

**Bachelor's Degree Programme
(BDP)**

ASSIGNMENT

2020-2021

**Elective Course in Commerce
ECO-07: ELEMENTS OF STATISTICS**

For July 2020 and January 2021 admission cycle



**School of Management Studies
Indira Gandhi National Open University
Maidan Garhi, New Delhi -110068**



School of Management Studies
Indira Gandhi National Open University

ECO – 07: ELEMENTS OF STATISTICS

ASSIGNMENT: 2020-21

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 2020 and January 2021**). The validity is given below:

1. Those who are enrolled in **July 2020**, it is valid up to **June 2021**.
2. Those who are enrolled in **January 2021**, it is valid up to **December 2021**.

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/2020-21
Coverage : ALL BLOCKS

Maximum Marks: 100

Attempt all the questions:

- Q.1** Compare between mean, median and mode to point out their merits and limitations. (20)
- Q.2** Differentiate between dispersion and skewness. If Karl Persons's coefficient of skewness (SKp) = 0.06; mean = 150; variance of distribution= 2500 Find: median; mode & coefficient of variation. (20)
- Q.3** a) Discuss the usefulness of statistics and explain the limitations of statistics. (10)
 b) What is tabulation? Differentiate between classification and tabulation ? (10)
- Q.4** a) Calculate the quartiles Q_1 and Q_3 for wages of the labours given below: (10)

| Wages | 30-32 | 32-34 | 34-36 | 36-38 | 38-40 | 40-42 | 42-44 |
|-----------|-------|-------|-------|-------|-------|-------|-------|
| Labourers | 12 | 18 | 16 | 14 | 12 | 8 | 6 |

- b) The consumption of number of guava and orange on a particular week by a family are given below: (10)

| | | | | | | | |
|-------------------|---|---|---|---|---|---|---|
| Number of Guavas | 3 | 5 | 6 | 4 | 3 | 5 | 4 |
| Number of Oranges | 1 | 3 | 7 | 9 | 2 | 6 | 2 |

Which fruit is consistently consumed by the family?

- Q.5** Write short notes on the following: (4X5)
- a) Law of statistical regularity
 b) Non sampling errors
 c) Factors Affecting Choice of Data
 d) Lorenz Curve