



B.Tech III Semester Regular Examinations, February 2024

COMPUTER ORGANIZATION & OPERATING SYSTEMS
(CSE(DS))

Maximum Marks: 60

Date: 26.02.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 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		CO	Bloom Tx
All the following questions carry equal marks (10x1M=10 Marks)			
1.a)	Explain various types of computers?	1	L2
b)	Define RTL?	1	L1
c)	Explain about cache memory?	2	L2
d)	Define RAM and ROM write any 2 differences between them?	2	L1
e)	Define the asynchronous data transfer?	3	L1
f)	Explain about input-output-processor?	3	L2
g)	Define operating system?	4	L1
h)	What is deadlock ?	4	L1
i)	What is meant by contiguous memory allocation?	5	L1
j)	What are the various methods of accessing files?	5	L1
Part-B			
Answer All the following questions. (5X10M=50Marks)			Bloom Tx
2	Explain the functional units of the computer. [10M]	1	L2
OR			
3	a. Explain different types of micro-operations. [5M] b. Explain shift micro-operations. [5M]	1	L2
4	Explain about control memory and address sequencing in detail. [10M]	2	L2
OR			
5	Explain different types of memory unit in details. [10M]	2	L2
6	a. Explain various type of asynchronous data transfer modes. [5M] b. Explain about direct memory access. [5M]	3	L2
OR			
7	a. Explain serial communication. [5M] b. Explain about universal serial bus. [5M]	3	L2
8	Explain round robin algorithm with an example. [10M]	4	L5
OR			

9	What is dead lock? Explain the deadlock situation and how to avoid the dead lock. [10M]	4	L1,L2
10	a. Explain paging and structure of the page table. [5M] b. Explain about page swapping with help of neat sketch. [5M]	5	L2 L2
	OR		
11	Explain directory structure for file system in OS. [10M]	5	L2