

SUBJECT CODE: 19EC/AC/EM45

B.A. DEGREE EXAMINATION APRIL 2023

BRANCH IV - ECONOMICS

FOURTH SEMESTER

COURSE : ALLIED - CORE

PAPER : INTRODUCTORY ECONOMETRICS

TIME : 3 HOURS

MAX.MARKS: 100

SECTION A

ANSWER ANY TEN QUESTIONS. EACH ANSWER NOT TO EXCEED 50 WORDS:

(10 x 2 = 20)

1. Define Econometrics.
2. What do you mean by PRF and SRF?
3. What is an Outlier?
4. Define specification error.
5. Where do we use standard error and what is it?
6. Write down the types of hypothesis.
7. Bring out Type I and Type II error.
8. How do we represent coefficient of determination?
9. What is piece-wise linear regression?
10. Where do we use Dummy variable?
11. Expand- BLUE.
12. Write down the Simple linear regression equation.

SECTION B

ANSWER ANY FIVE QUESTIONS. EACH ANSWER NOT TO EXCEED 400 WORDS:

(5 X 8 = 40)

13. Discuss the procedure for Testing of Hypothesis.
14. Explain any two functional forms of regression equation.
15. Discuss the assumptions of a simple linear regression model.
16. What are the properties of a good estimator?
17. Find the reduced form. $D = a_0 + a_1P + u_1$; $S = b_0 + b_1P + b_2W + u_2$; $D = S$
Where D-Demand; S=Supply; P=Price; W= Weather.
18. Calculate R^2 . Given $\sum e_i^2 = 100$ [RSS] ; $\sum y_i^2 = 1000$ [TSS]
19. Given $\sum X = 56$; $\sum Y = 40$; $\sum X^2 = 524$; $\sum Y^2 = 256$; $\sum XY = 364$; $N = 20$.
Find the regression equation of Y on X and X on Y.
20. Explain Simultaneous equation models.

SECTION C

ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1000 WORDS:

(2 X 20 = 40)

21. Estimate the regression parameters for a simple linear regression model.
22. Find the regression equation of Y on X.
Quantity [Y] : 8 3 4 7 8 0 Price[X]: 2 4 3 1 3 5
23. Discuss the methodology of Econometrics.
24. Prove Gauss Markov theorem.
