

CALCULATING FAMILY EXPENSES USING SERVICE NOW

TEAM ID : NM2025TMID16319

Team Size : 4

Team Leader : Essath Nisha. E

Team Member : Gomathi . G

Team Member : Dhanalakshmi. D

Team Member : Sivadharshini. R

PROBLEM STATEMENT

Managing family expenses can be a hassle, often involving disjointed methods like spreadsheets, paper receipts, or various mobile apps that don't offer a unified view. This leads to a lack of transparency, difficulty in tracking spending, and a time-consuming process for reconciling shared costs.

OBJECTIVES

- **Centralized Expense Submission:** Create a portal or interface where family members can easily submit expense reports with details like category, amount, date, and a brief description.
- **Automated Approval Workflow:** Implement a workflow that automatically routes expense reports to the appropriate family member for approval (e.g., a parent or designated family accountant). This reduces manual effort and speeds up the reimbursement process.
- **Real-Time Tracking and Visibility:** Provide a dashboard where family members can view the status of their submitted expenses (e.g., pending, approved, rejected) and see a real-time summary of their spending.

CALCULATING FAMILY EXPENSES USING SERVICE NOW

PROJECT OVERVIEW

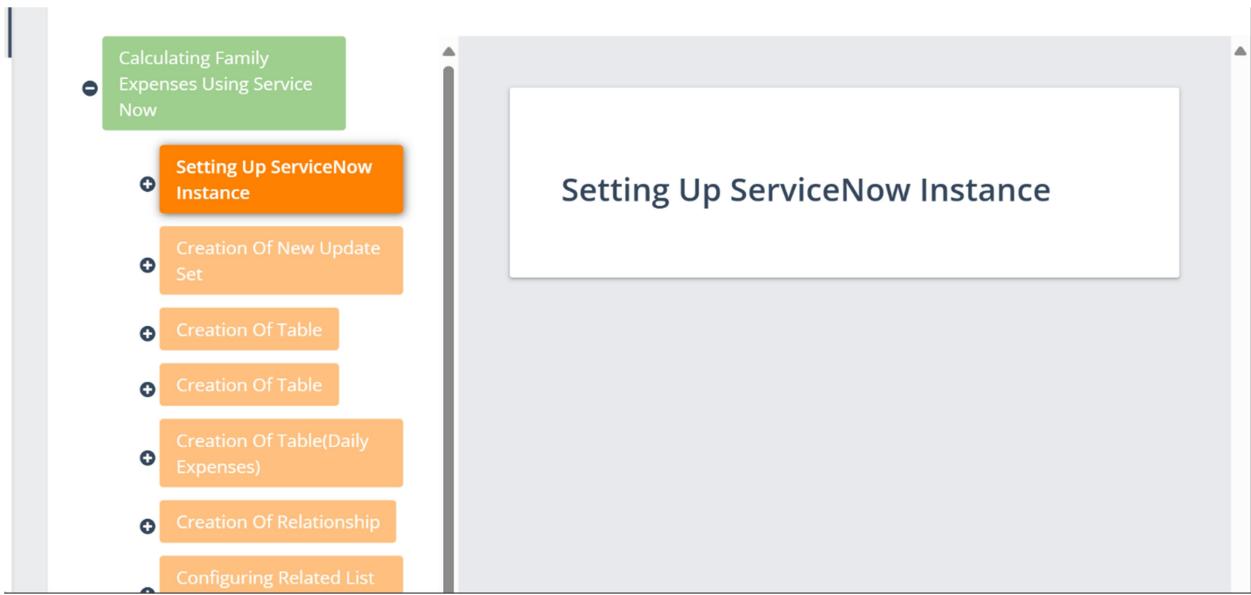
The project aims to develop a comprehensive expense calculation system using ServiceNow . This system will enable users to track and manage family expenses efficiently. It will include features such as expense categorization, budget setting, real-time tracking, and reporting capabilities. Utilizing ServiceNow's robust platform, the project will ensure seamless integration, user-friendly interface, and scalability to accommodate varying family sizes and financial complexities. The end goal is to empower users with the tools they need to make informed financial decisions and promote financial well-being within the family unit.

