Management Programme

ASSIGNMENT
For
January 2022 and July 2022 sessions

MS - 08: Quantitative Analysis for Managerial Applications

(Last date of submission for January 2022 session is 30th April, 2022
and for July 2022 session is 31st October)

School of Management Studies
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI, NEW DELHI – 110 068

ASSIGNMENT

Course Code	:	**MS-08**
Course Title	:	**Quantitative Analysis for Managerial Applications**
Assignment Code	:	**MS-08/TMA/JAN/2022**
Coverage	:	**All Blocks**

Note: Attempt all the questions and submit to the coordinator of your study centre. **Last date of submission for January 2022 session is 30th April, 2022 and for July 2022 session is 31st October, 2022.**

1. Comment on the statement "Statistics is the science and art of handling aggregate of facts – observing, enumerating, recording, classifying and other wise systematically treating them.

2. Calculate Spearman's coefficient of ranks correlation from the following data:

X	:	53	98	95	81	75	61	59	55
Y	:	47	25	32	37	30	40	39	45

3. Suppose that a day's production schedule calls for 9000 items. Three machines A, B and C each with a daily production capacity of 4000 have the probability that an item is defective on them as 1, 2 and 4 percent respectively. On a given day 4000 items were produced on A, 4000 on B and 1000 on C. One item is selected at random and found defective. What is the probability that it was produced on either A or B?

4. Two types of batteries are tested for their length of life and the following data are obtained:

	No. of samples	Mean life (hrs.)	Sample Variance
Type A	9	600	121
Type B	8	640	144

    Is there a significant difference in the two means? (t for 15 df at 5% level= 2.131)

5. Write short notes on:

    (1) Normal Distribution

    (2) Level of significance

    (3) Degree of freedom