



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 FIRST SEMESTER

COURSE CODE: ECO 1207-1

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

DATE:

TIME:

INSTRUCTIONS:

Attempt Question one and any other Two Questions

Question One

- a. Group the following variables into the appropriate level of measure. **(5 marks)**
- i) Marital status
 - ii) Job rank
 - iii) Temperature in °C
 - iv) Athlete position in a race
 - v) Medal award in an Olympic game
- b. The following are questions from a survey conducted in the year 2009 and 2019.

2009

Smoking of Marijuana is harmful to your brain health because the residue can stay in your head for more than a decade. Would you recommend Marijuana as a pain reliever for a cancer patient?

Yes [] No []

2019

Marijuana has the ability suppressing the body nerves hence reduce the felling of pain in an individual. Would you recommend Marijuana as a pain reliever for a cancer patient?

Yes [] No []

- i) What is the SPSS data type and level of measure for the 2009 question? **(2 marks)**
 - ii) One of the surveys gave out a yes of 20% while another gave a yes of 88%. Which survey gave out which percentage of yes? Justify your reasoning **(2 marks)**
 - iii) Would you trust the results given by either of these two survey? Justify your reasoning **(2 marks)**
- c. The extract below shows an excel extract use it to answer the questions that follows.

	A	B	C	D	E	F
1		Weight	Height	BMI		
2		56	1.18			
3		85	1.48			
4		117	1.02			
5		88	1.77			
6		69	1.43			
7		65	1.78			
8		88	1.12			
9		88	1.04			
10		102	1.52			
11	MEAN					
12	MEDIAN					
13	MODE					
14	INTERQUARTILE RANGE					

- i) Write a cell referencing function to compute the values of the following cells **(4 marks)**
- a) B11
 - b) C12
 - c) C13
 - d) B14
- d. With the aid of a well labeled diagram discuss the computer anatomy. **(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 Females who are Muslims and weigh over 30 Kg. **(2 marks)**
 - ii. Select Married Christians who are aged below 18 years. **(2 marks)**
 - iii. Filter out Widowed Female Muslims. **(2 marks)**
 - iv. Filter out Married youths (A youth is a person between 18 – 35 years). **(2 marks)**
 - v. A 25-year-old single guy is seeking for a Christian lady who is younger than him. Kindly write a code to assist him 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 []
- b) What did you do on 10th of February 7 years ago?

- c) “Excessive consumption of alcohol is harmful to someone’s health”. Do you think it’s good for an individual consume alcohol?

Yes [] No []

d) Do you dislike alcohol and like smoking?

Yes [] No []

e) What is the temperature of your body?

- i. Kindly discuss any five failures of the author of this questionnaire with regard to its construction. **(5 marks)**
- ii. State the appropriate SPSS data type for each of the variables in part (a) of the questionnaire. **(5 marks)**
- iii. State the level of measure for question (a) number 3 and question (e). **(2 marks)**
- iv. During a survey, which possible problem might arise from question (c)? justify your reasoning. **(2 marks)**
- v. Which is the most appropriate graphical technique to analyze question (a) part 2 **(1 mark)**

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. The Figure below shows an extract of an excel sheet.

	A	B	C	D	E	F	G	H	I	J	K	L
1	X1	X2	X3	X4	X5	SUM	AVERAGE	RANGE	VARIANCE	STANDARDIZED VALUE	EXPONENT OF STANDARDIZED VALUE	
2	21	31	33	38	29							
3	40	12	20	34	44							
4	47	14	50	13	18							
5	49	17	13	20	22							
6	28	36	23	36	48							
7	21	49	45	10	41							
8	46	34	30	27	22							
9	36	43	38	48	44							
10	11	20	31	25	48							
11	16	27	32	45	46							
12	26	44	34	18	39							
13	38	36	22	42	40							
14	20	19	29	16	39							
15												

- i) Write the specific Cell referencing functions to compute the entries of the following cells. **(5 marks)**
- F7 (*sum of X1 to X5*)
 - G10 (*Mean of X1 to X5*)
 - H5 (*Range for X1 to X5*)
 - J11 (*This is the standardized value of the average*)
 - K2 (*Exponent of the standardized mean*)