

Examination: In-Semester Examination

Semester: July 2024 - November 2024

Class: TY

Name of the department: COMP

(OZOZ NAS) V

Duration: 1:15 hrs

Semester:

K. J. Somaiya College of Engineering

Programme: Computer Engineering

Name of the Constituent College:

Programme code: 01

Maximum Marks: 30

Average Waiting Time and Average Turnaround time. Illustrate the scheduling sequence with the help of Gantt chart. Compute Solve this instance for - Non-Preemptive Shortest job first policy. Turnaround time. the help of Gantt chart. Compute Average Waiting Time and Average number represents higher priority. Illustrate the scheduling sequence with 1. Solve this instance for - Preemptive Priority scheduling. Assume a smaller SI 55 9d 5 5 54 PS 01 7 20 52 td. t 20 20 P3 3 20 0 P2 8 SI 0 Id (sw) Time (ms) Priority Burst Time **IsviriA** Process and priority as given below: Consider an instance set of 6 processes with given arrival time, Burst/service time 02 role in program execution. C. With respect to System Software, Discuss Linkers and Loaders with their syntax, input parameters and success and failure values. 01 B. What are system calls? Explain any two process related system calls with A. Compare and contrast Layered and microkernel architecture of OS. Solve Any TWO 19 Marks .oN Max. .Q Name of the Course: Operating Systems Course Code: 116U01C503

23 Solve Any <u>TWO</u>

A. Explain the process life cycle with the help of a 5-state state transition diagram. Give reason for every transition.

B. Differentiate between: a) Process synchronization and process concurrency.
b) User Level Threads Vs Kernel Level Threads
With respect to Message Passing, Describe the Direct and Indirect Communication Methods. 10