

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

**ASSIGNMENT**

**2021-2022**

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

**For July 2021 and January 2022 Admission Cycle**



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



## ECO – 07: ELEMENTS OF STATISTICS

### ASSIGNMENT- 2021-22

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 2021 and January 2022**). The validity is given below:

1. Those who are enrolled in **July 2021**, it is valid up to **June 2022**.
2. Those who are enrolled in **January 2022**, it is valid up to **December 2022**.

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

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<b>Course Code</b>	:	<b>ECO-07</b>
<b>Course Title</b>	:	<b>ELEMENTS OF STATISTICS</b>
<b>Assignment Code</b>	:	<b>ECO-07/TMA/2021-22</b>
<b>Coverage</b>	:	<b>ALL BLOCKS</b>

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**Maximum Marks: 100**

**Attempt all the questions:**

- Q.1** What do understand by statistics? Discuss the importance, functions and limitations of statistics. **(20)**
- Q.2** Compute unweighted means of the salaries of teachers in towns A and B. Compare them with weighted means. **(20)**

Schools	Town A		Town B	
	No. of teachers	Rate of salary	No. of teachers	Rate of salary
1. Municipal school	25	30	34	40
2. Government school	26	50	35	60
3. Aided school	20	43	12	25
4. Non-aided school	19	35	11	20
5. Night school	10	32	8	25
<b>Total</b>	100	190	100	170

- Q.3** a) Discuss any two types of frequency distribution graphs with example. **(10)**
- b) What is classification? Discuss the various methods of classification with example? **(10)**
- Q.4** a) Find the combined mean and combined standard deviation of the given series: **(10)**

	<b>Series A</b>	<b>Series B</b>
Mean	50	40
Standard deviation	5	6
No. of items	100	150

- b) Consider the following distribution and answer whether the given statements are true or false: (10)

	<b>Distribution A</b>	<b>Distribution B</b>
Mean	100	90
Median	90	80
Standard deviation	10	10

- i) Distribution A has the same degree of variation as distribution B.  
ii) Both the distributions have same degree of skewness.

**Q.5** Write short notes on the following: (5x4=20)

- a. Multistage sampling
- b. Types of ratios
- c. Pie diagrams
- d. Harmonic mean