

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION DECEMBER 2019
(Third Semester)

Branch - COMMERCE (BUSINESS ANALYTICS)

ECONOMETRICS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10x1 = 10)

- 1 Econometrics means:
(i) Mathematical measurement (ii) Statistical Measurement
(iii) Economic Measurement (iv) Commerce
- 2 The Linear Regression model is
(i) $Y = p_0 + p_1 X + U$; (ii) $Y_i = p_0 + X_i$
(iii) $Y = (p_1 + p_2 X)$ (iv) $Y_i = p_1 + p_2 X_i + U_i$
- 3 Goldberger coined the term
(i) Collinearity (ii) Micronumerosity
(iii) Multicollinearity (iv) Blue
- 4 Which one is variance - inflating factor
(i) $1 - r_{23}^2$ (ii) r_{23}^2
(iii) $\frac{1 - r_{23}^2}{V_1 - r_{23}^2 J}$ (iv) $\frac{1}{1 + r_{23}^2}$
- 5 Ols in the presence of heteroscedasticity (3 2 is efficient, is has
(i) Larger variance (ii) Smaller variance
(iii) No variance (iv) Consistence
- 6 Economic forecasting based on
(i) Time series data (ii) Industrial data
(iii) Business data (iv) Environmental data
- 7 Input-output models were originally introduced by
(i) Hibbs (ii) Sandberg
(iii) Leontief (iv) Stone
- 8 When the level of output is changed, the amounts of all inputs required are also changed proportionately This is called the assumption of
(i) Ratio (ii) Proportion
(iii) Fixed proportion of factor in puts (iv) Proportion output
- 9 The mechanism $u_t = \rho u_{t-1} + \epsilon_t$, where ρ is
(i) Auto correlation (ii) Coefficient of auto covariance
(iii) Correlation (iv) Regression
- 10 In the linear regression model, the autocorrelation does not
(i) $E(U_i) = 0$ (ii) $E(U_j U_j) = 0$
(iii) $E(U_i U_j) = 0$ (iv) $E(u_j) = 0$

Cont...

SECTION - B (35 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 7 = 35)

- 11 a Define Econometrics and discuss its scope.
OR
b Discuss the objective of Econometrics.
- 12 a Explain the basics of econometric modeling.
OR
b Explain about Multicollinearity.
- 13 a Describe the interaction effects and seasonal data effects in forecasting models.
OR
b Explain about univariate time series modeling.
- 14 a Delineate the concept of input and output analysis.
OR
b Elucidate the assumption s of input and output analysis.
- 15 a Explain about auto correlation.
OR
b Discuss about the characteristics of auto correlation.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Describe the types of forecasting
- 17 Explain the tests for detecting Multicollinearity.
- 18 Elucidate about the panel data modeling. .
- 19 Delineate the closed and open input/output models.
- 20 Describe about the ARIMA Modeling.

Z-Z-Z

END