THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

CITY CAMPUS

MAIN EXAMINATION

JANUARY – APRIL 2017 TRIMESTER

FACULTY OF COMMERCE

EVENING   PROGRAMME

CID 082: STATISTICAL METHODS IN DATA ANALYSIS

Date: APRIL 2017	Duration: 2 Hours
INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions	

Q1. a) Define 'Statistics' **(2 Marks)**

b) State and briefly discuss three Methods for collecting data **(6 Marks)**

c) Distinguish between **secondary** and **Primary** Data **(4 marks)**

d) Identify and discuss five limitations of statistics **(5Marks)**

e) Define Sampling and four methods of Sampling **(8Marks)**

f) Discuss **three** importance of statistics in Business **(5 Marks)**

Q2. a) The table below shows the distribution of salesperson for XYZ COMPANY registered in Kenya

No	Name of the Salesperson	Gender	Sales Ksh '000'
1	John	Male	70,000
2	Willy	Male	50,000
3	Mildred	Female	20,000
4	Lucy	Female	60,000
5	Edward	Male	40,000
6	Emily	Female	55,000
7	Cleophas	Male	5,000

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8	Lynette	Female	45,000
9	Sally	Female	90,000
10	Trump	Male	10,000

The company measures the performance of a salesperson based on the sale he/she makes and pays commission. In order to inform the management on recruitment, the Human Resource Manager has categorized the employees based on the Gender and how they have performed in terms of Sales:
From the above information:

a) What is the percentage of the male and female

b) Calculate the
   i)   Average performance for the Female employees
   ii)   Average Performance of the Male employees
   iii)   Overall Average Performance for the employees

c) From the above, what would you advice the Human Resource Manager when recruiting   **(10marks)**

d) Distinguish between sampling and Census   **(2 marks)**

e) Discuss three reasons why a Business organization collecting data would do sampling rather than census   **(8marks)**

Q3.   a)   Given the following data, find the regression equation of Y on X

X	Y
2	7
3	9
4	10
5	14
6	15

(6 marks)

b)   Find the value of Y when X=8   **(2 Marks)**

c)   Hypothesis testing involves five steps. Discuss the steps   **(12 Marks)**

Q4)   a)   Write short notes on the following
         i)   Quantitative Datavs qualitative data   **(2 Marks)**
         ii)   Continous Data   **(2 Marks)**
         iii)   Discrete Data   **(2 Marks)**
         iv)   Nominal Data   **(2 Marks)**
         v)   Rank Data   **(2 Marks)**
      b)   Discuss the three methods that can be used to display a set of data and their limitations.   **(10 marks)**

END
END

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