# TECHNICAL UNIVERSITY OF MOMBASA UNVIVERSITY EXAMINATIONS BCOM MANAGEMENT SCIENCE DECEMBER SERIES II YEAR 4 SEM 1

## BMS 4402: SPREADSHEET MODELLING AND FORECASTING

Instructions: Answer question one and any other Two

## **QUESTION ONE (30 MARKS)**

- a) Define the term forecasting and explain how it relates to planning (4 Marks)
- b) State any three reasons why companies should include forecasting in their day to day operations (3 Marks)
- c) In forecasting what does the equation Y = a + bX represent. Draw a graph to represent this (7 Marks)
- d) Explain the two general approaches to forecasting (8 Marks)
- e) Explain any four characteristics of accurate forecasts (8 Marks)

# **QUESTION TWO (20 MARKS)**

- a) Describe the main advantages and limitations of survey data (8 Marks)
- b) What is trend projection, and why is this method often employed in economic forecasting (12 Marks)

## **QUESTION THREE (20 MARKS)**

- a) Highlight the steps followed when using the FORECAST function in Microsoft Excel for calculating forecasts using linear regression (16 Marks)
- b) Explain the term multiple regression as used in forecasting (4 Marks)

### **QUESTION FOUR (20 MARKS)**

What is Delphi method of forecasting? Describe its main advantages and limitations (20 Marks)

### **QUESTION FIVE (20 MARKS)**

Naïve forecasting is a method commonly used by statisticians in their forecasting work. Discuss the process clearly stating its limitations (20 Marks)