

ICS Part 2 Statistics Chapter 16 Online Test

Sr	Questions	Answers Choice
1	The elimination or addition of a few more time periods may change its	A. speed B. value C. direction D. none of these
2	For a least squares linear trend $\hat{y} = a + bx$, b is the	A. variable B. intercept C. trend D. slope
3	The least squares estimates are unbiased estimates of the	A. statistic B. time series C. parameters D. variance
4	The systematic components of time series which follow regular pattern of variations are called:	A. Noise B. Signal C. Additive model D. Multiplicative model
5	$\hat{y} = a + bx$, this line will be called least squares line if it makes $\sum (y - a - bx)^2$	A. maximum B. constant C. minimum D. variable
6	The graph of time series is called:	A. Histogram B. Historigram C. Straight line D. Ogive
7	The basic components of a time series are:	A. 2 B. 3 C. 4 D. 5
8	The method of least square gives too much weight to extremely large deviations from the	A. population B. parameter C. sample D. trend
9	For a least squares linear trend $Y = a + bx$, the $\sum (Y - \hat{Y})^2 = 0$ 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
10	Sum of squares of residuals is denoted by	A. $\sum e$ B. $\sum e^2$ C. $\sum e^3$ D. $\sum e^4$
11	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
12	A business cycle has	A. one phase B. two phases C. three phases D. four phases
13	For a least squares linear trend $\hat{y} = a + bx$, the $\sum (y - \hat{y})^2 = 0$ when	A. all the y-values lie on the line B. all the y-values are positive C. all the y-values lie above the line D. none of these
14	The multiplicative time series model is:	A. $Y = T + S + C + I$ B. $Y = T \times S \times C \times I$ C. $Y = a + bX$ D. $Y = a + bX + cX^2$

15	The unsystematic sequence which follows irregular pattern of variations is called:	<p>A. Noise</p> <p>B. Signal</p> <p>C. Linear</p> <p>D. Non-linear</p>
16	The secular trend is measured by the method of semi-averages when:	<p>A. Time series contains yearly value</p> <p>B. Trend is linear</p> <p>C. Time series contains odd number of values</p> <p>D. None of them</p>
17	In moving average method, we cannot find the trend values of some:	<p>A. Middle periods</p> <p>B. End periods</p> <p>C. Starting periods</p> <p>D. Between extreme periods</p>
18	The equation of the quadratic (parabolic) trend is	<p>A. $\hat{y}=a+bx$</p> <p>B. $\hat{y}=a+by$</p> <p>C. $\hat{y}=a+b\sum x+c\sum x^2$</p> <p>D. $\hat{y}=a+bx+cx^2$</p>
19	The trend values in freehand curve method are obtained by:	<p>A. Equation of straight line</p> <p>B. Second degree parabola</p> <p>C. Signal</p> <p>D. Graph</p>
20	The sum of deviations= $\sum(y-\hat{y}) =$	<p>A. 0</p> <p>B. 1</p> <p>C. 10</p> <p>D. -1</p>