

### Faculty of Computing and Information Technology (FCIT) Department of Computing Indus University, Karachi

## Assignment-3 Spring 2024

Department / Faculty	Program	Semester	Course Title	Instructor	Issue Date	<b>Due Date</b>	Faculty Signature	Total Marks
FCIT	BSSE	4	Operating System	M.Irfan	28/05/2024	04/06/2024	de la companya del companya de la companya del companya de la comp	6

## **Instructions**

- 1. This paper contains 1 **Questions**. Attempt all questions.
- 2. This quiz should be completed within the in assigned time, after the due time, quiz will not be accepted.
- 3. Please ensure that no part of your quiz should be copied from any resource.
  - 4. The expected outcome of this assignment follows (C2, PLO-2, CLO-2)

#### This table is for official use; do not write anything on it.

CLOs	CLO_2	Total
Question Number	1	
Student's Score		
Maximum Score	6	

This paper has a total of **2 pages** including this title page



### Faculty of Computing and Information Technology (FCIT) Department of Computing Indus University, Karachi

NAME OF STUDENT:	ID No:

# Assignment # 3 Spring 2024 Operating System

Expected Outcome:

*CLO2,PLO-2,C2:* 

Analyze and evaluate the algorithms of the core functions of the Operating Systems and explain the major performance issues with regard to the core functions

#### Total (6 marks)

**Q1:** Analyze, evaluate and differentiate all scheduling algorithms given below and mention which scheduling algorithm is best for the given problem?

There are 7 processes P1 to P7. Their respective priorities, Arrival time, and Burst times are given below. Calculate TaT and WT?

Process	Priority	Arrival Time	Burst Time
1	2 (H)	0	1
2	6	1	7
3	3	2	3
4	5	3	6
5	4	4	5
6	10(L)	5	15
7	9	15	8

- I. Non-preemptive FCFS
- II. Shortest Remaining Time First
- III. RR. Time quantum = 3
- IV. Priority Scheduling
- V. Longest Remaining Time First
- VI. Highest Response Ratio First