## DEPARTMENT OF INFORMATION TECHNOLOGY:: VRSEC 201T3305 OPERATING SYSTEMS SESSIONAL I QUESTION BANK A.Y 2021-2022 ESSAY TYPE QUESTIONS

- 1. Explain Interprocess Communication in detail.
- 2. Discuss Multithreading models with neat diagrams.
- 3. Problems on CPU scheduling algorithms FCFS, SJF, SRTF, Priority preemptive and non preemptive, Round Robin (Calculation of Average Waiting Time and Average Turnaround Time)
- 4. Critical Section problem two process software solution
- 5. Write short notes on
- j) PCB
- ii) Operations on processes
- 6. Draw and explain the following
- j) Process state diagram
- ii/ Queueing diagram
- 7. Dining Philosephers problem solution

## **SHORT QUESTIONS**

- 1. Define operating system.
- 2. What is system call?
- 3. What is starvation and give the solution for starvation?
- 4. Define the following terms i) Waiting time ii) Throughput iii) Turnaround time
- 5. Specify the requirements of critical section problem solution.
- 6. What is race condition?
- 7. Define dispatch latency.
- 8. What are the benefits of multithreaded programming?
- 9. What are the different modes of operating system?
- 10. Differentiate between preemptive and non preemptive scheduling.