ଓଡ଼ିଶା ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର, ଓଡ଼ିଶା
Odisha State Open University, Sambalpur, Odisha
Established by an Act of Government of Odisha.

ASSIGNMENTS

Bachelor of Commerce (BCOM)

Third Semester

SESSION: 2020-2021

SUBMISSION DATES FOR ASSIGNMENTS

S.N	Course Code	Course Title	Assignment Number	Last Date of Submission
1	GECO 03	BUSINESS STATISTICS	I	Sunday, 28th February, 2021
2			II	Sunday, 28th February, 2021

Please read the instructions carefully before attempting assignment questions.

INSTRUCTIONS FOR DOING ASSIGNMENTS

Dear Learner,

You are required to submit your assignment response within the stipulated time in order to become eligible to appear in the term-end examination. The assignments will be evaluated by the counsellors at your Study Centre. Please submit your assignment response to the Coordinator of your Study Center. For a 4 credit course, there is one Assignment and for 6/8 credit course, there must be minimum 02(two) Assignment.

Purpose of Assignments:

1. Assignments are part of the continuous evaluation process in Open and Distance Learning (ODL) system. Due weightage is given to the marks/grades you obtain in assignments. This will help you for better performance in the term-end examination. If you secure good grades/marks in assignments, your overall performance will improve.

2. Assignments are also a part of the teaching-learning process in the ODL system. Your assignment, after evaluation, will be returned back to you with specific and general comments by the evaluator. This will help you to know your strength as well as your weakness. Thus, it will establish two-way communication between learner and evaluator.

How to Write Assignments:

Please read the instructions for writing the response of an assignment before you start writing your answer.

1. Write your name, programme code, the course title, enrolment no. and study centre name with code in the top sheet of the assignment answer booklet. The format is given below.

PROGRAMME TITLE: _____

ENROLMENT No.: _____ NAME: _____

ADDRESS: _____

COURSE CODE: _____ COURSE TITLE: _____

ASSIGNMENT CODE: _____ STUDY CENTRE: _____

DATE: _____ SIGNATURE: _____

2. Before attempting the assignments, please go through the course materials carefully, understand the same and write answers in your own language and style.
3. Write the answers in your own handwriting. Give sufficient margin in the left side of each page so that the evaluator will give comments on each paragraph/page.
4. Your handwriting should be neat and readable.

Weightage for each Assignments:

1. Each Theory Assignment will carry 25% weightage and term-end examination will carry 75% weightage.
2. Each assignment will be of 100 marks. But it will carry 25% weightage.
3. You have to score minimum pass mark i.e. 40% or P (Pass) Grade in 10-point scale for each assignment. In case you do not submit the assignment or get fail mark in the assignment you have to re-submit in the next year.

COMMERCE
Business Statistics (GECO-03)
ASSIGNMENT-I

(All the questions are compulsory)   Full Mark – 100

GROUP- 'A'
Q. No. 1 Answer within one word or one sentence each.   **Marks: $1 \times 10 = 10$**

a) Frequency Distribution
b) Discrete Series
c) Qualitative Data
d) Attribute
e) Respondent
f) Pilot Survey
g) Quartile Deviation
h) Coefficient of Determination
i) Mutual Dependence
j) Zero Correlation

GROUP - 'B'
Q. No 2. Explain the following terms within two sentences.   **Marks: $2 \times 10 = 20$**

a) What are the advantages of tabulation of data?
b) Define secondary data. State their chief sources.
c) Distinguish between census and sample survey.
d) What are the limitations of Correlation Coefficient?
e) What are the uses of probable error?
f) How correlation is different from regression?
g) Write the formula of regression coefficient.
h) Show that $r^2 = b_{xy} \times b_{yx}$
i) State the empirical relationship between mean, median and mode.
j) Write the formula of D7 and P68 in a continuous series.

