

ICS Part 2 Statistics Chapter 16 Online Test

Sr	Questions	Answers Choice
1	The multiplicative time series model is:	A. $Y = T + S + C + I$ B. $TSCI$ C. $Y = a + bX$ D. $Y = a + bX + cX^2$
2	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
3	In time series seasonal variations can occur within a period of:	A. Nine years B. Four Years C. Three years D. One year
4	The graph of a time series is called	A. histogram B. polygon C. straight line D. historigram
5	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
6	A business cycle has	A. one phase B. two phases C. three phases D. four phases
7	For a least squares linear trend $\hat{y} = a + bx$, b is the	A. variable B. intercept C. trend D. slope
8	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
9	The trend values in freehand curve method are obtained by:	A. Equation of straight line B. Second degree parabola C. Signal D. Graph
10	The elimination or addition of a few more time periods may change its	A. speed B. value C. direction D. none of these
11	The unsystematic sequence which follows irregular pattern of variations is called:	A. Noise B. Signal C. Linear D. Non-linear
12	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
13	In a straight line equation $Y = a + bX$; a is the:	A. X - intercept B. Slope C. Y - intercept D. None of them
14	$\hat{y} = a + bx$, this line will be called least squares line if it makes $\sum (y - a - bx)^2$	A. maximum B. constant C. minimum D. variable
15	The least squares estimates are unbiased estimates of the	A. statistic B. time series C. parameters

		D. variance
16	The basic components of a time series are:	A. 2 B. 3 C. 4 D. 5
17	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
18	The method of least square gives too much weight to extremely large deviations from the	A. population B. parameter C. sample D. trend
19	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
20	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