

## ICS Part 2 Statistics Chapter 16 Online Test

Sr	Questions	Answers Choice
1	The method of least square gives too much weight to extremely large deviations from the	A. population B. parameter C. sample D. trend
2	The secular trend is measured by the method of semi-averages when:	A. Time series contains yearly value B. Trend is linear C. Time series contains odd number of values D. None of them
3	Which one is a rough and crude method for measuring secular trend ?	A. free hand curve method B. semi average method C. moving averages method D. least square method
4	The equation of the quadratic (parabolic) trend is	A. $\hat{y}=a+bx$ B. $\hat{y}=a+by$ C. $\hat{y}=a+b\sum x+c\sum x^2$ D. $\hat{y}=a+bx+cx^2$
5	A business cycle has	A. one phase B. two phases C. three phases D. four phases
6	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
7	The trend values in freehand curve method are obtained by:	A. Equation of straight line B. Second degree parabola C. Signal D. Graph
8	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
9	$\hat{y}=a+bx$ , this line will be called least squares line if it makes $\sum(y-a-bx)^2$	A. maximum B. constant C. minimum D. variable
10	For a least squares linear trend $\hat{y}= a + b x$ ,	A. $\sum y \neq \sum \hat{y}$ B. $\sum \hat{y} = 0$ C. $\sum y = \sum \hat{y}$ D. none of these
11	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
12	The rise and fall of a time series periods longer than one- year is called.	A. Secular trend B. Seasonal variation C. Cyclical variation D. Irregular variation
13	The graph of time series is called:	A. Histogram B. Historigram C. Straight line D. Ogive
14	The sum of deviations $=\sum(y-\hat{y}) =$	A. 0 B. 1 C. 10 D. -1
15	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

		D. None of these
16	The basic components of a time series are:	A. 2 B. 3 C. 4 D. 5
17	For a least squares linear trend $Y = a + bX$	A. $\sum Y = \sum Y$ B. $\sum Y = 0$ C. $\sum Y > \sum Y$ D. None of them
18	Sum of squares of residuals is denoted by	A. $\sum e$ B. $\sum e^2$ C. $\sum e^3$ D. $\sum e^4$
19	The graph of a time series is called	A. histogram B. polygon C. straight line D. historigram
20	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