VI SEMESTER – CSE 'A & B' SECTION
CS6601 – DISTRIBUTED SYSTEMS

ACADEMIC YEAR: 2017-2018 (Even)   **BATCH: 2015-2019**

COURSE OBJECTIVES

The student should be made to:

1. Understand foundations of Distributed Systems.
2. To study about Inter Process Communication, Remote Procedure Call with case study.
3. Introduce the idea of peer to peer services and file system.
4. Understand in detail the system level and support required for distributed system.
5. Understand the issues involved in studying process and resource management.

Bloom's Taxonomy

Remember	Understand	Apply	Analyze	Evaluate	Create
K1	K2	K3	K4	K5	K6

COURSE OUTCOMES

Students who successfully complete this course should be able to:

1. To know about the trends and challenges in Distributed systems. [K2]
2. To explore about different protocols to perform communication in Distributed systems. [K2]
3. To visualize how peer to peer network works and basics of Distributed File System. [K2]
4. To comprehend synchronization of processes in distributed systems using clocks, timestamp ordering; understand concepts of Coordination-Agreement, Master Election and replication. [K3]
5. To explore different resource management approaches; understand process migration features and issues. [K2]

ASSESSMENT TOOLS FOR ASSESSING COs

Assessment Tool	CO1	CO2	CO3	CO4	CO5
Unit Test 1	Y			Y	
Unit Test 2		Y		Y	
Unit Test 3			Y		Y

PROGRAMME OUTCOMES

1 Engineering knowledge: Our graduates will have the knowledge of mathematics, logic, probability and statistics, computer science and engineering, and the skill to apply them in the fields of computer software and hardware. **[K3]**

2 Problem analysis: Our graduates will have the knowledge and skill to identify, formulate, and solve hardware and software problems using sound computer science principles. **[K3, K4]**

3 Experimentation: Our graduates will have the skill to design and conduct experiments, organize, analyze, and interpret data. **[K3, K4, K5]**

4 Design and development: Our graduates will have the skill to design and construct hardware and software systems, components, or processes as per needs and specifications. **[K4]**

5 Team work: Our graduates will have the interpersonal and communication skills to function as team players on multidisciplinary teams.

6 Modern tools usage: Our graduates will be able to use the techniques, skills, and modern hardware and software tools necessary for computer engineering practice. **[K2, K3]**

7 Social and environmental responsibilities: Our graduates will demonstrate knowledge related to social, ethical, legal, economical, health and safety, sustainability and environmental dimensions.

8 Communication skills: Our graduates will be able to effectively communicate technical information in speech, presentation, and in writing.

9 Contemporariness: Our graduates will have knowledge of contemporary issues in the practice of their profession.

10 Self-learning: Our graduates will develop confidence for self-learning and ability for life-long learning.

11 Competitive exam preparedness: Our graduates will participate and succeed in competitive examinations such as GATE, IES, GRE.

12 Leadership: Our graduates are trained to enhance their managerial skills, leadership quality and entrepreneurial spirit.

COURSE OUTCOMES MAPPED TO PROGRAMME OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	K3	K4	K5	K4	-	K3	-	-	-	-	-	-
CO1: K2	2	2	0	0	0	0	0	0	0	0	0	0
CO2: K2	2	2	0	0	0	0	0	1	0	2	0	0
CO3: K2	2	2	0	0	0	0	0	1	0	0	0	0
CO4: K3	3	2	0	2	0	0	0	1	0	2	0	0
CO5: K2	2	2	0	2	0	0	0	0	0	0	0	0

3 Strong   2 Significant   1 Reasonable

Prepared by	Verified by	Approved by
H. Shahul Hamead		
Y. V. Lokeswari	**PAC Team**	**HOD-CSE**

Justification of CO- PO mapping

CO	Description	Knowledge level	Remarks
CO1	To know about the trends and challenges in Distributed systems.	K2	Introduced trends and challenges in Distributed Systems.
CO2	To explore about different protocols to perform communication in Distributed systems.	K2	Explore communication protocols in Breadth-wise.
CO3	To visualize how peer to peer network works and basics of Distributed File System.	K2	Justification for the need for design of Peer to Peer.
CO4	To comprehend synchronization of processes in distributed systems using clocks, timestamp ordering; understand concepts of Coordination-Agreement, Master Election and replication.	K3	Introspection of various functionalities of Distributed Systems.
CO5	To explore different resource management approaches; understand process migration features and issues.	K2	Conceptualization of process migration and resource management techniques.

Prepared by   **Verified by**   **Approved by**

H. Shahul Hamead

Y. V. Lokeswari   **PAC Team**   **HOD-CSE**