

**SIR SYED UNIVERSITY OF ENGINEERING & TECHNOLOGY**  
**COMPUTER SCIENCE & INFORMATION TECHNOLOGY DEPARTMENT**

**SPRING 2022**

**OPERATION RESEARCH (IT-321)**

**Assignment 2**

Semester: V  
Due Date: 13-May-2022

Batch: 2020  
Max Marks: 03

Instructions:

- Attempt all questions

Q#01: Solve the given linear programming model by Simplex method:

$$\min z = 2a + 3b + 4c + 5d$$

*subject to,*

$$a - b + c - d \geq 10$$

$$a - 2b + 3c - 4d \geq 6$$

$$3a - 4b + 5c - 6d \geq 15$$

$$a \geq 0, b \geq 0, c \geq 0, d \geq 0$$