
| 4 | For a least squares linear trend=ŷ = a + bx, b is the | A. variable B. intercept C. trend D. slope |
| 5 | In moving average method, we cannot find the trend values of some: | A. Middle periods B. End periods C. Starting periods D. Between extreme periods |
| 6 | \hat{y} =a+bx, this line will be called least squares line if it makes= Σ (y-a-bx)2 | A. maximum B. constant C. minimum D. variable |
| 7 | The equation of the quadratic (parabolic) trend is | A. \hat{y} =a+bx B. \hat{y} =a+by C. \hat{y} =a+b Σ x+c Σ x ² D. \hat{y} =a+bx+cx ² |
| 8 | Sum of squares of residuals is denoted by | A. \(\si\) < \(\ |
| 9 | The sum of deviations= $\Sigma(y-\hat{y})$ = | A. 0 B. 1 C. 10 D1 |
| 10 | Increase the number of patients in the hospital due to heel stock is: | A. Seasonal trend B. Secular trend C. Cyclical movements D. Irregular variation |
| 11 | In the measurement of secular trend the moving averages | A. give the trend in a straight line B. measure the seasonal variations C. smoothes out a time series D. measure irregular fluctuations |
| 12 | In the measurement of secular trend the moving averages: | A. Give the trend in a straight line B. Measure the seasonal variations C. Smooth out a time series D. None of these |
| 13 | For a least squares linear trend Y = a + bX | A. $\Sigma Y = 8nbsp; \Sigma Y$ B. $\Sigma Y = 0$ C. $\Sigma Y > \Sigma Y$ D. None of them |
| 14 | For a least squares linear trend=ŷ= a + b x, | A. $\Sigma y \< \Sigma \hat{y}$ B. $\Sigma \hat{y} = 0$ C. $\Sigma y = \Sigma \hat{y}$ D. none of these |
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| 15 | In time series seasonal variations can occur within a period of: | A. Nine years B. Four Years C. Three years D. One year |
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| 16 | A business cycle has | A. one phase B. two phases C. three phases D. four phases |
| 17 | The multiplicative time series model is: | A. Y = T + S + C + I B. TSCI C. Y = a + bX D. Y = a + bX + cX ² |
| 18 | For a least squares linear trend Y = a + bx, the $\Sigma(Y - Y)^2 = 0$ when: | A. All the Y-values are positive B. All the Y-values lie on the line C. All the Y-values lie above the line D. None of these |
| 19 | The elimination or addition of a few more time periods may change its | A. speed B. value C. direction D. none of these |
| 20 | The secular trend is measured by the method of semi-averages when | A. time series contains yearly values B. trend is linear C. time series contains odd number of values D. none of these |