



R20 Regulation

Subject code: 307DD

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Supplementary Examinations, November 2025

OPERATING SYSTEMS (ECE)

Maximum Marks: 70

Date: 28.11.2025

Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	What are the objectives of Operating System?	2M	1	L1
2	List out any four Process control system calls.	2M	1	L1
3	What is the difference between process and a thread?	2M	2	L1
4	What is Independent process?	2M	2	L1
5	Define Deadlock?	2M	3	L1
6	Define Rollback in deadlock recovery.	2M	3	L1
7	What is belady's anomaly.	2M	4	L1
8	What is demand paging and pure demand paging?	2M	4	L1
9	What are the different methods for allocation in a File System?	2M	5	L1
10	Define Free space management.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Contrast user view and system view of an operating system.	10M	1	L2
	OR			
12	Examine the services of Operating system.	10M	1	L2
13	Examine in detail the critical section problem and also write the algorithms for Readers- Writer's problems with Semaphores.	10M	2	L2
	OR			
14	Examine Schedulers and Process Control block.	10M	2	L2
15	Examine the various methods which we apply for recovery from deadlocks.	10M	3	L2
	OR			
16	Distinguish between Segmentation and Paging.	10M	3	L2
17	Examine the procedure for handling the page fault in demand paging	10M	4	L2
	OR			
18	Examine the concept and performance of demand paging	10M	4	L2

19	Contrast the approaches of how free space is managed by operating system.	10M	5	L2
	OR			
20	Explain about files and its operations.	10M	5	L2