Bachelor of Commerce

B.Com

CHOICE BASED CREDIT SYSTEM

BCOC – 134: BUSINESS MATHEMATICS AND STATISTICS

ASSIGNMENT

2021-2022

Second Semester

School of Management Studies

Indira Gandhi National Open University

Maidan Garhi, New Delhi -110068

BACHELOR OF COMMERCE
CHOICE BASED CREDIT SYSTEM
BCOC – 134: BUSINESS MATHEMATICS AND STATISTICS

ASSIGNMENT: 2021-22

Dear Students,

As explained in the Programme Guide, you have to do one Tutor Marked Assignment in this Course. The assignment has been divided into three sections. Section A Consists of long answer questions for 10 marks each, Section B consists of medium answer questions for 6 marks each and Section C consists of short answer questions for 5 marks each.

Assignment is given 30% weightage in the final assessment. To be eligible to appear in the Term-end examination, it is compulsory for you to submit the assignment as per the schedule. Before attempting the assignments, you should carefully read the instructions given in the Programme Guide.

1. Those students who are appearing in June 2021 Term End Examination they have to submit latest by in 15 March 2021.
2. Those students who are appearing in December 2021 exams. They should download the new assignment and submit the same latest by 15 October 2021.

You have to submit the assignment of all the courses to the Coordinator of your Study Centre.

TUTOR MARKED ASSIGNMENT

COURSE CODE	**:**	**BCOC – 134**
COURSE TITLE	**:**	**BUSINESS MATHEMATICS AND STATISTICS**
ASSIGNMENT CODE	**:**	**BCOC – 134/TMA/2021-22**
COVERAGE	**:**	**ALL BLOCKS**

Maximum Marks: 100

Note: Attempt all the questions.

Section – A

Q-1 Compute median from the following data: **(10)**

Mid-values	115	125	135	145	155	165	175	185	195
frequency	6	25	48	72	116	60	38	22	3

Q-2 From the following data calculate: **(10)**

a. Coefficient of correlation

b. Standard deviation of Y

X=0.854Y; Y=0.89X; $\sigma_x = 3$

Q-3 Calculate the trend values by the method of least square from the following data and estimate the sales for the year 2025. **(10)**

Year	2016	2017	2018	2019	2020
Sales of T.V. (000)	12	18	20	23	27

Q-4 Solve the following equation using Cramer's rule: **(10)**

2x+y-z=3; x+y+z=1; x-2y-3z=4

Q-5 Find the limit of the following function: **(10)**

$$\lim_{x \to \infty} \frac{(x+1)(2x+3)}{(x+2)(3x+4)}$$

Section – B

Q.6 Discuss the types of discounts. **(6)**

Q.7 Define inverse matrix and discuss its properties. **(6)**

Q.8 Briefly explain the functions related to business and economics. **(6)**

Q.9 What is index number? Discuss the three principal types of indices. **(6)**

Q.10 Define correlation and regression and explain the relationship between correlation and regression coefficients. **(6)**

Section – C

Q.11 Write short notes on the following: **(5X2)**

a. Properties of matrix multiplication

b. Distrust of statistics

Q.12 Differentiate between the following: **(5X2)**

a. Simple and Compound interest (with example)

b. Absolute and Relative measure of dispersion