Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore-43.
Bachelor's Degree Examination – November 2018
V Semester

Class: III UG **Time: 3Hrs**
Major: Economics **Maximum: 100**

11BECC15/15BECC16 – Econometric Methods
Part- A **10 x 1=10**
Choose the correct answer

1. The basic tool for econometrics is the
   [a] linear regression model b] correlation
   [c] index number [d] none of the above

2. Which is the property of an estimator?
   [a] unbiasedness [b] efficiency
   [c] consistency [d] all the above

3. Econometrics deals with
   [a] qualitative [b] theoretical
   [c] empirical [d] graphical

4. In the classical linear regression model $Y_t = \beta_o + \beta_1 X_t + u_{t,} X_t$ is called
   [a] explained [b] explanatory
   [c] random [d] endogenous

5. The conditional mean of y is written as
   [a] E(y/x) [b] y/x
   [c] x/y [d] E(x/y)

6. Econometrics is
   [a] exogenious model [b] identified model
   [c] endogenious model [d] either exogeneous or endogeneous

7. Independent variable is also known as
   [a] regressor [b] constant coefficient [c] Dummy variable
   [d] error term

8. Given y = a + bx, the term 'b' is
   a. constant co efficient b. parameter c. independent variable
   d. dependent variable

9. A phenomenon in which our predictor variable in a multiple regression model can be predicted with degree of accuracy can be identified with the help of
   a. Multi collinearity b. Auto correlation c. Hetro sechetroscedasticity
   d. none of the above

10. A measure of statistical accuracy of an estimate is termed as
    a. coefficient of determination b. standard error c. estimator d. linerar model

Part – B **5 x 6 = 30**

Answer ALL Questions,

Answer should not exceed 400 words or two pages

11.[a] Discuss the scope and divisions of econometrics

[or]

11.[b] How statistics, mathematic and econometrics are interrelated each other?

[or]

12.[a] Discuss the properties of an estimator

12.[b] What are the cause of multicollinearity?

[or]

13.[a] What are the uses of dummy variables?

[or]

13.[b] What are necessity of simultaneous equation model?

14.[a] Write a brief note on Durbin Watson test

[or]

14.[b] What are the applications of lagged models in economics?

15.[a] What is dummy variable trap?

[or]

15.[b] Why do you include dummy variable in a model?

Part – C **5 x 12 = 60**

Answer the following

Answer should not exceed 800 words or four pages

16.[a] Explain the methodology of econometrics

[or]

16.[b] The following table includes the price and quantity demanded for the product

Quantity('000)	8	3	4	7	8	0
Price (in Rs.)	2	4	3	1	3	5

Estimate the demand function for the product $Y = \beta_0 + \beta_1 X + u$

17.[a] Discuss various assumptions of linear regression model

[or]

17.[b] The following table gives data on weekly family consumption expenditure (Y) and weekly family income (X).

Y	70	65	90	95	110	115	120	140	155	150
X	80	100	120	140	160	180	200	220	240	260

(i) Estimate the consumption function of the family $Y = \beta_0 + \beta_1 X + u$

(ii) Find R^2 and interpret the result

18.[a] Explain the reasons for the problem of hetroscedasticity?

[or]

18.b] Given $\sum(e_t - e_{t-1})^2 = 49.56$, $\sum(e_t - e^{-})^2 = 18.8$ N = 112. Estimate Von-Neumann ratio and examine the existence of autocorrelation.

19.[a] Explain the adaptive expectation model

[or]

19.[b] Write an essay on stock adjustment model

20.[a] Explain the characteristics of dummy variable models

[or]

20.[b] Describe the linear probability approach to estimate the dependent dummy variable models.

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