Distributed Database System.
Theory L/T (Hours per week): 4/0, Credit: 4

MODULE-I
Features of distributed databases, features of centralized databases, level of distributed transparency – Reference Architecture, types of Data Fragmentation, distribution Transparency, Access primitives, Integrity constraints.

MODULE-II
Distributed Database design – A frame work, the design of database fragmentation, the allocation of fragments.Translation of global queries into fragment queries, query optimization.
Distributed Transaction Management – A framework, transaction atomicity, 2-phase commit, concurrency control: fundations, distributed deadlocks, timestamps.

MODULE-III
Reliability: Basic concepts, commit protocols, consistent view of Network, Detection and Resolution of Inconsistencies, check points and cold restart.
Commercial Systems: Tranclem's ENCOMPASS

MODULE-IV
Distributed database systems, IBM's Inter system communication, feature of distributed ingres and Oracle.
Heterogeneous databases: General problems – brief study of multibase.

Text Book:
Ceri S. Pelagatti. G, Distributed Database systems Principles and Systems, McGraw Hill.