JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF BUSINESS ADMINISTRATION

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR IN BUSINESS ADMINISTRATION WITH IT

2ND YEAR 2ND SEMESTER 2017/2018 ACADEMIC YEAR

NAIROBI CITY LEARNING CENTRE

COURSE CODE: ABA 206

COURSE OUTLINE: BUSINESS STATISTICS

EXAM VENUE: **STREAM: (BBA)**

DATE: **EXAM SESSION:**

TIME: 2 HOURS

Instructions:
1. Answer all questions in section A and any other two from section B
2. Candidates are advised not to write on the question paper
3. Candidates must hand in their answer booklets to the invigilator while in the examination room

Question One

i. Discuss five characteristics of index numbers. (5 marks)

ii. From the Information provided in the Table below compute the general price index. Use 2005 as the base year. Apply the arithmetic mean to compute the average.

	Flour	Sugar	Bread	Beans
2005	45	21	10	55
2006	47	20	11	75
2007	50	25	9	105
2008	48	23	15	120

(10 Marks)

iii) There has been an increase in the cost of living over the last 4 years as tabulated below:

Group	Percentage Increase	Weight
Food	29	8.5
Clothing	85	3
Rent	50	2.5
Transport	74	1.5
Others	69	1

Calculate the weighted arithmetic mean of the increase in the cost of living. (10 Marks)

iv) State 3 advantages and 2 disadvantages of the weighted arithmetic mean. (5 marks)

Question Two

i. State the five stages in a statistical investigation. (5 Marks)

ii. Distinguish between primary and secondary data. (2 Marks)

iii. Name three methods of primary data collection. (3 Marks)

iv. The following observations were made by a university student at the City campus cafeteria over a period of time, for 1st and 2nd year students.

Out of 397 students, in 1st year, 35 male students took coffee, 30 tea and 43 soda while for the female students 26 took coffee, 34 tea and 25 soda.

In 2nd year, 42 male students took coffee, 35 tea and 28 soda while female students showed preference for coffee -30, tea – 24 and soda – 45.

You are required to tabulate the information providing headings and totals. (10 Marks)

Question Three

a) There are three group of children. Group 1 has 3 girls and 1 boy; group 2 has 2 girls and 2 boys and group 3 has 1 girl and 3 boys. One child is selected at random from each group. What is the probability that the three selected consists of 1 girl and 2 boys? (10 Marks)

b) Using practical examples briefly explain the following terms as used in Statistics:

i) Null hypothesis

ii) Alternative hypothesis

iii) Sampling theory
iv) Inferential statistics
v) Sampling bias   (10 Marks)

Question Four

a) Define "Dispersion" as used in statistics.   (1 Mark)

b) Explain four measures of dispersion.   (4 Marks)

c) Calculate the mean deviation from the following data:

Size	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	7	8	12	32	38	45	28	12

(10 Marks)

d) Compute the standard deviation from the data given below:

No	1	2	3	4	5	6	7	8	9
X	133	152	128	210	185	225	162	148	150

(5 Marks)