## CLOUD COMPUTING (ELECTIVE-III)

(Common to CSE & IT)

### **Course Educational Objectives:**

This course introduces the fundamental concepts of cloud.

- Cloud Computing principles.
- Cloud Computing components.
- Cloud Computing architectures and implementations.
- Cloud Computing services.
- Cloud Computing Sharing

#### Course Oucomes:

At the end of the course the student will be able to

- Understand the fundamentals of big cloud and.
- ♣ Learn about cloud computing for the community.
- Learn about cloud services.
- Learn about cloud for the corporation.
- ❖ To know about cloud architectures.

UNIT-I (12 Lectures)

#### A MODEL OF VIRTUALIZATION:

What Is Virtualization, Access Virtualization: Providing Universal Access, Application Virtualization: Application Isolation, Delivery and Performance, Processing Virtualization: Doing System Tricks, Network Virtualization: Controlling the View of the Network, Storage Virtualization: Where Are Your Files and Applications, Security for Virtual Environments: Guarding the Treasure?

UNIT-II (14 Lectures)

#### INTRODUCTION:

Cloud Computing Introduction, From, Collaboration to cloud, Working of cloud computing, pros and cons, benefits, developing cloud computing services, Cloud service development, discovering cloud services.

#### **CLOUD COMPUTING FOR EVERYONE:**

Cloud Computing for the Family: Centralizing Email Communications, Collaborating on Schedules, Collaborating on Grocery Lists, Collaborating on To-Do Lists, Collaborating on Household Budgets, Collaborating on Contact Lists, Collaborating on School Projects, Sharing Family Photos. Cloud Computing for the Community: Communicating Across the Community, Collaborating on Schedules, Collaborating on Group Projects and Events.

UNIT-III (10 Lectures)

#### CLOUD COMPUTING FOR THE CORPORATION:

Managing Schedules, Managing Contact Lists, Managing Projects, Collaborating on Reports, Collaborating on Marketing Materials, Collaborating on Expense Reports, Collaborating on Budgets, Collaborating on Financial Statements, Collaborating on Presentations, Presenting on the Road Accessing Documents on the Road

UNIT-IV (12 Lectures)

#### **CLOUD SERVICES-COLLABORATING EVENTS:**

Collaborating on Calendars, Schedules, and Task Management, Collaborating on Event Management,

CLOUD SERVICES-collaborating database applications.

Collaborating on Word Processing, Collaborating on Spreadsheets, Collaborating on Databases, Collaborating on Presentations laborating on Contact Management, Collaborating on Project Management.

UNIT-V (12 Lectures)

#### **OUTSIDE THE CLOUD:**

Evaluating web mail services, Evaluating instant messaging, Evaluating web conference tools, creating groups on social networks, Evaluating on line groupware, collaborating via blogs and wikis.

#### STORING AND SHARING:

Understanding Cloud Storage, Evaluating Online File-Storage and -Sharing Services, Exploring Online Bookmarking Services

# SHARING DIGITAL PHOTOGRAPHS AND CONTROLLING IT ALL WITH WEB-BASED DESKTOPS:

Exploring Online Photo-Editing Applications, Exploring Photo-Sharing Communities Understanding Web-Based Desktops, Evaluating Web-Based Desktops.

#### **TEXT BOOKS:**

- 1. Dan Kusnetzky, "Virtualization: A Manager's Guide", 1st Edition, O'Reilly, 2011
- 2. Michael Miller, "Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online", 1<sup>st</sup> Edition, Pearson Education, New Delhi, 2009.

#### **REFERENCES:**

- 1. Barrie Sosinsky, "*Cloud Computing Bible*", 1<sup>st</sup> Edition ,Wiley India Pvt Ltd,2011.
- 2. Robert Elsenpeter, Toby J. Velte, Anthony T. Velte, "Cloud Computing: A Practical Approach", 1st Edition, Tata Mcgraw Hill Education, 2011.

