Question Paper Code: R18A32CS05

R18

ANURAG Engineering College

(An Autonomous Institution)

III B.Tech II Semester Regular/Supplementary Examinations, June/July-2024

DISTRIBUTED SYSTEMS

(COMPUTER SCIENCE AND ENGINEERING)

Time: 3 Hours **Max. Marks: 75**

Section – A (Short Answer type questions) (25 Marks)

Answer All Questions		Course Outcome	B.T Level	Marks
1.	Define ubiquitous computing.	CO1	L2	2M
2.	Describe various categories of middleware.	CO1	L1	3M
3.	What is Byzantine generals problem?	CO2	L2	2M
4.	Explain about vector clock in detail.	CO2	L2	3M
5.	What is IP multicast?	CO3	L2	2M
6.	Discuss about group communication.	CO3	L2	3M
7.	What is UDDI?	CO4	L2	2M
8.	What are NFS server operations? Explain.	CO4	L1	3M
9.	What is edge chasing?	CO5	L2	2M
10.	Explain about locking rules for nested transactions.	CO5	L2	3M

Section B (Essay Questions)

Answer all questions, each question carries equal marks. **(5 X 10M = 50M)**

11. A)	Illustrate main challenges of distributed systems in detail.	CO1	L3	10M
	OR			
B)	Explain two significant factors affecting interacting processes in a distributed system.	CO1	L2	10M
12. A)	Describe the 'snapshot' algorithm of Chandy and Lamport.	CO2	L3	10M
	OR			
B)	What are algorithms for mutual exclusion? Explain with examples.	CO2	L3	10M
13. A)	Discuss about external data representation and marshalling.	CO3	L2	10M
	OR			
B)	Explain about communication between distributed objects.	CO3	L2	10M
14. A)	Describe a case study on the Andrew File system in detail.	CO4	L3	10M
	OR			
B)	Explain design and implementation of distributed shared memory.	CO4	L3	10M
15. A)	Discuss about timestamp ordering in detail.	CO5	L2	10M
	OR			
B)	Explain in detail about transaction recovery.	CO5	L2	10M