**DEPARTMENT OF INFORMATION TECHNOLOGY : : VRSEC**

**20IT3305 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**

**i) PCB**

**ii) Operations on processes**

**6. Draw and explain the following**

**i) 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.**