

KIBABII UNIVERSITY



UNIVERSITY EXAMINATIONS

**2022/2023 ACADEMIC YEAR
FOURTH YEAR FIRST SEMESTER
MAIN EXAMINATION**

FOR THE DEGREE OF BACHELOR OF COMMERCE

**COURSE CODE: BCO 412
COURSE TITLE: E - COMMERCE**

DATE: 20 DEC 2022

TIME: 9:00-11:00 AM

INSTRUCTION TO CANDIDATES

- 1) The paper contains **FIVE** questions
- 2) Attempt **THREE** questions
- 3) Question **ONE** is Compulsory

TIME: 2 Hours

KIBU observes ZERO tolerance to examination cheating

QUESTION ONE

- a) Collaboration and communication systems enable employees to interact with each other, managers, vendors and customers. Describe the types of collaboration and communication systems that could be used by an e-business (6 Marks)
- b) Supply chain is the follow of materials, information, money and services from raw material suppliers through factories and warehouses to end customers. Examine the effects of e-commerce in supply chain and value chain (6 Marks)
- c) Summarize the key components found in an electronic marketplace, in e-commerce market mechanisms (6 Marks)
- d) Evaluate how a Customer Relationship Management (CRM) systems could be used to improve data and information of an E-business (6 Marks)
- e) Examine the vulnerabilities which an organization may be exposed to after commissioning a computer network with an internet connection (6 Marks)

QUESTION TWO

- a) KIBU Traders Ltd intends to set up an agricultural value addition processing plant producing milk products to compete with established brands in the market. Asses SIX ways on how they can use e-commerce to gain competitive advantage in the industry (6 Marks)
- b) Analyze SIX customer related factors that are important in the success of any e-commerce venture (6 Marks)
- c) Examine whether traditional commerce can survive the digital age (6 Marks)

QUESTION THREE

- a) Enumerate in details the quality thresholds of an Enterprise Resource Planning (ERP) system (6 Marks)
- b) Examine the vulnerabilities which an organization may be exposed to after commissioning a computer network with an internet connection (8 Marks)
- c) Suggest how mobile commerce has helped the growth of small scale enterprises (SME) in Kenya (6 Marks)

QUESTION FOUR

- a) Describe the components of Secure Electronic Transaction Protocol found in e-commerce (6 Marks)
- b) Citing examples in each case, summarize the e-commerce business models which involve transactions between the government and other entities (8 Marks)
- c) Suggest any SIX driving forces of E commerce adoption in Kenya (6 Marks)

QUESTION FIVE

- a) Assess the reasons why electronic payments improve customer service in E-commerce (6 Marks)
- b) Examine why an Electronic Data Interchange (EDI) is a prerequisite in E-commerce (6 Marks)
- c) Describe the components of a well-functioning commercial website adopted by a successful e-commerce business venture (8 Marks)



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR
SECOND YEAR FIRST SEMESTER
MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF EDUCATION (ARTS)

COURSE CODE: ECO 202

COURSE TITLE: STATISTICS FOR BUSINESS AND ECONOMICS

DATE: 20TH DECEMBER, 2022

TIME: 9.00AM – 11.00AM

INSTRUCTIONS TO CANDIDATES

Answer Question One in Section A and Any other TWO (2) Questions in Section B

TIME: 2 HOURS

KIBU observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over. ►

SECTION A

QUESTION ONE.

- a. The following shows the salaries earned by employees of KIBU University in a certain department;

Salary in Ksh. ,000.	0-10	11-20	21-30	31-40	41-50	51-60	61-70
Number of workers	6	12	22	37	17	8	5

Required

- i. Calculate the mean (3 marks)
 - ii. Determine the mode (3 marks)
 - iii. Find median of the data (3 marks)
- b. Explain four reasons why one would study a sample and not the entire population (4 marks)
- c. Explain the decision rule in accepting and rejecting null hypothesis using the one tailed and two tailed test. (4 marks)
- d. A midwife claims that the mean weights of babies delivered at her maternity clinic is 3.5 kg. A statistician takes a sample of 10 babies and obtains the following weights:
2.8, 2.5, 3.2, 3.5, 3.7, 2.7, 4.0, 4.5, 3.9, 3.6.
Test the midwife's claim at 0.05 level of significance (5 marks)
- e. The table below shows the units of fertilizer used and the units of yield in a science laboratory experience.

