Jyothy Charitable Trust®

Jyothy Institute of Technology

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Approved by The All India Council for Technical Education(AICTE)-New Delhi
Affiliated to Visvesvaraya Technological University(VTU), Belgavi

Department of Information Science & Engineering

Accredited by **N**ational **B**oard of **A**ccreditation **(NBA)** -New Delhi.

Assignment-1

Subject Name& Code: Operating Systems 21CS44 | Date: 3/7/23
Course Faculty: Mrs. Anupama V P | Submission by: 8/7/23
Semester: IV sem

Sl.No	Assignment Questions	LL	CO
1.	a. What is Interprocess communication? Explain direct and indirect communication with respect to message passing system. b. List and explain the services provided by OS for the user and efficient operation of system.	2 2	CO1 CO1
2.	a. What is Interprocess communication? Explain direct and indirect communication with respect to message passing system. b. What are System calls? Explain different types of system calls.	2 2	CO1 CO1
3.	a. What are interrupts? How is an interrupt handled by the OS? b. What is Pre-emptive scheduling and non pre-emptive scheduling? Explain with examples.	2 2	CO1 CO2
4.	a. With diagram explain multilevel queue and multilevel feed back queue scheduling algorithms. b. With example explain FCFS and SJF scheduling algorithms.	2 3	CO2 CO2
5.	a. Briefly explain the different criteria for process scheduling. b. Calculate the average waiting time and the average turnaround time by drawing the Gantt chart using FCFS, and priority algorithms. Lower priority number represents higher priority.	2 3	CO2 CO2

Process id	Arrival time	Burst Time	Priority
P1	0	9	3
P2	1	4	2
P3	2	9	1
P4	3	5	4

DAEC **HOD, ISE**