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 2023 and January 2024 Sessions

MMPC-005: Quantitative Analysis for Managerial Applications

(Last date of submission for July 2023 session is 31st October 2023 and for January 2024 session is 30th April, 2024)

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

Course Code	:	**MMPC-005**
Course Title	:	**Quantitative Analysis for Managerial Applications**
Assignment Code	:	**MMPC-005/TMA/ JULY/2023**
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 2023 session is 31st October, 2023 and for January 2024 session is 30th April 2024.

1. In a railway reservation office, two clerks are engaged in checking reservation forms. On an average, the first clerk (A1) checks 55% of the forms, while the second (A2) checks the remaining. While A1 has an error rate of 0.03, that of A2 is 0.02. A reservation form is selected at random from the total number of forms checked during a day and is discovered to have an error. Find the probabilities that it was checked by A1 and A2, respectively.

2. "Data used in statistical study is termed as either "Primary" or "Secondary" depending upon whether it was collected specifically for the study in question or for some other purpose." Explain both the sources of collecting the data in brief.

3. A fair coin is tossed 400 times. Using normal approximation to the binomial, find the probability that a head will occur
   a) More than 180 times
   b) Less than 195 times.

4. "The primary purpose of forecasting is to provide valuable information for planning the design and operation of the enterprise." Comment on the statement.

5. Write short notes on any three of the following:-
   a) Methods of collecting primary data
   b) Decision tree approach
   c) Central limit theorem
   d) Opinion polls
   e) Use of auto-correlations in identifying time series