**Name of the Teacher: Ms. Shilpa Chaudhary Class: BCA-II**

**Subject: SOFTWARE ENGINEERING (BCA-234)**

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **17-31 July 2017** | Introduction: Program vs. Software , Software Engineering, Programming paradigms, Software Crisis – problem and causes, Phases in Software development: Requirement Analysis, Software Design, Coding, Testing, Maintenance, Software Development Process Models: Waterfall, Prototype, Evolutionary and Spiral models, Role of Metrics. | **Weekly Oral Test** |
|  | **01-31 Aug 2017** | Feasibility Study, Software Requirement Analysis and Specifications: SRS, Need for SRS, Characteristics of an SRS, Components of an SRS, Problem Analysis, Information gathering tools, Organizing and structuring information, Requirement specification, validation and Verification. . SCM | **Group Discussion** |
|  | **01-30 Sept 2017** | Structured Analysis and Tools: Data Flow Diagram, Data Dictionary, Decision table, Decision tress, Structured English, Entity-Relationship diagrams, Cohesion and Coupling. | **Question Bank given to students of class** |
|  | **01-31 Oct 2017** | Gantt chart, PERT Chart, Software Maintenance: Type of maintenance, Management of Maintenance, Maintenance Process, maintenance characteristics | **Class test on board related to chart topic** |
|  | **01-13 Nov 2017** | Software Project Planning: Cost estimation: COCOMO model, Project scheduling, Staffing and personnel planning, team structure, Software configuration management, Quality assurance plans, Project monitoring plans, Risk Management. Software testing strategies: unit testing, integration testing, Validation testing, System testing, Alpha and Beta testing. | **written test on Specific Topics** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | Software Development Life cycle Models |
| **Assignment 2** | Cost Estimation model |
| **Class Test** | **Sessional Test: Unit II**  **Class tests: Different Topics on random days** |