C-DAC &Gujarat Technological University
M.E. Computer Engineering
(IT Systems and Network Security)
Gandhinagar

Semester: I

Subject Name: Cluster and Grid Computing (Elective I & II- Group 1)

Subject Code: 2715107

Course Content:
Early Grid Activities and Models , Grid Application and Grid Infrastructure, Grid Computing Organizations Grid Computing Anatomy , Parallelism, scheduling, Sequential Programming, Parallel Programming Overview, Architecture Taxonomy, Parallel Programming Paradigms, Paradigms for Message passing and Parameter parallel programming, Cluster Computing Models, Grid Service Architecture , Web Services Architecture Open Grid Services Architecture (OGSA), Sample Use Cases that Drives the OGSA, OGSA Platform Components , Technical Details of OGSI Specification, Grid Service: Naming and Change Management Recommendations, Parallel Programming Model ,Anonymous Remote Computing and Communication Model Introduction to the Grid Computing Toolkits.

Text Book:

1. Grid and Cluster Computing, Prabhu, Phi Learning

Reference Book:

1. Parallel Programming: for Multicore and Cluster Systems by Thomas Rauber, Gudula Ra1/4nger, Gudula Ranger, and Springer