9/12/2024 IT SEM-IV C SCHEME OS QP CODE: 10065286

Time: 3hours **Max. Marks: 80**

N.B.: 1) Question No.1 is compulsory.
2) Attempt any THREE questions out of remaining FIVE questions.
3) Figures to the right indicates full marks.
4) Assume suitable data if necessary.

Q1	**Answer any FOUR**	**20**
a	Explain process state model.	
b	Describe the implementation of file allocation techniques?	
c	What is difference between physical address and virtual address?	
d	Explain memory fragmentation.	
e	Explain about IPC.	
Q.2		
a	What is an Operating System? Explain structure of Operating System.	**10**
b	What is thread in OS? Compare user level and kernel level threads.	**10**
Q.3		
a	What is process scheduling? List process scheduling algorithms and explain anyone scheduling algorithm with example.	**10**
b	What is a deadlock? Explain necessary conditions for deadlock.	**10**
Q.4		
a	What is a process? Explain Process control block in detail.	**10**
b	What is redundant array storage? Explain RAID levels.	**10**
Q.5		
a	Explain objectives and characteristics of modern operating system. Explain Network OS.	**10**
b	What is page replacement? Explain any one page replacement algorithms with example.	**10**
Q.6	**Write short notes on any FOUR**	**20**
a	Segmentation	
b	Memory Allocation	
c	Deadlock avoidance	
d	Network OS	
e	Memory fragmentation	
f	Cache memory	