EEC-13

Bachelor's Degree Programme
(BDP)

ASSIGNMENT
For July 2015 and January 2016 Sessions

Course Code: EEC-13
Title of Course: Elementary Statistical Methods and Survey Techniques

School of Social Sciences
Indira Gandhi National Open University
Maidan Garhi, New Delhi-110068

EEC-13:
ELEMENTARY STATISTICAL METHODS AND SURVEY TECHNIQUES
2015-16

Dear Student,

As per the current pattern of assignments, you will have to do one assignment for this elective course EEC-13. The assignment is of 100 marks which contains 3 sections. Section A contains two questions of 20 marks each; Section B contains four questions of 12 marks each; and Section C contains two questions of 6 marks each.

Submission

Completed assignments should be submitted to the **Coordinator of your Study Centre** by:

For students of July 2015 cycle:	**31.3.2016**
For students of January 2016 cycle:	**30.9.2016**

EEC-13:
ELEMENTARY STATISTICAL METHODS AND SURVEY TECHNIQUES
TUTOR MARKED ASSIGNMENT

Programme Code: BDP
Course Code: EEC-13
Assignment Code: EEC-13/AST/TMA/2015-16
Maximum Marks: 100

Answer all the questions.

A. Long Answer Questions — 2 x 20 = 40 marks

1) (a) Calculate mean, median and mode from the following data.

Class Interval	Frequency
3-4	3
4-5	7
5-6	22
6-7	60
7-8	85
8-9	32
9-10	8

(b) Calculate the coefficient of variation from the data given above.

2. Bring out the distinction between sample survey and census. Describe the steps you would follow in collecting data though a sample survey. Prepare a small questionnaire for collection of income and expenditure levels of households.

B. Medium Answer Questions — 4 x 12= 48 marks

3) a) A sample of 400 students in a class is found to have a mean height of 171.38 cms. If mean height of the population is known to be 171.17 cms with a standard deviation of 3.30 cms, will it be regarded that there is no significant difference between the sample and the population mean heights?

b) Bring out the major properties of standard normal distribution.

4) Fit a straight line to the following data. Compare the estimated values with the actual values.

X	1	3	4	6	8	9	11	14
Y	1	2	4	4	5	7	8	9

5) What are the steps that you should keep in mind while constructing a price index? What are the properties that an index number should fulfil?

6) What is a life table? Explain its uses and limitations.

C. Short Answer Questions **2 x 6= 12 marks**

7) Write short notes on the following:

a) Sampling distribution and standard error
b) Age specific birth and death rates

8) Differentiate between the following:

a) Stratified random sampling and systematic random sampling
b) Seasonal variation and cyclical fluctuation