

# **GRETSA UNIVERSITY - THIKA**

## UNIVERSITY EXAMINATIONS MAY - AUGUST 2018 SEMESTER

### **BACHELOR OF COMMERCE**

## COURSE CODE: BCBA 200 COURSE TITLE: BUSINESS STATISTICS

#### DATE: 9 AUGUST 2018

TIME: 8.00 AM - 11.00 AM

#### **INSTRUCTIONS TO CANDIDATES**

- 1. SECTION A IS **COMPULSORY.**
- 2. SECTION B: ANSWER ANY OTHER **THREE** QUESTIONS.
- 3. **<u>DO NOT</u>** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
- 4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

**CAUTION:** All exam rooms are under CCTV surveillance during the examination period.

#### SECTION A: COMPULSORY

#### **Question One**

- a) Business statistics is the science of good decision making in the face of uncertainty and is used in many disciplines. Explain *four* limitations statistics. [12 marks]
- b) Statistics is broadly divided into *two* categories. Explain each category. [6 marks]
- c) Distinguish between primary and secondary data. [6 marks]
- d) A questionnaire is a tool used to collect data. Outline *three* disadvantages of a questionnaire. [6 marks]
- e) Graphs and diagrams leave a lasting impression on the mind and make intelligible and easily understandable the salient features of data. Explain *five* principles of constructing diagram. [10]

marks]

#### SECTION B: ANSWER ANY THREE QUESTIONS

#### **Question Two**

a) There are three common types of random sampling methods. Explain these methods.

[6marks]

b) The marks of 15 students of a college in Economics are as given below:-

50, 68, 28, 72, 55, 75, 50, 70, 34, 42, 56, 60, 33, 46

Required:

- (i) Compute the mean [5marks]
- (ii) Compute the standard deviation [9marks]

#### **Question three**

- a) An interview is one of the methods used in collecting primary data. Explain *three* advantages and *three* disadvantages of interview. [9marks]
- b) The following marks were obtained from 12 students in a continuous assessment test in a Business Mathematics.

 45, 32, 37, 46, 39, 36, 41, 48, 36, 24, 15, 27

 Required:

 (i)
 Compute the standard deviation

 (ii)
 Compute the variance

 [2 marks]

#### **Question Four**

- a) Distinguish between correlation and regression analysis. [8 marks]
- **b**) An interview of eight applicants for a driving post was taken by a firm. The table bellows shows the marks obtained by the applicants.

X	4	8	12	16	20	24	28	32
Y	2	4	6	8	10	12	14	16

Required:

Compute the correlation coefficient

[12 marks]

#### **Question five**

- a) Explain the circumstances under which coefficient of variation is used. [6 marks]
- b) The following table gives marks out of 50 awarded in microeconomics and business studies continuous assessment test to the same group of students.

Microeconomics (X)	10	10	18	25	28	33	34	39	42	43
Business Studies (Y)	11	22	22	19	35	27	33	40	42	47

Required:

Compute the regression equation of Y on X

#### [14marks]