Teaching Guidelines for

Logic Building & Problem Solving *(optional)*

PG-DAC March 2022

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