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

BMS 4402: SPREADSHEET MODELLING AND FORECASTING

Instructions: Answer question one and any other Two

QUESTION ONE (30 MARKS)

a) Explain the significance of demand forecasting   (5 Marks)
b) State any five decisions that need forecasting in an organization   (5 Marks)
c) Briefly explain the three characteristics of forecasting   (6 Marks)
d) Explain clearly the steps followed during forecasting   (10 Marks)
e) Forecasting models are broadly categorized into two. Explain these types of forecasting
   models   (4 Marks)

QUESTION TWO (20 MARKS)

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

QUESTION THREE (20 MARKS)

Discuss any FIVE application areas of forecasting   (20 Marks)

QUESTION FOUR (20 MARKS)

a) What is the forecast for December based on a weighted moving average applied to the
   following past demand data and using weights: 4, 3, 2 (largest weight is for most recent
   data)?   (8 Marks)

JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER
37	36	40	42	47	43

b) Describe the data requirements that should be met if regression analysis is to provide a
   useful basis of forecasting   (12 Marks)

QUESTION FIVE (20 MARKS)

a) Explain trend projection and explain why analysts use it for economic forecasting
                                                                                                            (14 marks)
b) Forecasting has become a main area of concern for business organizations. Explain this
   statement   (6 Marks)