

FACULTY OF ENGINEERING

B.E. (I.T) V– Semester (AICTE) (Main) (New) Examinations, February / March-2023

Subject: Distributed Systems (P.E -I)

Max. Marks: 70

Time: 3 Hours

- Note:** (i) First question is compulsory and answer any four questions from the remaining six questions. Each questions carries 14 Marks.
(ii) Answer to each question must be written at one place only and in the same order as they occur in the question paper.
(iii) Missing data, if any, may be suitably assumed.

1. (a) What are the goals of election algorithm?
(b) Discuss the importance of distributed garbage collection.
(c) Explain Marshaling.
(d) What is meant failure handling?
(e) What is transaction? List the different types of transactions.
(f) What is mutual exclusion? List its requirements.
(g) Define overlay routing. What is its importance?
2. (a) Explain Gossip based coordination.
(b) Discuss on multicast communication.
3. (a) Discuss security management in detail.
(b) Discuss on consistency protocols.
4. (a) Discuss the characteristics of multimedia data.
(b) Explain in detail about resource management.
5. (a) Explain the design requirements and challenges for distributed systems.
(b) Explain the client server resource sharing system.
6. (a) List and explain various socket primitives used in TCP stream communication.
(b) Briefly explain architecture for multi threaded servers.
7. (a) Explain the techniques to achieve high performance in distributed file systems.
(b) Explain the communication in Remote Procedure call, with a suitable diagram.