

## Lesson Plan

**Name of faculty** : Krishan Singh  
**Discipline** : Computer Engineering  
**Semester** : 5  
**Subject** : Cloud Computing  
**Lesson Plan Duration** : 15 Weeks  
**Work Load (Lecture/ Practical) per week (in hours):** Lectures-03

| Week            | Theory           |   | Practical     |       |
|-----------------|------------------|---|---------------|-------|
|                 | Lecture day      | Topic (including assignment / test)                         | Practical day | Topic |
| 1st             | 1st              | Evolution of Cloud Computing                                |               | -     |
|                 | 2nd              | Cloud Computing Overview                                    |               |       |
|                 | 3rd              | Cloud Computing Overview                                    |               |       |
| 2 <sup>nd</sup> | 4 <sup>th</sup>  | Characteristics,  |               | -     |
|                 | 5 <sup>th</sup>  | Applications,   |               |       |
|                 | 6 <sup>th</sup>  | Benefits, Challenges  |               |       |
| 3rd             | 7 <sup>th</sup>  | Cloud Computing Service Models: Infrastructure as a Service |               | -     |
|                 | 8 <sup>th</sup>  | Platform as a Service, Software as a Service                |               |       |
|                 | 9 <sup>th</sup>  | Cloud Computing Deployment Models: Private Cloud            |               |       |
| 4 <sup>th</sup> | 10 <sup>th</sup> | Public Cloud  |               | -     |
|                 | 11 <sup>th</sup> | Community Cloud, Hybrid Cloud                               |               |       |
|                 | 12 <sup>th</sup> | Major Cloud Service providers                               |               |       |
| 5 <sup>th</sup> | 13 <sup>th</sup> | Overview of SLA   |               | -     |
|                 | 14 <sup>th</sup> | Types of SLA  |               |       |
|                 | 15 <sup>th</sup> | SLA Life Cycle  |               |       |
| 6 <sup>th</sup> | 16 <sup>th</sup> | SLA Management Process                                      |               | -     |
|                 | 17 <sup>th</sup> | Overview of Virtualization                                  |               |       |
|                 | 18 <sup>th</sup> | Overview of Virtualization                                  |               |       |
| 7 <sup>th</sup> | 19 <sup>th</sup> | Types of Virtualization                                     |               | -     |
|                 | 20 <sup>th</sup> | Types of Virtualization                                     |               |       |
|                 | 21 <sup>st</sup> | Types of Virtualization                                     |               |       |
| 8 <sup>th</sup> | 22 <sup>nd</sup> | Benefits of Virtualization                                  |               | -     |

|                  |                  |                                  |  |   |
|------------------|------------------|----------------------------------|--|---|
|                  | 23 <sup>rd</sup> | Hypervisors                      |  |   |
|                  | 24 <sup>th</sup> | Hypervisors                      |  |   |
| 9 <sup>th</sup>  | 25 <sup>th</sup> | Cloud Security                   |  | - |
|                  | 26 <sup>th</sup> | Infrastructure Security          |  |   |
|                  | 27 <sup>th</sup> | Data Security                    |  |   |
| 10 <sup>th</sup> | 28 <sup>th</sup> | Data Security Issues             |  | - |
|                  | 29 <sup>th</sup> | Privacy Issues                   |  |   |
|                  | 30 <sup>th</sup> | Legal Issues in Cloud Computing  |  |   |
| 11 <sup>th</sup> | 31 <sup>st</sup> | Cloud Storage                    |  | - |
|                  | 32 <sup>nd</sup> | Overview                         |  |   |
|                  | 33 <sup>rd</sup> | Storage as a Service             |  |   |
| 12 <sup>th</sup> | 34 <sup>th</sup> | Benefits                         |  | - |
|                  | 35 <sup>th</sup> | Challenges                       |  |   |
|                  | 36 <sup>th</sup> | Storage Area Networks (SANs)     |  |   |
| 13 <sup>th</sup> | 37 <sup>th</sup> | Scheduling in Cloud              |  | - |
|                  | 38 <sup>th</sup> | Overview of Scheduling problem   |  |   |
|                  | 39 <sup>th</sup> | Different types of scheduling    |  |   |
| 14 <sup>th</sup> | 40 <sup>th</sup> | Different types of scheduling    |  | - |
|                  | 41 <sup>st</sup> | Scheduling for independent tasks |  |   |
|                  | 42 <sup>nd</sup> | Scheduling for independent tasks |  |   |
| 15 <sup>th</sup> | 43 <sup>rd</sup> | Scheduling for dependent tasks   |  | - |
|                  | 44 <sup>th</sup> | Scheduling for dependent tasks   |  |   |
|                  | 45 <sup>th</sup> | Static vs. Dynamic scheduling    |  |   |