ICS Part 2 Statistics Chapter 16 Online Test

Sr	Questions	Answers Choice
1	For a least squares linear trend=$\hat{y}$= a + b x,	A. Σy <$\Sigma\hat{y}$ B. $\Sigma\hat{y} = 0$ C. $\Sigma y = \Sigma\hat{y}$ D. none of these
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 graph of time series is called:	A. Histogram B. Historigram C. Straight line D. Ogive
4	A business cycle has	A. one phase B. two phases C. three phases D. four phases
5	The sum of deviations=$\Sigma(y-\hat{y})$ =	A. 0 B. 1 C. 10 D. -1
6	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
7	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
8	The graph of a time series is called	A. histogram B. polygon C. straight line D. historigram
9	The method of least square gives too much weight to extremely large deviations from the	A. population B. parameter C. sample D. trend
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 time series seasonal variations can occur within a period of:	A. Nine years B. Four Years C. Three years D. One year
12	The multiplicative time series model is:	A. Y = T + S + C + I B. TSCI C. Y = a + bX D. Y = a + bX + cX^2
13	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
14	In a straight line equation Y = a + bX; a is the:	A. X - intercept B. Slope C. Y- intercept D. None of them
		A. Σe B. Σe^2 C. Σe^3

15	Sum of squares of residuals is denoted by	D. $\sum e^4$
16	Methods of semi-averages gives an	A. accurate result B. objective result C. authentic result D. none of these
17	The basic components of a time series are:	A. 2 B. 3 C. 4 D. 5
18	The equation of the quadratic (parabolic) trend is	A. $\hat{y}=a+bx$ B. $\hat{y}=a+by$ C. $\hat{y}=a+b\Sigma x+c\Sigma x^2$ D. $\hat{y}=a+bx+cx^2$
19	The additive model of the time series is:	A. $Y = T + S + C + I$ B. TSCI C. $Y = a + bX$ D. $Y = a + bX + cX^2$
20	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