

**Kavayitri Bahinabai Chaudhari North Maharashtra University
Jalgaon, Ordinance 181**

College Name : - Institute of Management Research and Development,
Shirpur

Title of the Course : - **Certificate Course in Salesforce CRM.**

Aims / Objective : - To introduce Sales force Tools and its implementation in
managing and customizing Sales force CRM.

Duration of the Course : - 1 Year

Fees Structure : - Rs. 3,000/-

Course Structure :- 1) Paper I – Salesforce Administration
2) Paper II – Apex Triggers & Development
3) Paper III- Practical on Salesforce Administration & Apex
Development

Eligibility of the Course: - Student passed in the Higher Secondary Examination
(HSC) (10+2) or equivalent examination.

SN	Paper	Name of the subject	Theory / Practic al	Teach ing Hours	Maximum Marks Allotted			Passing			Credit
					Ext	Int	Total	Ext	Int	Total	
01	Paper I	Salesforce Administration	THEORY	90	60	40	100	24	16	40	6
02	Paper II	Apex Triggers & Development	THEORY	90	60	40	100	24	16	40	6
03	Paper III	Administration and Development	PRACTICAL	120	60	40	100	24	16	40	8

Minimum Staff : - 03 Three

Mode of Examination : - English (Theory & Practical)

Detailed Syllabus : - Attached

Paper I: Salesforce Administration (90 Hrs.)

Unit 1: Introduction to Salesforce (15 Hrs.)

- What is Salesforce?
- Salesforce Cloud Ecosystem (Sales, Service, Marketing Clouds)
- Overview of Salesforce CRM Architecture
- Navigation and User Interface

Unit 2: Salesforce Objects and Fields (20 Hrs.)

- Standard and Custom Objects
- Fields, Field Types, and Field-Level Security
- Creating and Managing Objects and Fields

Unit 3: Data Management in Salesforce (15 Hrs.)

- Importing and Exporting Data
- Data Validation Rules
- Data Backup and Restore
- Duplicate Management

Unit 4: Security and Access in Salesforce (20 Hrs.)

- Profiles, Permission Sets, and Sharing Rules
- Role Hierarchy and Organization-Wide Defaults (OWD)
- Setting Up Security for Users and Records

Unit 5: Reports and Dashboards (20 Hrs.)

- Creating Reports (Tabular, Summary, Matrix)
- Report Filters, Grouping, and Formulas
- Creating and Customizing Dashboards

References:

1. Salesforce.com, Salesforce Platform App Builder Certification Guide,
2. "Salesforce For Dummies" by Liz Kao & Jon Paz
3. Salesforce documentation: <https://developer.salesforce.com/docs/>

Paper II: Apex Triggers & Development

(90 Hrs.)

Unit 1: Introduction to Apex (15 Hrs.)

- Introduction to Apex Programming Language
- Apex Syntax and Data Types
- Classes and Objects in Apex
- Working with Collections in Apex

Unit 2: Triggers in Salesforce (20 Hrs.)

- What is a Trigger?
- Trigger Events (Before Insert, After Insert, Before Update, After Update, Before Delete, After Delete)
- Writing Apex Triggers for DML Operations
- Best Practices for Writing Triggers

Unit 3: Apex and SOQL (20 Hrs.)

- Introduction to SOQL (Salesforce Object Query Language)
- Writing SOQL Queries to Retrieve Data
- Using Relationships in SOQL (Parent-to-Child, Child-to-Parent)
- Dynamic SOQL and Bind Variables

Unit 4: Apex Classes and Methods (15 Hrs.)

- Creating and Using Apex Classes
- Methods and Constructors
- Handling Exceptions in Apex
- Apex Testing and Code Coverage

Unit 5: Integration and Asynchronous Apex (20 Hrs.)

- Introduction to Web Services (SOAP and REST)
- Outbound Messaging in Salesforce
- Queueable Apex and Batch Apex
- Scheduled Apex for Regular Tasks

References:

1. "Apex Programming for Salesforce" by Jason Ouellette
2. Salesforce official Apex Developer Guide
3. "Salesforce Advanced Apex Programming" by Dan Appleman

Paper – III: Practical on Salesforce Administration & Apex Development (120 Hrs.)

Salesforce Administration and Configuration Practical Exercises

1. Create and Configure Custom Objects

- Create a custom object called "Event" and configure its fields (e.g., Event Name, Date, Location).
- Create a custom field type like Date, Picklist, and Text Field on this object.

2. Set Up Profiles, Permission Sets, and Sharing Rules

- Create two profiles: "Standard User" and "Event Manager".
- Assign different permissions and access to objects and fields for both profiles.
- Create a permission set and assign it to a user to grant additional permissions.
- Create a sharing rule to share records with specific users.

3. Create Validation Rules

- Create a validation rule to ensure that the "Event Date" field cannot be left blank and is a future date.
- Add error messages and test the validation rule functionality.

4. Set Up Workflow Rules and Email Alerts

- Create a workflow rule to trigger an email alert when the "Event" record's "Status" field is set to "Completed".
- Design a custom email template for the alert.

5. Design Reports and Dashboards

- Create a summary report for the "Event" custom object that groups events by their status.
- Create a dashboard that displays the number of events in different statuses (e.g., Active, Completed, Canceled).

Salesforce Integration with Slack Practical Exercises

6. Integrate Salesforce with Slack Using App Integration

- Install the "Salesforce for Slack" app from the Slack App Directory.
- Configure the app to link your Salesforce Org to Slack, ensuring that your Salesforce records are synced with Slack.

SOQL (Salesforce Object Query Language) Practical Exercises

7. Write Simple SOQL Queries

- Write a SOQL query to retrieve all "Event" records where the status is "Active".
- Write a SOQL query that retrieves the Name and Email of all Contacts associated with "Event" records.

8. Use Relationships in SOQL

- Write a SOQL query to get a list of "Event" records with their related "Contact" and "Account" information (using Parent-to-Child and Child-to-Parent relationships).
- Create a dynamic SOQL query that allows you to filter "Event" records by their date and location based on user input.

Apex Trigger Practical Exercises

9. Create a Before Insert Trigger

- Write an Apex Trigger that automatically assigns the "Event Manager" profile to users when a new "Event" record is created.
- Use the trigger to populate the "Event Date" field with the current date if it's empty.

10. Create a Trigger for Preventing Duplicate Records

- Write a trigger on the "Event" object to prevent the creation of duplicate events (based on Event Name and Date) by checking if a similar event already exists before insert.

11. Create a Trigger for Updating Related Records

- Write an Apex Trigger on the "Event" object that updates the "Status" field of related "Contact" records when the event is marked as "Completed".

12. Create an After Update Trigger for Sending Notifications

- Write an Apex Trigger that sends an email notification when the "Status" of an "Event" record is changed to "Completed".
- Use the Messaging class to send the email notification.

Lightning App Practical Exercises

13. Create a Lightning App

- Build a Lightning App to display and manage "Event" records.
- Include components like the Event List View, Recent Events, and a custom component for creating new Event records.

14. Create a Custom Lightning Component

- Build a custom Lightning Component that shows a calendar view of upcoming "Event" records.
- Display the Event Name, Date, and Location in the calendar view.

15. Design a Lightning Record Page for Events

- Create a custom Lightning Record Page for the "Event" object with sections for Event Details, Attendees, and Related Contacts.
- Add components like Record Highlights, Related Lists, and Custom Components.