NAME OF THE PROGRAM: *CSE*	**DEGREE:** *B.Tech*
COURSE NAME: *Software Engineering Lab*	**SEMESTER:** *5th*
COURSE CODE: *ESC591*	**COURSE CREDIT:** *2*
COURSE TYPE: *LAB*	**CONTACT HOURS:** *4P*
SESSION: *2023-2024*	

Exp. No.	List of Experiments	Date
1.	Analyze Online Library Management System and prepare a SRS Document.	Week 1
2.	Analyze Online Social Networking System and prepare a SRS Document.	Week 2
3.	i. Analyse the functional requirements for an Online Library Management System and prepare a SPMP (Software Project Management Plan) Document. ii. Estimate size of the LMS using Function Point metric. iii. Design Level 0 DFD for the LMS using MS Project.	Week 3
4.	1. Considering your immense expertise in software development, The Absolute Beginners Inc. has recently allotted you a mega project. The goal of the project is to create a database of all Hindi films released since 2000. The software would allow one to generate a list of top ten hit films, top ten flop films, best comedy films, and so on. Using your prior experience, you have decided the approximate sizes of each module of the software as follows: • Data entry (0.9 KDSI) • Data update (0.7 KDSI) • Query (0.9 KDSI) • Report generation and display (2 KDSI) Also, take into consideration the following cost drivers with their ratings: • Storage constraints (Low) • Experience in developing similar software (High) • Programming capabilities of the developers (High) • Application of software engineering methods (High) • Use of software tools (High) (All other cost drivers have nominal rating). 1. Now answer the following: • Applying intermediate COCOMO estimate the effort required to develop this system. • Applying intermediate COCOMO estimate the time required to develop this system. • Calculate the phase wise effort percentage for the above application. Applying intermediate COCOMO estimate the minimum size of the team you would require developing this system and assuming that your client would pay Rs.50,000 per month of development. How much would be the likely billing? 2. Prepare a Level 0 DFD of Movies database Management System using the MS Project. 3. Decompose into Level-1, Level-2 and Level-3 DFDs applicable wrt your SRS.	Week 4
5.	Draw a Use Case Diagram of “Library Management System” using the STARUML.	Week 5
6.	Draw a Use Case and Class Diagram of “Emotion Based Music Player” using the STARUML.	Week 6

Exp. No.	List of Experiments	Date
7.	Draw a Use Case and Class Diagram of "Hospital Management System" using the STARUML.	Week 7
8.	Draw a Sequence Diagram on Online Shopping System	Week 8
9.	a) Draw a Gantt chart for a "Library Management System" using MS Project. b) Prepare a SPMP to plan the project. c) Estimate the size, time, cost, effort and staff requirements using Function point metric and COCOMO Model. d) Draft a test plan illustrating all test cases.	Week 9
10.	Draw the Activity Diagram and State Chart Diagram for the following: Multimedia information like text, audio, video, and any combination of those are most pervasive in almost every application field namely Computer, Network, Smartphone, and elsewhere. We also require a high degree of privacy of our own document. There is a problem with how such a document can be protected from unauthorized access. Of course, there are many methods such as using passwords, smartcards, biometrics, etc. are known. Nevertheless, the existing methods have their own limitations as robustness and cost issues. This project would aim to devise a (new) method and develop a user-friendly and cost-effective solution to the problem. **Input:** • A detailed profile of the user, who wishes to protect the document. The profile template will be finalized after a careful discussion with the team member (i.e., a software engineer here). • If any other input that might require. • Document itself to be protected. **Functions:** • Encryption of document • Decryption of document • Opening a document under the protection • Deleting a document under the protection • Copying a document under the protection **Output:** • Document after encryption • Document after decryption • Result on opening a document: success or failure; locking for three unsuccessful attempts • Results on deleting a document under protection: success or failure; locking for three unsuccessful attempts • Results on copying a document under protection: success or failure; locking for three unsuccessful attempts	Week 10
11.	a) Draw a Gantt chart for a "Hospital Management System" using MS Project. b) Prepare a SPMP to plan the project. c) Estimate the size, time, cost, effort and staff requirements using Function point metric and COCOMO Model. d) Draft a test plan illustrating all test cases.	Week 11
12.	1. A case study for live projects with some test cases. 2. Develop a Porotype implementing all software engineering practices for the following applications: a. Online Library Management System	Week 12

Exp. No.	List of Experiments	Date
	b. Online Hospital Management System c. Online Staff Attendance System d. Online Ticket Booking System e. Online Hotel Reservation System f. Online Event Management System g. Safe Home Automation System h. Mobile Application for Autistic Children i. Online Payroll System Online Food Delivery System	