

**STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI -86**  
**(For Candidates admitted during the academic year 2019-2020 and thereafter)**

**SUBJECT CODE: 19EC/PC/EC44**

**M.A DEGREE EXAMINATION MAY 2021**  
**BRANCH III – ECONOMICS**  
**END SEMESTER EXAMINATION**

**COURSE: CORE**  
**PAPER: ECONOMETRIC METHODS II**  
**TIME: 1 ½ HOURS**

**MAX. MARKS: 50**

**SECTION – A**

**ANSWER ANY THREE QUESTIONS IN 300 WORDS EACH: (3x10=30)**

1. Determine the identifiability of each equation with the help of the Order and Rank conditions of identification.

	Coefficients of the variables								
Eqn.	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>	Y <sub>4</sub>	Y <sub>5</sub>	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
1	1	$\beta_{12}$	0	$\beta_{14}$	0	$\gamma_{11}$	0	0	$\gamma_{14}$
2	0	1	$\beta_{23}$	$\beta_{24}$	0	0	$\gamma_{22}$	$\gamma_{23}$	0
3	$\beta_{31}$	0	1	$\beta_{34}$	$\beta_{35}$	0	0	$\gamma_{33}$	$\gamma_{34}$
4	0	$\beta_{42}$	0	1	1	$\gamma_{41}$	0	$\gamma_{43}$	0
5	$\beta_{51}$	0	0	$\beta_{54}$	1	0	$\gamma_{52}$	$\gamma_{53}$	0

2. Explain simultaneous equation models.
3. Most economists feel that increases in GDP eventually leads the monetary authorities to increase the MSS. Who is right? Which approach will you adopt to address this question of indeterminate causality between these two variables?
4. Explain Durban Watson test.
5. Derive GLS estimators.
6. Explain Unit Root Test.

**SECTION – B**

**ANSWER ANY THREE QUESTIONS IN 1200 WORDS EACH: (1x20=20)**

7. What are the types of model specification errors one likely to encounter in empirical analysis? Explain the consequences of these errors. How does one detect the errors of measurement?
8. What is autocorrelation? Discuss the nature, consequences, detection and remedies for autocorrelation.

