

**Paper Code:** BCADSE 6.4      **Paper title:** Elective-III: a. Cloud Computing      **Teaching Hours** – 5 hrs/week

**Total Teaching Hours:** 60 Hrs.

**Marks:** Th-80+IA-20

**Credits:** 4

#### **UNIT I**

Cloud Computing Basics: Cloud Computing Overview, applications, Intranets and the Cloud, Why Cloud Computing Matters, benefits, limitations, Companies in the Cloud today, Cloud services. **12 Hrs**

#### **UNIT II**

Cloud Computing Technology: Hardware and Infrastructure, clients, security, network, services, accessing the Cloud , Platform, Web Applications, Web APIs, web browsers, Cloud Storage – Overview, Cloud Storage Providers, standards, Application, Client, Infrastructure, Service. **12 Hrs**

#### **UNIT III**

Cloud Computing At Work: Software as a service – Overview, driving forces, Company offerings, Industries, Software plus Services – Overview, Mobile Device Integration –Providers, Microsoft Azure, Google Cloud Platform, AWS (Workflow Demonstration). **12Hrs**

#### **UNIT IV**

Developing Applications: Google, Microsoft, Intuit Quick Base, Cast Iron Cloud, Bungee Connect, Local clouds and Thin Clients, Virtualization, Server Solutions, Thin Clients. **12Hrs**

#### **UNIT V**

Migrating to the Cloud: Cloud Services for Individuals, Cloud services aimed at the mid, market – Enterprise, Class Cloud Offerings, Migration. **12 Hrs**

#### **References:**

1. Velte T. Antony, Velte J. Toby. and Elsen Peter Robert, Cloud Computing: A Practical Approach, Tata McGraw-Hill
2. Miller Michael, Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online, QuePublishing.
3. Beard Haley, Cloud Computing Best Practices for Managing and Measuring Processes for On- demand Computing, Applications and Data Centers in the Cloud with SLAs, EmereoPvt. Limited.
4. Mark I. Williams, A Quick Start Guide to Cloud Computing: Moving Your Business into the Cloud, Kogan Page, Great Britan

#### **Additional Reading:**

1. Gautam Shroff, Enterprise Cloud Computing Technology Architecture Applications, Cambridge University Press
2. Toby Velte, Anthony Velte, Robert Elsenpeter, Cloud Computing, A Practical Approach McGraw-Hill Osborne Media;
3. Chris Hay, Brian Prince, “Azure in Action” Manning Publications