

Teaching Guidelines for
Logic Building & Problem Solving
(Optional Preparatory Module)
PG-DAC September 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