NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI
CYCLE TEST – 1 : JAN. 2021 SESSION

DEPARTMENT   : CSE

DATE & TIME OF EXAM   : 1st March 2021/ 10:00 -12:00 PM

SUB CODE   : CSPC43   DURATION:1 hours

FACULTY NAME   : Dr. S. Jaya Nirmala

Answer all the questions

1. Discuss about the dual-mode operation.   [3]
2. For the following set of processes, find the average waiting time, and turnaround time while applying the RR algorithm. Draw charts and show the calculations.   [5]

Process Number	Burst	Arrival
P1	25	0
P2	12	10
P3	20	15
P4	10	25
P5	60	20

3. List out the various definitions of Operating Systems   [2]

4. Write a Pthread program which takes a number *n* as command line argument and calls a function called 'calculator' that counts and prints the count of even numbers from 0 to the given *n.*   [3]

5. Distinguish between Ordinary pipes and Named pipes.   [2]

6. Write short notes about Thread Cancellation.   [3]

7. Define the following: a) Convoy Effect b) Processor Affinity   [2+2]

8. Write short notes on Peer-to-Peer systems.   [3]