SALESFORCE TECHNOLOGIES

Course Code	23SA8755	Year	IV	Semester	I
Course Category	SOC	Branch	CSE	Course Type	Theory/Practical
Credits	2	L-T-P	1-0-2	Prerequisites	Fundamentals in any programming language
Continuous Internal Evaluation:	30	Semester End Evaluation:	70	Total Marks:	100

Course Outcomes		
Upon Successful completion of course, the student will be able to		
CO1	Apply basics of CRM, multi-tenancy, Data modelling and management in Sales force for solving problems in Apex.	L3
CO2	Implement programming constructs of Apex like class, interface triggers as an individual on different IDEs/ online platforms.	L3
CO3	Develop an effective report based on various programs implemented.	L3
CO4	Apply technical knowledge for a given problem and express with an effective oral communication.	L3
CO5	Analyze outputs using given constraints/test case/ debugging and deployment tools of Sales force.	L4

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2
CO1		2										2	
CO2					2				2				
CO3										3			
CO4									2		2		
CO5			1			1							
Average		2	1		2	1			2	3	2	2	

Syllabus		
Unit No	Contents	Mapped CO

I	**Sales force Fundamentals:** What is a multi-tenancy, consideration, MVC paradigm, Core CRM objects? **Data Modeling and Management:** Data modeling, Relationship types, Visualizing and creating entity relationships, Importing and exporting data into development environments. **Practical Exercises:** 1. Create, setup Salesforce developer account and access developer console. 2. Exercise on Standard and custom objects, Relationship fields. 3. Exercise on how to import and export data.	**CO1, CO2, CO3, CO4, CO5**
II	**Apex:** Apex Basics, Class and instance, Features of Apex, Apex variables, constants and expressions, Access modifiers, Control flow statements, working with data in salesforce. **Practical Exercises:** 1. Exercise on install Force.com IDE and create projects. 2. Exercise on primitive datatypes, sObject, Enum and collections. 3. Exercise on control statements and looping statements.	**CO1, CO2, CO3, CO4, CO5**
III	**Apex Classes, Interfaces & Triggers:** Apex classes, interfaces, Apex triggers, sObject relationships, Implementing SOQL & SOSL queries, the order of execution, Exception handling, Security in Apex, Web service callouts **Practical Exercises:** 1. Exercise on creating Apex class. 2. Exercise on SOQL and SOSL Queries. 3. Exercise on working with Apex Triggers.	**CO1, CO2, CO3, CO4, CO5**
IV	**Salesforce user interface:** Introduction, Displaying Salesforce data using Visualforce, Lightning component framework, Benefits of Lightning component framework, Resources in Lightning component. **Practical Exercises:** 1. Exercise on displaying data using Visualforce and Visualforce pages. 2. Practice components in Lightning component framework.	**CO1, CO2, CO3, CO4, CO5**
V	**Debugging and Deployment tools:** Debugging and Deployment tools, Monitoring and accessing debug logs, deploying metadata to another org. **Practical Exercises:** 1. Exercise on creating sandbox and deployment strategies.	**CO1, CO2, CO3, CO4, CO5**

Learning Resources
Text Books
1. Salesforce Platform Developer I Certification Guide, John Vandevelde, Gunther Roskams, Packt Publishing.
References
1. Beginning Salesforce Developer, Michael Wicherski, Apress.
e-Resources and other Digital Material
1. Salesforce Platform Developer I, Trail: https://trailhead.salesforce.com/content/learn/trails/platform-developer-i-certification-study-guide