Salesforce Technologies

Course Code	20SA8755	**Year**	IV	**Semester**	I
Course Category	SOC/JOC	**Branch**	CSE	**Course Type**	Theory/Practical
Credits	2	**L-T-P**	1-0-2	**Prerequisites**	Fundamentals in any programming language
Continuous Internal Evaluation:	-	**Semester End Evaluation:**	50	**Total Marks:**	50

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**

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3: High, 2: Medium, 1: Low)

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**
CO1													3	
CO2					2				2					
CO3										3				
CO4										3				
CO5		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