Milestone 1: ServiceNow Instance

Activity 1: Setting up ServiceNow Instance

Setting up ServiceNow Instance

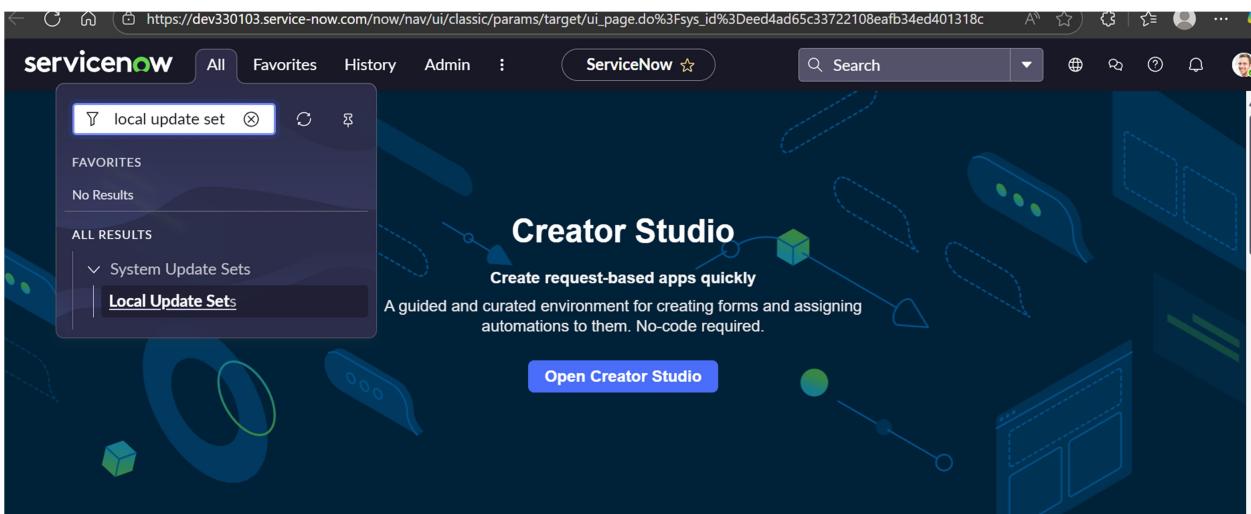
- 1. Sign up for a developer account on the ServiceNow Developer site “<https://developer.servicenow.com>”.**
- 2. Once logged in, navigate to the "Personal Developer Instance" section.**
- 3. Click on "Request Instance" to create a new ServiceNow instance.**
- 4. Fill out the required information and submit the request.**
- 5. You'll receive an email with the instance details once it's ready.**
- 6. Log in to your ServiceNow instance using the provided credentials.**
- 7. Now you will navigate to the ServiceNow.**



Milestone 2: Creation of New Update Set

Activity 1: Creation of New Update Set

1. Go to All >> In the filter search for Local Update set > click on New.



1. Enter the Details as:

- i Name: Family Expenses
2. Then click on Submit and Make current.

The screenshot shows the ServiceNow interface for creating a new update set. The search bar at the top has 'local' typed into it. The main area is titled 'Update Set - Create New Update Set'. The form contains the following fields:

