#### CLOUD COMPUTING

| III Semester: MBA          |                              |                        |   |   |         |                   |     |       |
|----------------------------|------------------------------|------------------------|---|---|---------|-------------------|-----|-------|
| Course Code                | Category                     | Hours / Week           |   |   | Credits | Maximum Marks     |     |       |
| CMBC43                     | Core                         | L                      | T | P | C       | CIA               | SEE | Total |
|                            |                              | 4                      | - | - | 4       | 30                | 70  | 100   |
| <b>Contact Classes: 45</b> | <b>Tutorial Classes: Nil</b> | Practical Classes: Nil |   |   |         | Total Classes: 45 |     |       |

### I. COURSE OVERVIEW:

The course focuses on the concepts of cloud computing and virtualization and accessibility to cloud and cloud hosting and also concepts relating to hardware and software. The course gives the exposure on various cloud services and applications and platforms available and also about the privacy issues relating to cloud data management and cloud security related issues. The course provides the information relating to web based communication and web conferences and its tools and also collaborations via blogs and wikis.

#### **II. COURSE OBJECTIVES:**

# The students will try to learn:

- I. The basics of cloud computing for business management.
- II. Various types of cloud service applications and tools for the purpose of data analysis and testing.
- III. Alternatives for cloud communications and incorporating collaborations.
- IV. Various aspects relating to the data security and legality of activities.
- V. The concept of web communication and mailing services and social networking.

## III. COURSE OUTCOMES:

# After successful completion of the course, students will be able to:

- **CO 1:** List out the basic concepts and evolution of cloud computing to take cloud computing decisions.
- **CO 2:** Contrast on the elasticity and resource pooling and web services in cloud computing for effective decision making.
- **CO 3:** Illustrate about various kinds of cloud services available in market to take hiring decisions.
- **CO 4:** Examine various kinds of cloud computing applications for effective organizational maintenance.
- **CO 5:** Appraise the communication through cloud computing for making effective communications.
- **CO 6:** Assess the online collaboration for projects and business for effective maintenance.
- CO 7: Illustrate the level of data security in cloud computing to secure the organizational data.
- CO 8: List out various legal and ethical aspects and various models in cloud computing
- CO 9: Develop different methods of web based communication and mailing services to take decision relating to communication.
- CO 10: Summarize on various types of collaborations through groupware and social networking to take collaborating decisions.

## IV. SYLLABUS

# UNIT-I INTRODUCTION TO CLOUD COMPUTING

Classes: 08

Evolution -Cloud Computing, Hardware, Internet and Software, Virtualization. Cloud service Attributes: Access to the cloud, Cloud Hosting, Information technology support. Characteristics of Cloud Computing: Rapid Elasticity, Pay per use, Independent Resource Pooling, Network Access, Web Services on Cloud.

# UNIT-II CLOUD SERVICES APPLICATIONS

Classes: 10

Cloud Delivery Models- Infrastructure-as-a-Service, Platform-as-a-Service, Software-as-a-Service. Cloud Categories: Public Cloud, Private Cloud, Hybrid Cloud, Community Cloud. Applications — Online Planning and Task Management —Event Management — CRM. Cloud Service Development

tools - Word Processing, Databases, Storing and File Sharing on Cloud.

# UNIT-III CLOUD COMPUTING FOR MANAGERS

Classes: 09

Centralizing Email Communications – Collaborating on Schedules - To-Do Lists, Contact Lists.

Online Community development, Online collaboration tools for Projects, Cloud Computing for Business.

# UNIT-IV CLOUD MANAGEMENT

Classes: 10

Privacy and its relation to Cloud-based Information Systems. Security in the Cloud: Data Security and Control, Provider Loss, Subpoenaed Data, Lack of Provider Security, Encryption. Common Standards in the Cloud, End-User Access to the Cloud Computing, Legal and Ethical dimensions, Cloud Pricing Models.

# UNIT-V VIRTUAL OFFICE MANAGEMENT

Classes: 08

Web-based communication tools, Web Mail Services, Web Conference Tools, Social Networks and Groupware, collaborating via blogs and .Wikis, IBM, Amazon Ec2, Google Apps for Business.

### **Text Books:**

- 1. Rastogi Surbhi, "Cloud Simplified", BPB Publication, 2021.
- 2. John R.Vacca, "Cloud Computing Security foundations and challenges", CRC Press, Nov, 2020.
- 3. Frederic Magoules, Jie Pan, and Fei Teng, "Cloud Computing Data-Intensive Computing and Scheduling", Crc Press, 1<sup>st</sup> Edition, 2018.

## **Reference Books:**

- 1. Igor Fyanberg, Hui-LanLu, Dorskuler, "Cloud Computing Business Trends and Technologies", Wiley Publishers, 2016.
- 2. Ignor Faynberg, Hui-Lan Li, Dor Skuler, "Cloud Computing", Wiley-Blackwell, 1<sup>st</sup> Edition, Dec, 2015.

#### **Web References:**

- 1. https://www.pdfdrive.com/cloud-security-a-comprehensive-guide-to-secure-cloud-computing-e16098716.html
- 2. https://www.pdfdrive.com/secure-cloud-computing-e26598533.html

### **E-Text Books:**

- 1. http://www.e-booksdirectory.com/details.php?ebook=10166
- 2. http://www.e-booksdirectory.com/details.php?ebook=7400re