Course Name: Cloud Computing Course Code: PGICT20C103

Core Credits: (4)

Unit 1:

Introduction to Cloud Computing: Definition. History, Characteristics of Cloud Computing, Cloud architecture, Cloud storage, Cloud models: Service models, Deployment models, Cloud based services and applications, Benefits from Cloud Computing

Unit 2:

Principles & working of Cloud Computing: Virtualization Technology, Distributed Technology, Thin-client Technology, Working & migration of cloud computing Cloud concepts & Technologies: Load balancing, Scalability & Elasticity, Deployment, Replication, Monitoring, Service-level agreements (SLA), Billing, Web Technology & Cloud computing

Unit 3:

Classification of Cloud, Types of cloud: Private, Public, Hybrid, Community. Cloud management, Services of Cloud: PaaS, IaaS, SaaS, Cloud- cube model, Cloud service development Tools.

Unit 4:

Cloud Security: Introduction, Cloud security challenges, Authorization, Authentication, Identity & Access Management, Data security, Data Integrity, Encryption & Key management, Security management in Cloud computing.

Recommended Books

- 1) Cloud Computing: Dr S. Ananadmurugan. T. Priyaa, M.C Arvind Babu
- 2) Cloud Computing: A Hands-on approach: Arshdeep Banga, Vijay Madisetti
- 3) Cloud Computing: Web Based Applications That change the way you work and collaborate online, Que 2008, Michael Miller.