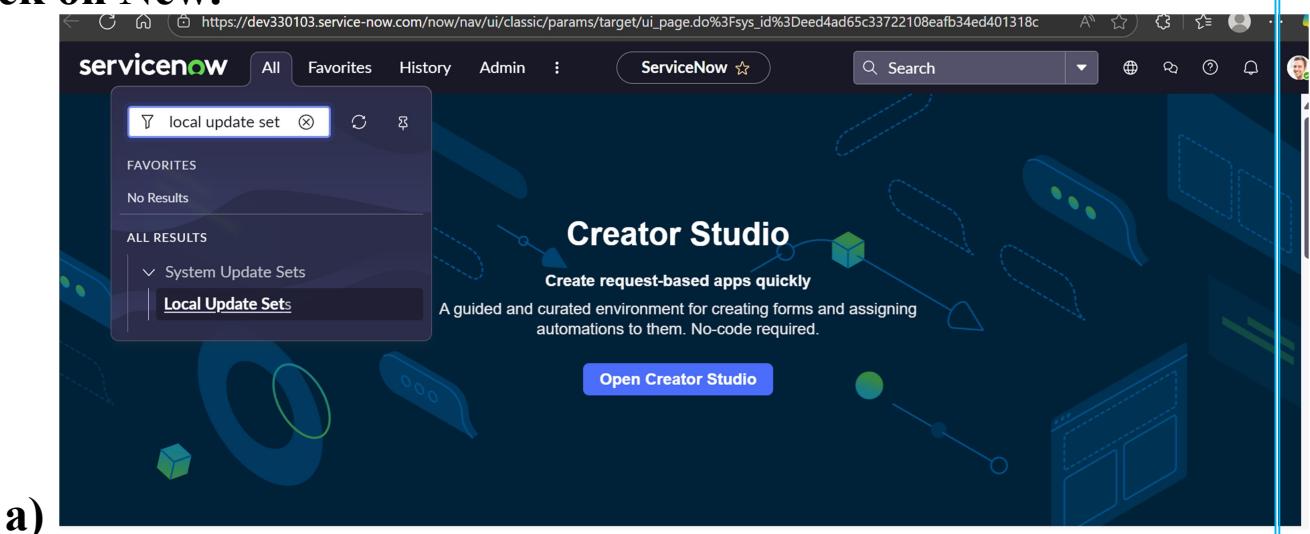
- Name: Family Expenses
- State: In progress
- Parent: (empty)
- Release date: (empty)
- Description: (empty)

At the bottom of the form are two buttons: 'Submit' and 'Submit and Make Current'. To the left of the main content, there is a sidebar with a tree view of system configurations under the 'Local' category, including Regions, Currencies, Exchange Rates, System Properties, System Localization, System Update Sets, Local Update Sets, Team Development, Local Changes, Configuration by Category, and Logical Partition. An information icon ('i') is located near the sidebar.

Milestone 3: New Update Set

Activity 1: Creation of New Update Set

1. Go to All >> In the filter search for Local Update set > click on New.



2. Enter the Details as:

- i Name: Family Expenses
3. Then click on Submit and Make current

Milestone 4: Tables

Activity 1: Creation of Family Expenses Table

1. Go to All > In the filter search for Tables > click on New.
2. Enter the Details:
 - i Label: Family Expenses
 - ii Name: Auto-Populated
 - iii New menu name: Family Expenditure

3.

4. Go to the Header and right click there>> click on Save.

Creation of Columns (Fields)

- 1. Near Columns Double click near insert a new row.**
- 2. Give the details as:**
 - a) Column label: Number**
 - b) Type: String**
- 3. Double click on insert a new row again**
- 4. Give the details as:**
 - a) Column label: Date**
 - b) Type: Date**
- 5. Double click on insert a new row again**
- 6. Give the details as:**
 - a) Column label: Amount**
 - b) Type: Integer**
- 7. Double click on insert a new row again**
- 8. Give the details as:**
 - a) Column label: Expense Details**
 - b) Type: String**
 - c) Max length: 800**

Table Columns for text						
Dictionary Entries						
	Column label	Type	Reference	Max length	Default value	Display
	Created	Date/Time	(empty)	40		false
	Updates	Integer	(empty)	40		false
	Created by	String	(empty)	40		false
	Updated	Date/Time	(empty)	40		false
	Sys ID	Sys ID (GUID)	(empty)	32		false
	Updated by	String	(empty)	40		false
✖️	Number	String				false
✖️	Date	Date				false
✖️	Amount	Integer				false
✖️	Expenses Details	String		800		false
+	Insert a new row...					

