Teaching Guidelines for
Logic Building & Problem Solving *(optional)*
PG-DAC September 2021

Duration: 18 hours online sessions + problem solving as self study

Objective: This preparatory module is conducted online before the actual PG-DAC course commences for students to learn to think logically and how to solve problems. A number of problems will be given to the students to solve them logically.

Prerequisites: Knowledge of computer fundamentals.

Evaluation: No separate evaluations. Daily assignment problems are to be solved and submitted.

Note: Each day comprises 3 hours' online lecture sessions followed by solving various problems using the topics learnt by the students.

Day 1: Building Logic and Solving Problems
Lecture:
    Logical thinking
    Problem solving process
Assignments:
    Practice logic building on given problems

Day 2: Decision making
Lecture:
    If-else, nested if-else, switch case
Assignments:
    Decision making problems using if-else, nested if-else, switch case

Day 3: Control Statements
Lecture:
    Loops
Assignments:
    Conditional problems using loops

Day 4: Modular Programming
Lecture:
    Functions
Assignments:
    Problems using functions

Day 5: Arrays
Lecture:
    Arrays
Assignments:
    Problems using arrays

Day 6: Strings
Lecture:
    Strings
Assignments:
    Problems using strings