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| **Cloud Computing**  III B.Tech – VI Semester (Code:18IT603) | | | |
| Lectures : | **4** Periods / Week | Continuous Internal Assessment : | **50** Marks |
| Final Exam : | **3** hours | Semester End Exam : | **50** Marks |
| **UNIT-I** | | | 15 Periods |
| **Introduction to Cloud Computing:** Definition, 5-4-3 principles of Cloud Computing, Cloud Eco System, features of Cloud service, benefits and drawbacks, Cloud architecture, Anatomy of Cloud, Network Connectivity in Cloud Computing, Applications on the Cloud, Managing the Cloud, Migrating Application to Cloud.  **Cloud Deployment and Service Models:** Deployment Models, Service Models.  Getting Started with AWS, Amazon CloudWatch | | | |
| **UNIT-II** | | | 15 Periods |
| **Hands-on Elastic Compute Cloud -** Introduction to EC2, Features of EC2, EC2 Instance Types, Managing EC2 Using Management Console, Managing EC2 Using AWS CLI, Managing EC2 Using AWS SDK (Java), Monitoring Using CloudWatch.  **Hands-on Simple Queue Service (SQS) -** What Is Messaging Queuing Service?, Introduction of AWS SQS, Features of SQS, Using AWS Management Console, Using AWS CLI, Using AWS SDK—Java, Monitor Using CloudWatch. | | | |
| **UNIT-III** | | | 15 Periods |
| **Hands-on Kinesis** - Introduction to AWS Kinesis Stream and Firehose, Features, Using AWS Management Console, Using AWS CLI, Using AWS SDK—Java, Monitor Using CloudWatch.  **Hands-on Simple Storage Service (S3)** - Introduction to AWS S3, Features, Using AWS Management Console, Using AWS CLI, Using AWS SDK - Java, Monitoring Using CloudWatch. | | | |
| **UNIT-IV** | | | 15 Periods |
| **Working with Data** - using AWS RDS, using NoSQL Databases.  Auto-scaling. | | | |
| **Text Book(s) :** | 1. Chandrasekaran, K. Essentials of cloud computing. CrC Press, 2014. 2. Gulabani, Sunil. Practical Amazon EC2, SQS, Kinesis, and S3. Apress,, 2017. 3. https://docs.aws.amazon.com/ | | |
| **References :** | 1. Wittig, Michael, Andreas Wittig, and Ben Whaley. Amazon web services in action. Manning,, 2018. 2. Sarkar, Aurobindo, and Amit Shah. Learning AWS: Design, build, and deploy responsive applications using AWS Cloud components. Packt Publishing Ltd, 2018. | | |