STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 86

(For Candidates admitted during the academic year 2015 – 2016 and thereafter)

SUBJECT CODE: 15EC/AC/EM45

B.A. DEGREE EXAMINATION APRIL 2018 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:

 $(10 \times 2 = 20)$

- 1. What is econometrics?
- 2. Define pooled data.
- 3. What do you mean by population regression function?
- 4. What is standard error.
- 5. What is goodness of fit?
- 6. What is a double log model?
- 7. Define the term null hypothesis.
- 8. Define dummy variable.
- 9. State seasonal adjustment.
- 10. What is ANCOVA model?
- 11. Define simultaneous equation model.
- 12. What do you mean reduced form?

SECTION B

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

 $(5 \times 8 = 40)$

- 13. Describe the classical methodology of econometrics.
- 14. Write the assumptions of CLRM.
- 15. Clarify the reasons for inclusion of stochastic disturbances term in the OLS.
- 16. Distinguish between one tailed and two tailed test.
- 17. Write a short note about semi log models.
- 18. Explain the application of semi log models.
- 19. Clarify the features of dummy variable.
- 20. Distinguish between endogenous variable and exogenous variable with illustration.

SECTION C

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

 $(2 \times 20 = 40)$

- 21. In the linear regression model $y = \alpha + \beta x + u$ obtain the best linear unbiased estimators of α and β .
- 22. Analyze the important relationship between \mathbb{R}^2 and F test.

23. Hourly wages in relation to marital status and region of residence, from a sample of 528 persons in May 2010, the following regression results were obtained:

$$\begin{split} \hat{Y} &= 8.8148 + 1.0997D_{2i} - 1.6729D_{3i} \\ Se &= (0.4015) \quad (0.4642) \quad (0.4854) \\ t &= (21.9528) \quad (2.3688) \quad (-3.4462) \\ &\quad (0.0000)^* \quad (0.0182)^* \quad (0.0006)^* \\ R^2 &= 0.0322 \end{split}$$

Where

Y = hourly wage in Rupees

 D_2 = married status; 1 = married, 0 = otherwise

 D_3 = region of residence; 1 = South, 0 = otherwise

And * denotes the p values.

Interpret these results.

24. Explain the simultaneous equation bias with the help of simple Keynesian model of income determination.
