MSCS303   CLOUD COMPUTING (3-0-0)

Module-I (9 Hrs.)
Basics of Cloud Computing: Introduction, Evolution of Cloud Computing, Cluster Computing, Grid Computing, Mobile Computing, Popular Views, Characteristics of Cloud Computing. Need for Cloud Computing, Types of Cloud Deployment Models, Types of Cloud Service Models, Security Paradigms and Issues of Cloud Computing,

Module-II (9 Hrs.)
Some Popular Cloud Service Providers for PaaS, SaaS, IaaS, NIST Cloud Architecture. Cloud Framework: Introduction, Framework for Cloud Computing Environment, Service Oriented Architecture (SOA), Life Cycle of Services in SOA Integrating SOA and the Cloud, Cloud Framework, Framework Constraints, Workflow and Co-ordination of Multiple Activities, Need of Workflow, Examples of Workflow Tools

Module-III (9Hrs.)
Virtualization: Introduction, Needs of Virtualization in Cloud Computing Environment, Advantages of Virtualization Technique in Cloud Computing Environment, Category of Virtual Machine, Virtualization Model for Cloud Computing, Categorization of Guest OS Virtualization Techniques, Mapping Technique of Virtual Machine to Physical Machine in a
Private Cloud, Draw Backs of Virtualization

Module-V (9Hrs.)
Computing Platforms and Technologies: Amazon Web Services (AWS), Google AppEngine, Microsoft Azure, Case Studies: Application Paradigms of Cloud Computing, Security Threats and Protection in Cloud Computing

Text Books:
1. Mastering Cloud Computing by RajkumarBuyya, Christian Vecchiola,S.ThamaraiSelvi, 1st Edition 2013,TMH.
2. George Reese Cloud Application Architectures, First Edition, 2009, O'Reilly Media.

References Books:
1. Cloud Computing and SOA Convergence in Your Enterprise A Step-by-Step Guide by David S. Linthicum,1st Edition, 2009, Pearson.
2. Cloud Computing, Dr. Kumar Saurabh, 2nd Edition, 2012, Wiley India.