

**NETTUR TECHNICAL TRAINING FOUNDATION**  
**DIPLOMA IN COMPUTER ENGINEERING & IT INFRASTRUCTURE –CP08**  
**III SEMESTER REGULAR & SUPPLEMENTARY EXAMINATION-JAN 2023**

**Subject: Operating System**

**Total Time: 2 Hr.**

**Subject Code: CP08310T**

**Total Marks: 50 marks**

**PART B**

**1.0 ANSWER ANY EIGHT OF THE FOLLOWING**

**2\*8=16**

- 1.1 Define Operating System
- 1.2 List out the process states
- 1.3 What are the two types of semaphores?
- 1.4 List out the conditions that causes deadlock
- 1.5 Define swapping
- 1.6 How does a page fault occurs?
- 1.7 What is Single-level Directory Structure?
- 1.8 What is seek time?
- 1.9 Define RTOS
- 1.10 Define Context Switch

**2.0 ANSWER ANY SIX OF THE FOLLOWING**

**3\*6=18**

- 2.1 Define distributed system? List out the advantages of Distributed system
- 2.2 What is thrashing? How to prevent thrashing?
- 2.3 Write a short note on Round Robin Scheduling algorithm
- 2.4 Explain Internal Fragmentation
- 2.5 Explain FIFO replacement algorithm
- 2.6 List out the attributes of a file
- 2.7 Explain the characteristics of RTOS
- 2.8 Explain FCFS Disk scheduling

**3.0 ANSWER ANY FOUR OF THE FOLLOWING**

**4\*4=16**

- 3.1 Explain the functions of an operating system
- 3.2 Explain Multithreading Models with the help of neat diagram
- 3.3 Write a short note on Paging
- 3.4 Explain the techniques used for the implementation of free space
- 3.5 Explain SJF and Priority Scheduling algorithms
- 3.6 Explain Hard real time and soft real time systems

