

## ICS Part 2 Statistics Chapter 16 Online Test

Sr	Questions	Answers Choice
1	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
2	Methods of semi-averages gives an	A. accurate result B. objective result C. authentic result D. none of these
3	For a least squares linear trend $\hat{y} = a + bx$ , b is the	A. variable B. intercept C. trend D. slope
4	For a least squares linear trend $Y = a + bX$	A. $\sum Y = \sum Y$ B. $\sum Y = 0$ C. $\sum Y \neq \sum Y$ D. None of them
5	The method of least square gives too much weight to extremely large deviations from the	A. population B. parameter C. sample D. trend
6	The elimination or addition of a few more time periods may change its	A. speed B. value C. direction D. none of these
7	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
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	In time series seasonal variations can occur within a period of:	A. Nine years B. Four Years C. Three years D. One year
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	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. $\hat{y} = a + bx + cx^2$
12	A business cycle has	A. one phase B. two phases C. three phases D. four phases
13	The least squares estimates are unbiased estimates of the	A. statistic B. time series C. parameters D. variance
14	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
15	The unsystematic sequence which follows irregular pattern of variations is called:	A. Noise B. Signal C. Linear D. None of these

U. Non-linear

16 The graph of time series is called:

- A. Histogram
- B. Historigram
- C. Straight line
- D. Ogive

17 The graph of a time series is called

- A. histogram
- B. polygon
- C. straight line
- D. historigram

18 The basic components of a time series are:

- A. 2
- B. 3
- C. 4
- D. 5

19  $\hat{y}=a+bx$ , this line will be called least squares line if it makes  $=\Sigma(y-a-bx)^2$

- A. maximum
- B. constant
- C. minimum
- D. variable

20 The sum of deviations  $=\Sigma(y-\hat{y}) =$

- A. 0
- B. 1
- C. 10
- D. -1