DECO

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...Bastion of Knowledge...

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OFFICE OF THE DEPUTY PRINCIPAL

ACADEMICS, RESEARCH AND STUDENTS' AFFAIRS

UNIVERSITY EXAMINATIONS

2018 /2019 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER REGULAR EXAMINATION

FOR THE DIPLOMA IN ECONOMICS

COURSE CODE:DECO 015

COURSE TITLE: BASIC STATISTICS

DATE: **TIME: 3 HOURS**

INSTRUCTION TO CANDIDATES

- **SEE INSIDE**

THIS PAPER CONSISTS OF 5 PRINTED PAGES   **PLEASE TURN OVER**

DECO

INSTRUCTIONS:-

- Answer Question **ONE** and any other **TWO** questions.
- Question **ONE** carries **30 Marks**

QUESTION ONE

The Following distributiongives the pattern of overtime work per week done by 100 employees of a company.

Overtime hours	10-15	15-20	20-15	25-30	30-35	35-40
No. of employees	11	20	35	20	8	6

Calculate

a) median,   (10 marks)
b) first quartile and   (10 marks)
c) 7th decile.   (10 marks)

QUESTION TWO

An analysis of production rejects resulted in the following figures

No. of rejects per operator	no. of operators
21-25	5
26-30	15
31-35	28
36-40	42
41-45	15
46-50	12
51-55	3

Calculate mean, standard deviation and coefficient of skewness and comment on the results

(20 marks)

QUESTION THREE

The following table gives the distribution of weekly wages of 600 workers of a factory

Weekly wages in ksh	Frequency	weekly wages in ksh	Frequency
Below 375	69	600-675	58
375-450	167	675-750	24
450-525	207	750-825	10
525-600	65		

a) Draw an ogive for the above data and then obtain the median value. Check it against calculated value (10 marks)

b) Obtain the limits of weekly wages of central 50% of the workers (10 marks)

QUETION FOUR

You are given the data pertaining to kilowatt hours of electricity consumed by 100 persons in Kakamega.

Consumption in kilowatt	number of users
0 but not less than 10	6
10 but not lees than 20	25
20 but not less than 30	36
30 but not less than 40	20
40 but not less than 50	13

Calculate the standard deviation and the range within which middle 50% of the consumers fall.

(20 marks)

QUESTION FIVE

You have conducted a market survey with a sample of size 50 regarding the acceptability of a new product which your company wants to launch. The scores of the respondents on the appropriate scale are as follows

40	45	41	45	45	30	39	8	48	25
26	9	23	24	26	29	8	40	41	42
39	35	18	25	35	40	42	43	44	36
27	32	28	27	25	26	38	37	36	35
32	28	40	41	43	44	45	41	39	41

Prepare a frequency table and present the same information as a histogram

(20 marks)

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