GROUP -'C'
Q. No 3.Answer the following questions within 75 Words.   **Marks: $3 \times 10 = 30$**

a) What are the stages of a statistical survey?
b) What are the various methods of collecting primary data?
c) What is the difference between Questionnaire and schedule?
d) What is tabulation? What are its objectives?
e) Find the mean of the squares of the first n natural numbers.
f) Differentiate between correlation and causation.
g) Write about simple, partial and multiple correlation.
h) How to plot high degree of positive correlation in a scatter diagram?
i) Under what situation rank correlation coefficient is used?
j) How can you determine the regression line of Y on X.

Group- 'D'

Q. No 4. Long answer-type Questions (Word Limit: 500 Words).   Marks: 10x 4 = 40

a) What do you mean by classification of data? What are the objectives of classification?

b) The numbers 3.2, 5.8, 7.9, and 4.5 have frequencies x, (x + 2), (x – 3), and (x + 6) respectively. If their mean is 4.876; find the value of x.

c) The mean height of 15 students is 154 cm. It was found later that while calculating mean, the reading 155 cm was wrongly read as 125 cm. Find the correct mean height.

d) Find the coefficient of correlation from the following data:

Cost:	39	65	62	90	82	75	25	98	36	78
Sales:	47	53	58	86	62	68	60	91	51	84

Also interpret the result.

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COMMERCE
Business Statistics (GECO-03)
ASSIGNMENT-2

(All the questions are compulsory)   Full Mark – 100

GROUP- 'A'

Q. No. 1 Answer within one word or one sentence each.   **Marks: $1 \times 10 = 10$**

   a) Decile Range
   b) Symmetrical Distribution
   c) Coefficient of Kurtosis
   d) Skewness
   e) Variance
   f) Probable Error
   g) Base Year
   h) Value Index
   i) Splicing
   j) Secular Trend

GROUP - 'B'

Q. No 2. Explain the following within two sentences.   **Marks: $2 \times 10 = 20$**

   a) Write the formula of Karl Pearson's Measure of Skewness.
   b) Draw a Mesokurtic Curve.
   c) What is the formula of Fisher's ideal index?
   d) Enumerate the methods of isolating trend.
   e) Differentiate between price indices and quantity indices.
   f) What is simple aggregative index?
   g) Find the range of the following observations. 23, 16, 14, 29, 5.6, 27, 13, 59
   h) How to determine mean deviation of ungrouped data?
   i) Find the SD of the first n natural numbers.
   j) What is the formula of coefficient of variation and variance?

GROUP -'C'

Q. No 3.Answer the following questions within 75 Words.   **Marks: $3 \times 10 = 30$**

   a) Find the mean deviation about the median for the following observations 2, 3, 4, 7, 8, 9, 10, 11, 14
   b) What is the difference between Bowley's and Kelly's measures of skewness?
   c) What is the relation between standard error and probable error?
   d) Distinguish between weighted indices and unweighted indices.
   e) Make a comparison of Laspeyre's and Paasche's Indices
   f) What is deflating of index numbers?
   g) What is multiplicative model?
   h) List out the components of a time series
   i) Why do we analyse a time series?
   j) Find the quartile deviation for the following data.

Class-interval	0-10	10-20	20-30	30-40	40-50
No of students	5	8	15	16	6

GROUP- 'D'

Q. No 4. Long answer-type Questions (Word Limit: 500 Words).   **Marks: 10 x 4=40**

a) The standard deviation of 7 observations is 15.75. If each of the observations is multiplied by 2, what is the new standard deviation?

b) Coefficients of variation of two sets of observations are 58 and 69. Their standard deviations are 21.2 and 15.6 respectively. Find their arithmetic means.

c) Compute the Karl Pearson's coefficient of skewness from the following data :
   Daily Expenditure (Rs):   0-20   20-40   40-60   60-80   80-100
   No. of families: 13   25   27   19   16

d) From the following data, obtain the trend line by Freehand Method for further analysis
   Years 1996   1997   1998   1999   2000   2001   2002   2003
   'Y'   24   28   38   33   49   50   66   68