



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**FACULTY OF SOCIAL SCIENCES**  
**DEPARTMENT OF ECONOMICS**  
**2024\_2 EXAMINATION**

**COURSE TITLE:** APPLIED ECONOMETRICS II  
**COURSE CODE:** ECO 454  
**CREDIT UNITS:** 2 UNITS  
**TIME ALLOWED:** 2 HOURS  
**INSTRUCTION:** ANSWER ANY THREE (3) QUESTIONS

**QUESTION ONE**

**1a.** Distinguish between a model and economic model **(3.5 Marks)**

**1b.** Given the table below calculates the  $(\hat{\alpha})$  and  $\hat{\beta}$  where X is income and Y is consumption and interpret your result.

X	10	25	30	40	45
Y	30	35	55	65	70

**(20 Marks)**

**QUESTION TWO**

**2a** Define stationary time series according to Woodridge (2009) **(5.5 Marks)**

**2bi** Discuss the following concepts of forecasting and trend (i) Seasonal trends (ii) Combined linear and seasonal trends **(8 Marks)**

**2bii** Discuss the four Types of trends **(10 Marks)**

**QUESTION THREE**

**3a** Discuss the steps should be followed when performing Rank Condition **(10 Marks)**

**3b** Discuss the four Properties of Two Stage Least Square **(13.5 Marks)**

**QUESTION FOUR**

**4a** State the three Properties of the Instrumental Variable **(8.5 Marks)**

**4b** State the Estimation Procedure of full information likelihood method **(15 Marks)**