**USHA RAMA COLLEGE OF ENGINEERING AND TECHNOLOGY**

Department of INFORMATION TECHNOLOGY

**LESSON PLAN**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Academic Year** : 2016-17 | | **Sem**  : I | | |
| **Course**: Software Engineering | | | | |
| **Class** :III B.TECH | | **Section** : IT | | |
| **Date of commencement of Class work**: 13/6/2016 | | **Date of end of Class work** : 8/10/2016 | | |
| **Prepared By**: L Narasimha Swamy Assistant Professor | | **Approved By**: HOD | | |
|  | | | | |
| **S.No.** | **TOPIC** | | **Mode of Delivery**  **DDELIVERY** | **DATE** |
| **UNIT-I :Introduction to Software Engineering** | | | | |
| 1 | Software meaning | | Lecture interspersed with discussion | 13/06/2016 |
| 2 | Introduction to SE | | 14/06/2016 |
| 3 | Software crisis | | 15/06/2016 |
| 4 | Software engineering definition | | 16/06/2016 |
| 5 | Evaluation of SE | | 17/06/2016 |
| 6 | SE Methodologies | | 18/06/2016 |
| 7 | SE Challenges | | 20/06/2016 |
| 8 | Software process | | 21/06/2016 |
| 9 | Process Classification | | 22/06/2016 |
| 10 | Phases development life cycle | | 23/06/2016 |
| 11 | SE development process models | | 24/06/2016 |
| 12 | Process applicability | | 25/06/2016 |
| 13 | Advantages | | 27/06/2016 |
| 14 | Limitations | | 28/06/2016 |
| 15 | Assignment Test-1 | | 29/06/2016 |
| **UNIT-II :Requirement Engineering** | | | | |
| 16 | Software requirements | | Lecture interspersed with discussion | 30/06/2016 |
| 17 | Software requirements process | | 01/07/16 |
| 18 | Software requirements elicitation and analysis | | 04/07/2016 |
| 19 | Software requirements structure and prototyping | | 06/07/2016 |
| 20 | Data oriented analysis | | 08/07/2016 |
| 21 | OOP S analysis | | 11/07/2016 |
| 22 | Software requirements specification | | 13/07/2016 |
| 23 | Software requirements validation | | 21/07/2016 |
| 24 | Software requirements management | | 22/07/2016 |
| 25 | Assignment Test-2 | | 23/07/2016 |
| **UNIT-III : Software Design** | | | | |
| 26 | Software Design process | | Lecture interspersed with discussion | 25/07/2016 |
| 27 | Characteristics of Software Design | | 26/07/2016 |
| 28 | Design principals | | 27/07/2016 |
| 29 | Modular design | | 28/07/2016 |
| 30 | Design methodologies | | 29/07/2016 |
| 31 | Structure design and methods | | 30/07/2016 |
| 32 | Transform Vs transaction analysis | | 01/08/2016 |
| 33 | OOAD and Design | | 02/08/2016 |
| 34 | OOAD and Design analysis | | 03/08/2016 |
| 35 | Assignment Test-3 | | 04/08/2016 |
| **UNIT-IV** | | | | |
| **Software Implementation and Testing** | | | | |
| 36 | Introductions to code principal | | Lecture interspersed with discusson | 06/08/2016 |
| 37 | Code process and verification | | 16/08/2016 |
| 38 | Code documentation | | 17/08/2016 |
| 39 | Introduction to testing | | 18/08/2016 |
| 40 | Testing fundamentals | | 19/08/2016 |
| 41 | Test planning | | 20/08/2016 |
| 42 | Black box testing | | 22/08/2016 |
| 43 | White box testing | | 23/08/2016 |
| 44 | Levels of testing | | 31/08/2016 |
| 45 | Usability testing | | 01/09/2016 |
| 46 | Regression testing | | 02/09/2016 |
| 47 | Debugging approach | | 03/09/2016 |
| 48 | Assignment Test-4 | | 07/09/2016 |
| **UNIT-V** | | | | |
| **SPM** | | | | |
| 49 | Introduction to SPM | | Lecture interspersed with discussion | 08/09/2016 |
| 50 | SPM essentials | | 09/09/2016 |
| 51 | What is the SPM | | 10/09/2016 |
| 52 | Software configuration management | | 12/09/2016 |
| 53 | Project planning activities | | 21/09/2016 |
| 54 | Software metrics | | 22/09/2016 |
| 55 | Software measurements | | 23/09/2016 |
| 56 | Project size estimation | | 24/09/2016 |
| 57 | Effort estimation techniques | | 26/09/2016 |
| 58 | Assignment Test-5 | | 27/09/2016 |
| **UNIT-VI** | | | | |
| **Software Quality and Maintenance** | | | | |
| 59 | Software quality factors | | Lecture interspersed with discussion | 28/09/2016 |
| 60 | Verification and validation | | 29/09/2016 |
| 61 | Software quality assurance | | 30/09/2016 |
| 62 | The Capability maturity model | | 01/10/16 |
| 63 | Software maintenance | | 03/10/16 |
| 64 | Maintenance process models | | 04/10/16 |
| 65 | Maintains cost | | 05/10/16 |
| 66 | Reengineering | | 06/10/16 |
| 67 | Reengineering activities and reuse | | 07/10/16 |
| 68 | Assignment Test-6 | | 08/10/16 |

**Text Books:**

1. software engineering ,concepts and practies,ugrasen Suman cengage learingig .

2. software Engineering ,8/e sommerville pearson

3. software Engineering ,7/e,Roger s.Pressman

**Reference Books:**

1. Software Engineering A Precise approach Pankaj Jalote Wiley.

**List the Course Outcomes(Cos):**

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| --- | --- | --- | --- |
| **Sub code** | **Sub Name** | **COs** | **Expected level of attainment**  **On 5 scale** |
|  | **Software Engineering** | 1. Have an ability to apply software testing knowledge and engineering methods.  2. Have an ability to design and conduct a software test process for a software testing project.  3. Have an ability to identify the needs of software test automation, and define and develop a test tool to supporttest automation.  4. Have an ability understand and identify various software testing problems, and solve these problems bydesigning and selecting software test models, criteria, strategies, and methods. | **4.5** |

**SIGNATURE OF FACULTY SIGNATURE OF HOD**