Bachelor's Degree Programme
(BDP)

ASSIGNMENT
2023-2024

Elective Course in Commerce
ECO-07: ELEMENTS OF STATISTICS

For July 2023 and January 2024 Admission Cycle

School of Management Studies

Indira Gandhi National Open University

Maidan Garhi, New Delhi -110068

ECO – 07: ELEMENTS OF STATISTICS

ASSIGNMENT- 2023-24

Dear Students,

As explained in the Programme Guide, you have to do one Tutor Marked Assignment in this Course.

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.

This assignment is valid for two admission cycles (**July 2023 and January 2024**). The validity is given below:

1. Those who are enrolled in **July 2023**, it is valid up to **June 2024**.

2. Those who are enrolled in **January 2024**, it is valid up to **December 2024**.

You have to submit the assignment of all the courses to The Coordinator of your Study Centre. For appearing in June Term-End Examination, you must submit assignment to the Coordinator of your study centre latest by 15th March. Similarly for appearing in December Term-End Examination, you must submit assignments to the Coordinator of your study centre latest by 15th September.

TUTOR MARKED ASSIGNMENT

Course Code	:	**ECO-07**
Course Title	:	**ELEMENTS OF STATISTICS**
Assignment Code	:	**ECO-07/TMA/2023-24**
Coverage	:	**ALL BLOCKS**

Maximum Marks: 100

Attempt all the questions:

Q.1   a)   Calculate the standard deviation and variance from the following data: **(10+10)**

x	10	12	14	16	18	20	22
f	3	5	9	16	8	7	2

   b)   What is coefficient of variation? What is its role as a measure of variation?

Q.2   What is sampling? Explain various methods of sampling? Why sample survey is preferred compared to census survey? Explain.   **(20)**

Q.3   Describe the problems that are usually confronted by the investigator when he decides to collect primary data. Explain various methods of collecting primary data and also narrate their merits and demerits.   **(20)**

Q.4   a)   A motorist travelled for three days at the rate of 480 km. a day. On the first day he travelled for 10 hours at a speed of 48 km per hour, on the second day he travelled for 12 hours at a speed of 40 km. per hour and on the third day for 15 hours at a speed of 32 km. per hour. What was his average speed?   **(10+10)**
   b)   Calculate the arithmetic mean for the following data by using the two methods of Arithmetic mean for Discrete Series:

Marks	10	20	30	40	50	60	70	80
No. of students	8	21	23	17	15	9	5	2

Q.5   **Write short notes on the following:**   **(5×4=20)**

   a)   Median
   b)   Negative skewness
   c)   Sampling errors
   d)   Objectives of classification