



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS**

**2020/2021**

**SCHOOL OF BUSINESS AND ECONOMICS**

**BACHELOR'S OF SCIENCE ECONOMICS**

**BACHELOR'S OF SCIENCE FINANCIAL**

**ECONOMICS AND BACHELOR'S OF SCIENCE**

**ECONOMICS AND STATISTICS**

**FIRST YEAR SECOND SEMESTER**

**COURSE CODE: ECO 1207-1**

**COURSE TITLE: COMPUTER APPLICATIONS AND  
DATA ANALYSIS I.**

**DATE: 12/10/2021**

**TIME: 8:30 am – 10:30 am**

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**INSTRUCTIONS:**

Attempt Question one and any other Two Questions

**Question One**

- a. Give the appropriate graphical technique that should be used to present each of the following variables. **(5 marks)**
- i) Marital status
  - ii) Job rank
  - iii) Body Temperature of employees
  - iv) Age of students
  - v) Gender of students
- b. State what should be done by the designer of an XLSForm so that the form could do the following;
- i. Capture the time and data when a participant filled the form. **(1 mark)**
  - ii. Record the GPS coordinate of the location when the data was collected. **(1 mark)**
  - iii. Automatically compute the profit based on given sales data. **(1 mark)**
  - iv. Allow the respondent to upload a passport photo. **(1 mark)**
  - v. Allow only married individuals to fill a section of the form. **(1 mark)**
  - vi. Make some of the questions compulsory in the form. **(1 mark)**
- c. The extract below shows an excel extract use it to answer the questions that follows.

	A	B	C	D	E	F	G	H	I
1	Product	Price	Number of Products Sold	Cost Per unit of Product Produced	Fixed Cost	Variable Cost	Total Cost	Revenue	Profit
2	A	50	1136	30	1000				
3	B	40	7930	18	1200				
4	C	56	6204	32	1100				
5	D	47	8329	25	1400				
6	TOTAL								
7									

- i) Write a cell referencing function to compute the values of the following cells **(4 marks)**
- a) F2
  - b) G4
  - c) H5
  - d) I3
- d. A computer is defined as a system that converts data into information, with the aid of a well labeled diagram describe how this happens. **(5 marks)**

## Question Two

- a. A data set contains Five variables (Gender, Age, Weight, Religion and Marital\_status). The variables Gender, Religion and Marital status were coded as follows: Gender (1 = Male, 2=Female), Religion (1 = Christian, 2= Muslim, 3 = Catholic, 4 = Other religions), Marital\_status (1=Single, 2 = Married, 3 = Widowed, 4 = Separated). Write down SPSS code that will do the follow;
- i. Select Males who are Catholic and weigh below 75 Kg. **(2 marks)**
  - ii. Select Divorced Muslims who are aged above 40 years. **(2 marks)**
  - iii. Filter out Married Female Catholic. **(2 marks)**
  - iv. Filter out Single Female youths (A youth is a person between 18 – 35 years). **(2 marks)**
  - v. A 30-year-old single lady is seeking for a Non-Muslim Gentle man who is three years older than her. Kindly write a code to assist her with this for the given data set. **(2 marks)**
- b. Give the technological advancements that has taken place during the evolution of computers through generations. **(5 marks)**

## Question Three

- a. Below is an extract of a survey questionnaire use it to answer the questions that follows;
- a) Kindly fill in the following details about yourself*
1. Name: \_\_\_\_\_
  2. Marital status  
Single [ ] Married [ ] Divorced [ ] Widowed [ ] Separated [ ]
  3. Highest level of education  
No schooling [ ] Primary [ ] Secondary [ ] Middle level college [ ]  
  
Bachelor's degree [ ] Masters [ ] PhD [ ]
  4. Phone number: \_\_\_\_\_
  5. HIV/AIDS Status  
Positive [ ] Negative [ ] Unknown [ ]
- i. Give the SPSS data type of each of the variables in the above questionnaire. **(5 marks)**
  - ii. Design a survey worksheet of an XLSForm for the above questionnaire extract. **(5 marks)**
  - iii. Explain one violation that has been committed by the author of the questionnaire with reference to characters of a good survey instrument. **(2 marks)**
- b. Give three functions of the operating system. **(3 marks)**

#### **Question Four**

- a. Riziki Holding Limited has several branches all over the country which are required to submit daily sales data to the headquarters for proper monitoring and evaluation of the performance of each branch. In order to do this, the company has hired you as a consultant to design an online form that will enable the branches to submit the daily data in a single server. The form is supposed to capture the branch number which starts with a leading zero, name of the manager, the date and time of submission, the number of each of their three products A, B and C sold in that day. Apart from that, the form is supposed to calculate the daily revenue of each product and the total revenue of branch. The revenue of each product is given by number sold times the price (A=Kshs 400, B= Kshs 510 and C=Kshs 650), while the total revenue is given by the sum of all the three revenues. Design the survey worksheet of an XLSform for the above form. **(10 marks)**
- b. With the aid of a well labeled diagram, describe the computer anatomy. **(5 marks)**