



**"Investing in Africa's Future"**

**COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE**

**MEC406: BUSINESS CYCLES AND FORECASTING**

**END OF SEMESTER TERM PAPER**

**APRIL/MAY 2020**

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## **INSTRUCTIONS**

Answer **One** questions.

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

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

1. Discuss the following:
  - a) The Box-Jenkins method. **[25 marks]**
  - b) The four stages of business cycle. **[25 marks]**
  - c) Any five theories of business cycle. **[50 marks]**
  
2. Business Cycles and Forecasting
  - a) Write a paper on monopoly power, inflation and business cycles. **[50 marks]**
  - b) Explain the properties of a stochastic process. **[50 marks]**
  
3. The quarterly sales data (number of copies) for a university textbook for four years are presented in the following table:

<b>YEAR</b>	<b>QUARTER</b>			
	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Y1</b>	20	10	4	11
<b>Y2</b>	33	17	9	18
<b>Y3</b>	45	23	11	25
<b>Y4</b>	60	30	13	29

- a) Why do business cycles occur? Explain the impact of the four stages of business cycle. **[50 Marks]**
- b) Analyse the textbook sales data and forecast the textbook sales for each quarter of the 5<sup>th</sup> year. Use a multiplicative model. **[50 marks]**