9.Go to the Header and right click there>> click on Save.

Making Number Field an Auto-Number

- 1. Double click on the Number Field/Column.**
- 2. Go down and double click on Advanced view**
- 3. In Default Value:**
 - i Use dynamic default: check the box**
 - ii Dynamic default value: Get Next Padded Number**
- 4. Click on Update.**

The Default value specifies what value the field has when first displayed.

Use dynamic default

Dynamic default value

5.

- 6. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance**
- 7. Click on New.**
- 8. Enter the below Details:**

- i Table: Family Expenses**
- ii Prefix: MFE**

Number
New record

* Table

Prefix

* Number

Application

Number of digits

iii

- 9. Click on Submit.**

Configure the Form

- 1. .Go to All >> In the filter search for Family Expenses >> Open Family Expenses**
- 2. Click on New**
- 3. Go to the Header and right click there>> click on Configure >> Select Form Design**
- 4. Customize or Drag Drop the form as per your requirement.**

The screenshot shows a form configuration interface with two main sections. The top section is titled '2 Column' and contains three fields: 'Number' (Read-Only), 'Date', and 'Amount'. Each field has a gear icon for settings and a close button. The bottom section is titled '1 Column' and contains a single field labeled 'Expenses Details'. This field also has a gear icon and a close button. The interface includes a toolbar at the top with various icons for file operations.

i

- 5. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only**
- 6. Make Date, Amount Mandatory Field by clicking on the gear icon and checking Mandatory**
- 7. Click on Save**

Milestone 5: Create of table

Activity 1: Creation of Daily Expenses Table

- 1. Go to All > In the filter search for Tables > click on New.**
- 2. Enter the Details:**
 - i Label: Daily Expenses**
 - ii Name: Auto-Populated**
 - iii Add Module to menu: Family Expenditure**

The screenshot shows a configuration screen for a database module. On the left, there are three input fields: 'Label' containing 'Daily Expenses', 'Name' containing 'u_daily_expenses', and 'Extends table' which is empty. On the right, there are several configuration options: 'Application' set to 'Global', 'Create module' checked, 'Create mobile module' checked, 'Add module to menu' set to '-- Create new --', and 'New menu name' set to 'Family Expenditure'.

iv

3. Go to the Header and right click there>> click on Save.

Creation of Columns(Fields)

- 1. Near Columns Double click near insert a new row.**
- 2. Give the details as:**
 - a) Column label: Number**
 - b) Type: String**
- 3. Double click on insert a new row again**
- 4. Give the details as:**
 - a) Column label: Date**
 - b) Type: Date**
- 5. Double click on insert a new row again**
- 6. Give the details as:**
 - a) Column label: Expense**
 - b) Type: Integer**
- 7. Double click on insert a new row again**
- 8. Give the details as:**
 - a) Column label: Family Member Name**
 - b) Type: Reference**
 - c) Max length: 800**
- 9. Double click on insert a new row again**
- 10. Give the details as:**
 - a) Column label: Comments**
 - b) Type: String**
 - c) Max length: 800**

11. Go to the Header and right click there>> click on Save.

Making Number Field an Auto-Number

- 1. Double click on the Number Field/Column.**
- 2. Go down and double click on Advanced view**
- 3. In Default Value:**
 - i Use dynamic default: check the box**
 - ii Dynamic default value: Get Next Padded Number**
- 4. Click on Update.**

The Default value specifies what value the field has when first displayed.

