# TECHNICAL UNIVERSITY OF MOMBASA <br> 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
b) State any three reasons why companies should include forecasting in their day to day operations
c) In forecasting what does the equation $\mathrm{Y}=\mathrm{a}+\mathrm{bX}$ represent. Draw a graph to represent this
d) Explain the two general approaches to forecasting
e) Explain any four characteristics of accurate forecasts

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
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

