MASTER OF SCIENCE
DATA SCIENCE AND ANALYTICS
(MSCDSA)

MSCDSA/ASSIGN/SEMESTER-I

ASSIGNMENTS

(January – 2026 & July – 2026)

MCS-061, MCS-062, MCS-063, MCS-207, MCSL-064, MCSL-065

SCHOOL OF COMPUTER AND INFORMATION SCIENCES
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI, NEW DELHI – 110 068

CONTENTS

Important Notes

1. Submit your assignments to the Coordinator of your Study Centre on or before the due date.
2. Assignment submission before due dates is compulsory to become eligible for appearing in corresponding Term End Examinations. For further details, please refer to MSCDSA Programme Guide.
3. To become eligible for appearing the Term End Practical Examination for the lab courses, it is essential to fulfill the minimum attendance requirements as well as submission of assignments (on or before the due date). For further details, please refer to the MSCDSA Programme Guide.
4. The viva voce is compulsory for the assignments. For any course, if a student submitted the assignment and not attended the viva-voce, then the assignment is treated as not successfully completed and would be marked as ZERO.

Course Code	**:**	**MCS-063**
Course Title	**:**	**Data Structures using Python**
Assignment Number	**:**	**MSCDSA (I)/063/Assign/2026**
Maximum Marks	**:**	**100**
Weightage	**:**	**25%**
Last Date of Submission	**:**	**30th April, 2026 (for January session)** **31st October, 2026 (for July session)**

There are four questions in this assignment, which carry80 marks. Each question carries 20 marks. Rest 20 marks are for viva voce. All algorithms should be written nearer to Python programming language. You may use illustrations and diagrams to enhance the explanations, if necessary.

Q1: Explain the process of exception handling in Python with an example. **(20 Marks)**

Q2: What is a Tree ? How does it differ from a Binary Tree ? Explain the process of converting a Tree into a Binary Tree. **(20 Marks)**

Q3: Explain built in sorting functions of Python with examples. **(20 Marks)**

Q4: What is a Minimum Cost Spanning Tree? Explain with an example. **(20 Marks)**