

B.E. (Computer Science and Engineering) Project Work.

SEMESTER VII

Course Code	Course	Teaching Scheme			Examination Scheme				
		L	P	T	Theory	TW	POE	OE	Total
CS7C01	Advanced Computer Architecture	4	-	1	100	25	-		125
CS7L02	Distributed Systems	3	2	-	100	25	-		125
CS7L03	Advanced Database Systems	3	2	-	100	25	-	50	175
CS7E04	Elective – I	3	-	1	100	25	-		125
CS7L05	Web Technologies – I	3	4	-	-	50	50		100
CS7L06	Project – I	-	4	-	-	75	-	75	150
Total		16	12	2	400	225	50	125	800

SEMESTER VIII

Course Code	Course	Teaching Scheme			Examination Scheme				
		L	P	T	Theory	TW	POE	OE	Total
CS8C01	Data Analytics	4	2	-	100	25		50	175
CS8C02	Project Management	3	-	-	100	-		-	100
CS8C03	Real-time Operating System	4	-	1	100	25		-	125
CS8E04	Elective – II	3	-	1	100	25		-	125
CS8L05	Web Technologies – II	2	4	-	-	50	50	-	100
CS8L06	Project – II	-	4	-	-	75		75	150
CS8L07	Community Services	-	2	-	-	25		-	25
Total		16	12	2	400	225	50	125	800

Elective – I

- A. Soft Computing
- B. Mobile Applications
- C. Adhoc Wireless Networks

Elective – II

- A. Internet of Things
- B. Software Testing and Quality Assurance
- C. Introduction to Mainframes

It should consist of 15-20 experiments based on the following topics.

1. Create html pages for website like login, registration and about us pages.
2. Design created pages using CSS
3. Create different types of valid XML documents
4. Search information from XML document using SAX parser
5. Navigating the Document Object Model tree for given XML Document
6. Creating XML document using DOM
7. Write XSLT styles-sheet to convert XML document to HTML
8. XML Validation using XSchema
9. Remote Procedure call using XML
10. Installation, Configuration of Tomcat Server and Deployment of Servlet based application
11. Write a servlet to store form data to database – use Type 4 JDBC driver
12. Write a servlet to search data from database
13. Session Management using Servlet
14. Write a JSP application to display database contents
15. Write a servlet to search data from database. Write a JSP application to input book information and store in the database. Application must provide facility to search book based on title of book, and author
16. Write a JSP application to input student information like first name, last name, department, date of birth, class, marks obtained in five subjects and store this information into database. Also generate report showing aggregate marks of all the students.
17. Write a JSP application to demonstrate Session Management using JSP (Application Controlled Authentication)

CS7L06. PROJECT - I

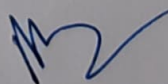
Practical : 4 hrs/ week

Term work : 75 Marks

OE : 75 Marks

The project work is to be carried out in two semesters of B.E. The project should be undertaken preferably by group of 4-5 students who will jointly work and implement the project in the two semesters.

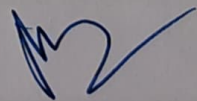
In Semester VII, The group will select a project with the approval of the Guide (teaching staff) and submit the name of the project with a synopsis of the proposed work of not more than 02 to 08 pages before second week of August in the academic year. The group is expected to complete detailed system design, analysis, data flow design, procurement of hardware and/or software, implementation of a few modules of the proposed work at the end of semester –VII as a part of the term work submission in the form of a joint report. The term work assessment will be done jointly by teachers appointed by Head of the Department.



The oral examination will be conducted by an internal and external examiner as appointed by the University.

Note:

1. **Project work** should be continually evaluated based on the contributions of the group members, originality of the work, innovations brought in, research and developmental efforts, depth and applicability, etc.
2. Two mid-term evaluations should be done, which includes presentations and demos of the work done.
3. *Care should be taken to avoid copying and outsourcing of the **project work**.*

A handwritten signature in blue ink, consisting of a stylized 'M' followed by a checkmark-like flourish.

11. Program based on PHP variables, Expression, arrays, control structure
12. Experiment Based on OOP and Advance OOP PHP
13. Form validation using PHP using regular expressions
14. Upload various types of file from client side to server with validation
15. Write a program to send Mail using PHP
16. Insert user entered data in form to MySQL database using PHP
17. Update user's data stored in MySQL database using PHP
18. Write a program to manage session in PHP having login facility in any web application

CS8L06. PROJECT - II

Practical : 4 hrs / week

Termwork : 75 Marks
OE : 75 Marks

Objective:

The group will continue to work on the project selected during the semester VII and submit the completed **project work** to the department at the end of semester VIII as mentioned below-

1. The workable project.
2. The project report in the bound journal complete in all respect with the following: -
 - i) Problem specifications.
 - ii) System definition – requirement analysis.
 - iii) System design – dataflow diagrams, database design
 - iv) System implementation – algorithm, code documentation
 - v) Test results and test report.
 - vi) In case of object oriented approach – appropriate process be followed.
 - vii) Open Source tools like Latex can be used for report preparation.

Termwork:

Term work will be jointly assessed by a panel of teachers appointed by Head of the Department

External Exam:

Oral examination will be conducted by internal and external examiners as appointed by the Shivaji University.

Note:



1. **Project work** should be continually evaluated based on the contributions of the group members, originality of the work, innovations brought in, research and developmental efforts, depth and applicability, etc.
2. Two mid-term evaluations should be done, which includes presentations and demos of the work done.
3. **Care should be taken to avoid copying and outsourcing of the project work**

CS8L07. COMMUNITY SERVICES

Practical : 2 hrs / week

Termwork : 25 Marks

Objectives:

1. To create an awareness among the common man of Western Maharashtra region and area coming under jurisdiction of the Shivaji University regarding the e-services provided by various public sector organization
2. To promote the use of technological services in day-to-day activities.
3. To understand the problems of the locality.
4. To make the student aware of the various engineering tools and techniques used in eservices.
5. Creating awareness of RTI (Right To Information) among general public for procuring public documents and it's appropriate use.

Details:

The students project group is expected to do the following:

1. With the prior written permission from the Head of the Institute the project group should visit any Public Sector / Government/ Semi government organization like – Zilha Parishad, Collector Office, Municipal Corporation, Tahasildar Office, RTO, MSEB, Court, Railway station , Tourism Services, agricultural service sector, Banks where the facilities of e-governance and e-services available for public purposes.
2. The project group should understand the public related services and identify the required services for the common man.
3. Two/Three groups should plan awareness programs/camps to be carried out in the nearby villages / Taluka places / residential colonies / localities and visit the suitable areas along with the staff to create awareness among the common man about various eservices available in public domain.
4. They should prepare a presentation simulating the services that are being exposed to common man and give a demonstration during their visit to the concerned area.
5. Further group should take the feedback from the concerned locality on a pre-designed format that may be provided by the Head of the Institute.
6. Group should prepare a report detailing:
 - a. The kind of services chosen.
 - b. The office / organization visited mentioning the authorities meet.
 - c. The facilities provided by the chosen service.