



## CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH Department of Computer Science and Engineering ACADEMIC YEAR: 2022-2023

Subject Name: Software Engineering
Semester: 5<sup>th</sup>
Subject Code: CS346

**Practical List** 

| Practical List |   |      |     |  |  |  |
|----------------|---|------|-----|--|--|--|
| Sr.<br>No.     | Aim Part-1  | Hrs. | COs |  |  |  |
| 1              | List & draw at least 7 various Software Development Life Cycle (SDLC) models and preparing the detailed case study on "Definition A" that which SDLC model is suitable to develop the "Definition A"?   | 2    | CO1 |  |  |  |
| 2              | List at least 10 Agile Development tools for desktop and mobile application development in IT industry and prepare the detailed case study on "JIRA Tool" for Agile Development.  | 2    | CO5 |  |  |  |
| 3              | List at least 5 software development planning tools and prepare the detailed case study of Risk Analysis & Management (i.e. Risk Identification, Risk Projection, Risk Refinement, Risk Mitigation.) on "Definition A."   | 2    | CO2 |  |  |  |
| 4              | List at least 10 software design principals & online/offline tools for the software development process and Draw the UML diagram (Diagram Must 1. Use Case, 2. Activity, 3. State, 4. Sequence, 5. Data Flow (DFD) 6. Class) for Definition A  Link: https://creately.com/blog/diagrams/uml-diagram-types-examples/             | 4    | CO1 |  |  |  |
| 5              | Design the Software Requirement Specification (SRS) document on Definition A desktop application in IEEE format only. (Excluding UML Diagram) Link: https://web.cs.dal.ca/~hawkey/3130/srs_template-ieee.doc  | 4    | CO1 |  |  |  |
| 6              | List at least 10 type of Testing for software development life cycle in IT industry and Design Test Case, Test Suites & Testing Strategy for the "Definition A" Link: 1. https://www.softwaretestinghelp.com/types-of-softwaretesting/ 2. https://www.geeksforgeeks.org/types-software-testing/                                 | 4    | CO4 |  |  |  |
| 7              | Prepare the details Case Study on Design coding standards and guidelines for your respective SGP project definition and justify which Software Quality Standards & Testing Tool will be suitable for your Definition A.  Link: https://www.geeksforgeeks.org/coding-standards-and-guidelines/                                   | 4    | CO3 |  |  |  |
| 8              | List at least 5 online or offline Software Maintenance tools & prepare the detail case study on "Definition A" Maintenance document as a Definition A.  Link: 1. https://ecomputernotes.com/software-engineering/tools-for-software-maintenance  2. https://www.techwalla.com/articles/what-is-cohesion-in-software-engineering | 2    | CO6 |  |  |  |





| 9  | Prepare the detailed case study on Microsoft Azure/AWS DevOps tool in the area of cloud business application.  | 2 | CO5 |
|----|--|---|-----|
| 10 | Prepare a detailed case study on Design Thinking methodology in the area of mobile application development (Android or iOS).  Link: https://www.thesunflowerlab.com/blog/design-thinking-and-mobile-app-development/ | 2 | CO5 |

| Sr. No. | Part-2  | Hrs. | COs   |
|---------|---|------|---|
| 1       | Case Study: Software Engineering (Any One Group Wise)  (1) Revolution in Software Process Model, History to Current scenario: A Case Study.  (2) A roadmap for Software Design or software design strategies in IT Companies. (In the context of worlds know IT Companies.)  (3) A Case Study for software quality assurance. (In the context of Overall India or any particular state of India.)  (4) SOFTWARE TESTING in a small or Start-up Related companies: A case study (In the context of Overall, India or any particular state of India.)  (5) Innovation Agile Methodology towards DevOps: A Case Study.  (6) A Case Study in a small or Start-up Related company for software maintenance, reengineering, reverse engineering, software configuration management. (In the context of Overall India or any particular state of India.) | 2    | 1- CO1<br>2-CO5<br>3- CO3<br>4- CO4<br>5- CO5<br>6- CO6 |
| #       | List of Open-Source Media Player for Practical Aim,  1. Kodi 2. MPV 3. Miro 4. FFmpeg 5. SMPlayear  Link: https://filmora.wondershare.com/video-player/10-open-source-video-player-for-linux-windows-and-mac.html   | #    | #   |