**Lesson Plan**

**Name of faculty :** Saravjit Chahal

**Discipline :** Computer Engineering

**Semester :** 5 (CO1)

**Subject :** Cloud Computing

**Lesson Plan Duration :** 15 Weeks (from 04th August to 26th November)

**Work Load (Lecture/ Practical) per week (in hours):** Lectures - 02, Practical - 02

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| **Week** | **Theory** | | **Practical** | |
| **Lecture day** | **Topic**  **(including assignment /**  **test)** | **Practical day** | **Topic** |
| 1 | 1st | Evolution of Cloud Computing | 1 | Introduction to Cloud Vendors: Amazon, Microsoft, IBM. |
| 2nd | Cloud Computing Overview |
| 2 | 3rd | Cloud Computing Overview | 2 | Introduction to Cloud Vendors: Amazon, Microsoft, IBM contd. |
| 4th | Characteristics, |
| 3 | 5th | Applications, | 3 | Introduction to Cloud Vendors: Amazon, Microsoft, IBM contd. |
| 6th | Benefits, Challenges |
| 4 | 7th | Cloud Computing Service Models: Infrastructure as a Service | 4 | Setting up Virtualization using Virtualbox/VMWare Hypervisor |
| 8th | Platform as a Service, Software as a Service |
| 5 | 9th | Cloud Computing Deployment Models: Private Cloud, Public Cloud | 5 | Setting up Virtualization using Virtualbox/VMWare Hypervisor  Contd. |
| 10th | Community Cloud, Hybrid Cloud, Major Cloud Service providers |
| 6 | 11th | Sessional test | 6 | Setting up Virtualization using Virtualbox/VMWare Hypervisor  Contd. |
| 12th | SLA Management overview |
| 7 | 13th | Overview of SLA | 7 | Setting up Virtualization using Virtualbox/VMWare Hypervisor  Contd. |
| 14th | Types of SLA |
| 8 | 15th | SLA Life Cycle | 8 | Introduction to OwnCloud and its features |
| 16th | SLA Management Process |
| 9 | 17th | Overview of Virtualization | 9 | Introduction to OwnCloud and its features  Contd. |
| 18th | Types of Virtualization |
| 10 | 19th | Benefits of Virtualization | 10 | Installation and configuration of OwnCloud software for SaaS |
| 20th | Hypervisors and its types |
| 11 | 21st | Sessional Test | 11 | Introduction to OwnCloud and its Features Contd. |
| 22nd | Storage as a Service |
| 12 | 23rd | Benefits and Challenges | 12 | Introduction to OwnCloud and its Features Contd. |
| 24th | Storage Area Networks (SANs) |
| 13 | 25th | Infrastructure Security, Network Level Security | 13 | Installing Open Source Cloud simulation software CloudSim |
| 26th | Data Security Issues |
| 14 | 27th | Privacy Issues | 14 | Installing Open Source Cloud simulation software CloudSim contd. |
| 28th | Legal Issues in Cloud Computing |
| 15 | 29th | Revision | 15 | Revision |
| 30th | Sessional test |