UNIVERSITY OF NAIROBI
DEPARTMENT OF ECONOMICS AND DEVELOPMENT STUDIES
FEBRUARY – MAY 2023 SEMESTER
CEC/XEQ 401: INTRODUCTORY ECONOMETRICS I
CONTINUOUS ASSESSMENT TEST – TAKE AWAY
MODULE I & II

May 15, 2023

Instructions

1. Attempt BOTH Questions.

2. This test is due on May 22, 2023.

3. Show all your workings. The computations are to be done using a scientific calculator, and not an econometric software.

4. All hypotheses should be tested at the 5% level of significance, unless otherwise specified.

5. The following are the options for submitting the responses to this test. You are advised to use the particular option that best works for you.

   a. Typed solutions, converted to Portable Document Format (PDF), and uploaded on the Examination portal as a single document.

   b. Handwritten solutions on foolscaps, scanned to PDF as a single document, and uploaded on the Examination portal.

6. Indicate your full name and registration number on the title page of your answer sheet, and your registration number on any subsequent pages of the answer sheet. Any answer sheet page without a legible registration number WILL NOT BE GRADED.

Table 1 shows demand for money M ($ billions) and the rate of interest R (%) in 8 different economies:

Table 1: Money Demand and Rate of Interest

Economy	M ($ billions)	R (%)
1	36	6.3
2	50	4.6
3	46	5.1
4	30	7.3
5	20	8.9
6	35	5.3
7	37	6.7
8	61	3.5

1. a. Compute the sample correlation coefficient between M and R, and comment on its value. (6 marks)

   b. Using the above information, test the hypothesis that there is no correlation between demand for money M and the rate of interest R in the population. (4 marks)

2. a. Regress M on R. (10 marks)

   b. Calculate the standard errors of the estimated regression coefficients. (10 marks)