"Investing in Africa's Future"

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

NMEC 303: INTRODUCTION TO ECONOMETRICS

END OF SECOND SEMESTER EXAMINATIONS

MAY 2021

LECTURER: MR G. MANDEWO
TIME: 7 HOURS

INSTRUCTIONS

Answer **ONE** question.
Total possible mark is **100.**

Start **each** question on a new page in your answer booklet.

The marks allocated to **each** question are shown at the end of the question.

Show all your workings.

Credit will be awarded for logical, systematic and neat presentations.

1. It is important to execute hypothesis testing to determine whether variables are significant or insignificant. Using t-ratios, confidence interval approaches and p-value. Generate your own models and test for hypothesis, for Simple Linear regression models and Multiple Linear Regression models. Emphasis should be on interpretation and discussing implications for model specifications.   **[100 Marks]**

2. The method of ordinary least squares is used to determine the formulae for the parameters. Demonstrate how this is achieved in both absolute values and deviations. You are required to further show that both formulae give the same result. You are required to further determine the coefficient of determination and tests for its significance.
                                                [100 Marks]

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                                                [100 Marks]

END OF EXAMINATION