Unit of fertilizer (x)	1	2	3	4	5
Units of yield (y)	20	15	18	12	10

Find

- i. The regression equation of x and y (6 marks)
- ii. Estimate the units yields if 2.5 units of fertilizer are used (2 marks)

SECTION B.

QUESTION TWO

- a. In an investigation to find out the effect of a diet on a patient's weight, 10 patients were weighed before and after the administration of the drugs. The obtained results are as follows:

Weight after	68	72	71	75	64	74	62	75	82	76
Weight before	71	64	70	75	67	60	57	69	84	72

You are required to test the hypothesis that the mean of difference of means is zero at 95% confidence level and 99% confidence level. (10 marks)

- b. With the aid of explanation and examples of parameters estimation, write short note on the following: (10 marks)
- i. Population parameter
 - ii. Sample statistic
 - iii. Randomness of a variable say
 - iv. Sample in a pooled population.
 - v. Sampling error

QUESTION THREE

- a. Consider the following hypothetical past data on the demand for sugar for the years 2000 to 2006 in country Kenya

Year	Population (millions) (X_i)	Quantity of sugar demanded (in million tonnes) (Y_i)
2010	10	40
2011	12	50
2012	15	60
2013	20	70
2014	25	80
2015	30	90

2016	40	100
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Using the data,

- i. Calculate the terms of linear equations in simple regression (6 marks)
 - ii. Estimated regression equation between X and Y (2 marks)
 - iii. Suppose the population for the year 2018 is projected to be 100 million, forecast the demand for sugar in that year (2 marks)
- b. Name and explain any five measures of dispersion in statistics (10 marks)

QUESTION FOUR

- a. The following raw data shows the ages of employees of Khetias Supermarket in 2022;

49	41	45	53	47	46	48	42	43	46
45	36	56	44	61	68	54	58	51	47
47	49	42	48	53	48	41	65	45	52
58	50	55	45	43	72	63	45	38	43
42	47	43	49	46	57	49	44	47	48

Required,

- i. Group the data starting from the interval 35 – 39 (3 marks)
 - ii. Calculate the mean deviation (4 marks)
 - iii. Find quartile deviation (3 marks)
- b. The Business Week newspaper described Willys' Company efforts to compare Ndaish, their bestselling juice, with Dosh, produced by Patricys' Company. Willys surveyed shoppers in a large mall in the city centre to determine their preferences. For notational purposes, Assume that N means 'Ndaish was preferred by the first shoppers' and D means 'Dosh was preferred by the second shopper'. Industry reports reveal that Ndaish has 20 % of the market share and

Dosh enjoys 5 % of the market share. Assuming these market shares translate into probabilities, Willys executives wanted to know, if two shoppers are selected at random, what is the probability that:

- i. Both preferred Ndaish (2 Marks)
- ii. Both preferred Dosh (2 Marks)
- iii. The first preferred Ndaish and the second preferred Dosh (2 Marks)
- iv. The first preferred Dosh and the second preferred Ndaish (2 Marks)
- v. One shopper preferred one juice and the other shopper preferred the other juice. (2 Marks)

QUESTION FIVE

a. The following data shows the weekly income of certain employees in a farm.

Income (ooo)	50-60	60-70	70-80	80-90	90-100	100-110	110-120
Frequency	8	10	16	14	10	5	2

Find Pearson's first and second coefficient of skewness and interpret your results (10 marks)

- b. A second year student of Kibabii University intends to carry out a statistical enquiry on the demand of meals in the students mess. Explain sequentially the steps you will advise him to follow in carrying out the enquiry (10 marks)