namibia university
OF SCIENCE AND TECHNOLOGY

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF MARKETING & LOGISTICS

QUALIFICATION: BACHELOR OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT	
QUALIFICATION CODE: 07BLSC	**LEVEL:** 6
COURSE CODE: FDA621S	**COURSE NAME**: FORECASTING AND DATA ANALYSIS
SESSION: JANUARY 2019	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

SUPPLEMENTARY / SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER[S]	Ms. E. Salomo and Ms. E Theophelus [FT/PT] Ms. E Kalipi [Di]
MODERATOR:	Ms. Gloria Tshoopara

INSTRUCTIONS	
	1. This paper consists of **Four [4]** questions 2. Answer **ALL** questions 3. Write as legible as possible, and as precise as possible 4. Indicate your class lecturer's name on your answer sheet 5. Read each question carefully 6. Allocate your time appropriately

THIS QUESTION PAPER CONSISTS OF 5 PAGES [Including this front page]

QUESTION 1; MULTIPLE QUESTION; SELECT THE CORRECT ANSWER

1.1 It refers to the process of determining the amount of product and related information that consumers will require in the future, either in the short or long term.
   a) Qualitative Techniques
   b) Demand forecasting
   c) Time series
   d) Data Analytic

   2 marks

1.2_____ demand for product and/or service is caused by the demand for other products and/or services
   a) In depended demand
   b) Depended Demand
   c) Forecasting
   d) All of the Above

   2 marks

1.3 Which one is not a component of time series?
   a) Trend
   b) Seasonal
   c) Random
   d) Delphi

   2 marks

1.4 A_____analytics is defined as the use of statistics and modelling to determine future performance based on current and historical data
   a) Data
   b) Predictive
   c) Seasonal
   d) Forecasting

   2 marks

1.5 It's an approach that uses interviews and surveys to judge preferences of customer and to assess demand
   a) Time series
   b) Market survey
   c) Sale force
   d) Executive opinion

   2 marks

1.6 Decisions relating to the sales and operation s planning (aggregate planning) involve
   a) Short term forecasting
   b) Medium term forecasting
   c) Long term Forecasting
   d) None of these

   2 marks

1.7 Which of the Following does not fall under qualitative forecasting method?
  a) Judgmental method
  b) Market research
  c) Delphi method
  d) Moving average Method

<div align="right">2 marks</div>

1.8 The measure of forecast error that calculates the average of absolute differences between the actual and the forecast demand over n time period is known as:
  a) None of these
  b) Mean absolute deviation
  c) Mean square error
  d) Mean absolute percentages error

<div align="right">2 marks</div>

1.9 Trend projection is an example of which kind of forecasting
  a) Qualitative
  b) Time-series
  c) Barometric
  d) Econometric

<div align="right">2 marks</div>

1.10 In time-series analysis, which source of variation can be estimated by the ratio-to-trend method?
  a) Cyclical
  b) Trend
  c) Seasonal
  d) Irregular

<div align="right">2 marks</div>

1.11 Which of the following is not a qualitative forecasting technique?
  a) Surveys of consumer expenditure plans
  b) Perspectives of foreign advisory councils
  c) Consumer intention polling
  d) Time-series analysis

<div align="right">2 marks</div>

1.12   A qualitative forecast:
  a) Predicts the quality of a new product.
  b) Predicts the direction, but not the magnitude, of change in a variable.
  c) Is a forecast that is classified on a numerical scale from 1 (poor quality) to 10 (perfect quality).
  d) Is a forecast that is based on econometric methods

<div align="right">2 marks</div>

1.13 The first step in time-series analysis is to:
  a) Perform preliminary regression calculations.
  b) Calculate a moving average.
  c) Plot the data on a graph.
  d) Identify relevant correlated variables

<div align="right">2 marks</div>

1.14 Forecasts are referred to as naive if they
   a) Are based only on past values of the variable.
   b) Are short-term forecasts.
   c) Are long-term forecasts.
   d) Generally result in incorrect forecasts.

2 marks

1.15 Which of the following is not one of the four types of variation that is estimated in time-series analysis?
   a) Predictable
   b) Trend
   c) Cyclical
   d) Irregular

2 marks

Subtotal 30 marks

SECTION B [70 MARKS]

QUESTION 2

2.1 What are the effects of inaccurate forecasting?   [5 marks]

2.2 What is the role of forecasting in supply chain?   [5 marks]

2.3 Below data show's sales figures for the last five years. You want to forecast sales forecast for 2018 using exponential smoothing ($\alpha = 0.85$). 2013 forecast was 185

Calculate the forecast for year 2018 using exponential smoothing?   [10 marks]
Actual data:
   2013   180
   2014   168
   2015   159
   2016   175
   2017   190
   2018   ?

Subtotal [20 marks]

QUESTION 3

3.1 How does forecasting relates to the below department and identify the possible conflict of interest between this departments?   [10 marks]
   a) Marketing
   b) Human resource
   c) Finance and accounting
   d) Engineering
   e) Information systems (IS)

3.2 Discuss the 5 assumptions inherent to forecasting?   [10 marks]

3.3 Discuss the 5 challenges experienced when forecasting for a new product?   [10 marks]

Subtotal [30 marks]

QUESTION 4

You are the Supply chain Manager and you would like to convince your company to acquire a new forecasting system for data analytics, in your preparation for a board meeting address in which way your Organizations can benefit from Data analytics?

Subtotal [20 marks]

END OF FAD621S, 2nd OPPORTUNITY QUESTION PAPER