# INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI DEPARTMENT OF MATHEMATICS AND STATISTICS

### MA522M-Data Science Programming Laboratory

Exercise-1 Duration: 30 Minutes P1 Slot 10:00-10:30

18 January 2025 Practical 3 Marks

### Answer All Questions. Usage of Internet is not Allowed

- 1. Write a Python program which accepts the radius and height of a cone from the user and computes the volume and surface area. [1 Mark]
- 2. Write a Python program which accepts a sequence of comma-separated input integers from the user and generates a list, tuple, set and frozen set. At least 5 elements should be there in the list. [2 Marks]

# INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI DEPARTMENT OF MATHEMATICS AND STATISTICS

#### MA522M-Data Science Programming Laboratory

Exercise-1 Duration: 30 Minutes P1 Slot 10:00-10:30

18 January 2025 Practical 3 Marks

## Answer All Questions. Usage of Internet is not Allowed

- 1. Write a Python program to get integer a, b, c, d and x, calculate  $(ax + bx^2 + cd)^3[1 \text{ Mark}]$
- 2. Write a Python program which accepts a sequence of comma-separated fruits from the user and generates a list and a set. Get at least 6 fruit names from the user. Display the first and last items in the list. Print the length of the set. [2 Marks]