

ICS Part 2 Statistics Chapter 16 Online Test

| Sr | Questions | Answers Choice |
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| 1 | The trend values in freehand curve method are obtained by: | A. Equation of straight line B. Second degree parabola C. Signal D. Graph |
| 2 | The sum of deviations= $\sum(y-\hat{y}) =$ | A. 0 B. 1 C. 10 D. -1 |
| 3 | For a least squares linear trend= $\hat{y} = a + b x$, | A. $\sum y$ & $\sum \hat{y}$ B. $\sum \hat{y} = 0$ C. $\sum y = \sum \hat{y}$ D. none of these |
| 4 | 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 |
| 5 | 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 |
| 6 | The method of least square gives too much weight to extremely large deviations from the | A. population B. parameter C. sample D. trend |
| 7 | The least squares estimates are unbiased estimates of the | A. statistic B. time series C. parameters D. variance |
| 8 | In a straight line equation $Y = a + bX$; a is the: | A. X - intercept B. Slope C. Y- intercept D. None of them |
| 9 | Sum of squares of residuals is denoted by | A. $\sum e$ B. $\sum e^2$ C. $\sum e^3$ D. $\sum e^4$ |
| 10 | In moving average method, we cannot find the trend values of some: | A. Middle periods B. End periods C. Starting periods D. Between extreme periods |
| 11 | For a least squares linear trend= $\hat{y} = a + bx$, b is the | A. variable B. intercept C. trend D. slope |
| 12 | The elimination or addition of a few more time periods may change its | A. speed B. value C. direction D. none of these |
| 13 | For a least squares line trend $Y = a + bx$, the b is the: | A. Intercept B. Slope C. Variable D. Trend |
| 14 | 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 |

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| 15 | A business cycle has | <p>A. one phase B. two phases C. three phases D. four phases</p> |
| 16 | The equation of the quadratic (parabolic) trend is | <p>A. $\hat{y}=a+bx$ B. $\hat{y}=a+by$ C. $\hat{y}=a+b\sum x+c\sum x^2$ D. $\hat{y}=a+bx+cx^2$</p> |
| 17 | The straight line is fitted to a time series when the movements in the time series are | <p>A. linear B. quadratic C. cubic D. constant</p> |
| 18 | The systematic components of time series which follow regular pattern of variations are called: | <p>A. Noise B. Signal C. Additive model D. Multiplicative model</p> |
| 19 | The additive model of the time series is: | <p>A. $Y = T + S + C + I$ B. TSCI C. $Y = a + bX$ D. $Y = a + bX + cX^2$</p> |
| 20 | Increase the number of patients in the hospital due to heel stock is: | <p>A. Seasonal trend B. Secular trend C. Cyclical movements D. Irregular variation</p> |