Nirma University

Institute of Technology

Semester End Examination (IR), December - 2021
B. Tech. in IC / EC / CSE, Semester-V
2HSOE52 Introduction to Econometrics

Roll/

CO4 L3

Supervisor's initial

19BCE238 with date Exam No. Max. Marks: 50 Time: 2 Hrs Instructions: 1. Attempt all questions. 2. Figures of right indicate full marks. 3. Draw neat sketches wherever necessary. [80] What do you mean by Econometrics? How does it differ from Q1 A CO1 L1 correlation? List ANY 05 assumptions of Classical Linear Regression Model [07] Discuss the properties of Best Linear Unbiased Estimator Q1 B CO2 L2 (BLUE) as outlined by the celebrated Gauss Markov Theorem [08] Discuss the following **02 A** (1)Ratio Scale (2)Ordinal Scale (3)Interval Scale (4)Nominal CO1 L2 Q2 B Distinguish Cross Sectional, Time Series and Panel Data in [07] CO2 L2 **Econometrics Q3 A** What do you mean by Hypothesis Testing? Explain this with [04] one statistical illustration of your own imaginary data. CO3 L2 Q3 B Why Ordinary Least Square (OLS) estimator is popularly used in [02] Econometrics compared to Maximum Likelihood Estimator CO3 L2 (MLE)? Q3 C Distinguish R squared value and F statistic probability value in [14] evaluating regression output. Illustrate with a statistical CO4 L3 example of imaginary data [14] OR **03** C Discuss the major causes with reference to (1) Multicollinearity

(2) Heteroskedascity and (3) Auto Correlation