

## Teaching Guidelines for

## **Logic Building & Problem Solving** (optional)

PG-DAC March 2023

**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