MMPC-005

Master of Business Administration (MBA)/ Master of Business Administration (Online) MBA(OL) / Master of Business Administration (Banking and Finance) (MBF)/ Master of Business Administration(Financial Management) (MBAFM)/ Master of Business Administration(Human Resource Management) (MBAHM)/ Master of Business Administration(Marketing Management) (MBAMM) Master of Business Administration(Operations Management) (MBAOM)/Post Graduate Diploma in Operations Management (PGDIOM)

ASSIGNMENT

For

July 2026 and January 2027 Semesters

MMPC-005: Quantitative Analysis For Managerial Applications

(Last date of submission for July 2026 Semester is 31st October 2026 and for January 2027 Semester is 30th April 2027)

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

ASSIGNMENT

Course Code	**:**	**MMPC-005**
Course Title	**:**	**Quantitative Analysis for Managerial Applications**
Assignment Code	**:**	**MMPC-005/TMA/ JULY/2026**
Coverage	**:**	**All Blocks**

Note: Attempt all the questions and submit this assignment to the Coordinator of your study centre. Last date of submission for July 2026 Semester is 31st October 2026 and for January 2027 Semester is 30th April 2027.

1. Distinguish between primary and secondary data. Discuss various methods of collecting primary data. Indicate the situation in which each of these methods should be used.

2. Based on a recent nation-wide poll, a seller of printed advertisements estimates that 56% of all adults usually open all the mails they receive. If this is still the current rate at which adults open mail, what is the probability that, in a random sample of 1000 adults, the number who usually open all of their mails will be
   a) Less than 541?
   b) 570 or more?

3. List the various reasons that make sampling so attractive in drawing conclusions about the population. Also explain the major difference between probability and non-probability sampling.

4. As part of an investigation of employee turnover, an industry-wide survey of people in sales management positions gave the number of years of experience in sales relate positions. The data is as follows:

	Males	**Females**
Sample size	80	70
Mean years	21.7	18.5
Std.dev of years	9.3	4.8

   Construct a 95% confidence interval for the difference of means $\mu_1 - \mu_2$.

5. Write short notes on any three of the following:
   a) Decision Tree Approach
   b) Non-Probability Sampling Methods
   c) Central Limit Theorem
   d) The Correlation Coefficient