MS-08

Management Programme

ASSIGNMENT
FIRST SEMESTER
2015

MS - 08: Quantitative Analysis for Managerial Applications

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

ASSIGNMENTS

Course Code	**:**	**MS - 08**
Course Title	**:**	**Quantitative Analysis for Managerial Applications**
Assignment No.	**:**	**MS-08/TMA/SEM-I/2015**
Coverage	**:**	**All Blocks**

Note : Attempt all the questions and submit this assignment on or before 30th April, 2015 to the coordinator of your study centre.

1. Calculate mean, median and mode from the following data relating to production of a steel mill on 60 days.

Production (in Tons per day)	21-22	23-24	25-26	27-28	29-30
Number of Days	7	13	22	10	8

2. In an automobile, the shaft (it converts translatory motion to rotatory motion) can fail either due to failure of bearing or failure of slider crankshaft mechanism. The probabilities of failure of bearing and crankshaft are 0.2 and 0.3, respectively, and the probabilities of failure of shaft due to failure of bearing and due to failure of crankshaft are 0.5 and 0.6, respectively. If the shaft has failed in an automobile, what are the probabilities that it failed due to either failure of bearing or crankshaft?

3. The marks obtained in Statistical Methods paper in MBA First Semester examination of a Management Institute, followed normal distribution with mean 75 and standard deviation 10. If 250 students appeared at the examination, estimate the number of students, scoring:
   (i) Less than 70 marks,
   (ii) More than 90 marks.

4. A manufacturer of LCD TV claims that it is becoming quite popular, and that about 5% homes are having LCD TV. However, a dealer of conventional TVs claims that the percentage of homes with LCD TV is less than 5%. A sample of 400 household is

surveyed, and it is found that only 18 household have LCD TV. Test at 1% level of significance whether the claim of the company is tenable.

5. Define correlation & Regression? What is the difference between the two? Give examples of a situation, where you will use them.