Use dynamic default

Dynamic default value 🔍 ⓘ

>Delete Column Update

- 5. Go to All >> In the filter search for Number Maintenance >> select Number Maintenance**
- 6. Click on New.**
- 7. Enter the below Details:**
 - i Table: Family Expenses**
 - ii Prefix: MFE**

* Table 🔍 ⓘ

Prefix 🔍 ⓘ

* Number ⓘ

Application ⓘ

Number of digits ⓘ

iii Submit

- 8. Click on Submit.**

Configure the Form

1. Go to All >> In the filter search for Daily Expenses >> Open Daily Expenses
2. Click on New
3. Go to the Header and right click there >> click on Configure >> Select Form Design
4. Customize or Drag Drop the form as per your requirement.

The screenshot shows a form configuration interface with two columns. The top column, labeled '2 Column', contains four fields: 'Number' (Read-Only), 'Date', 'Family Member Name', and 'Expenses'. The bottom column, labeled '1 Column', contains one field: 'Comments'. Each field has a gear icon for settings and a delete icon.

5. Make Number Read-Only Field by clicking on the gear icon and checking Read-Only
6. Make Date, Family Member Name Mandatory Field by clicking on the gear icon and checking Mandatory
7. Click on Save

Milestone 6: Creation of Relationship

Activity 1: Creation of Relationship between Family Expenses and Daily Expenses tables

1. Go to All >> In the filter search for Relationships >> Open Relationships

2. Click on New.

3. Enter the details:

i Name: Daily Expenses

ii Applies to table: Select Family Expenses

iii Daily Expenses: Select Daily Expenses

4. Click Save.

Milestone 7: Configuring Related List

Activity 1: Configuring Related List on Family Expenses

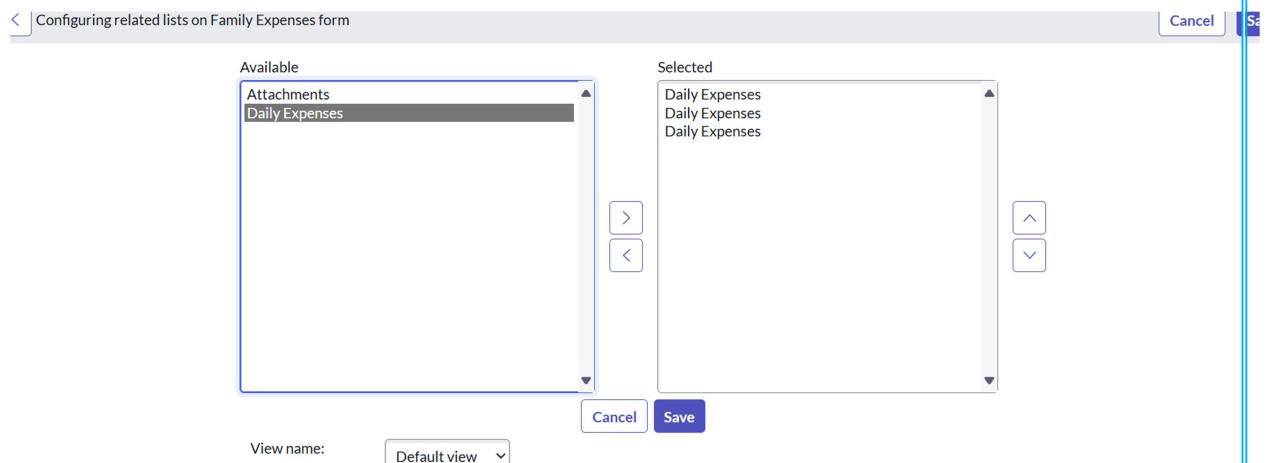
**1. Go to All >> In the filter search for Family Expenses
>> Open Family Expenses**

2. Click on New

**3. Go to the Header and right click there>> click on
Configure >> Select Related Lists**

4. Add Daily Expenses to the Selected Area.

5. Click on Save



Milestone 8: creation of Business

Activity 1: Creation of Business Rules

- 1. Go to All >> In the filter search for Business Rules.**
- 2. Under System Definition Select Business Rules then click on New.**
- 3. Enter the Details:**
 - i Name: Family Expenses BR**
 - ii Table: Select Daily Expenses**
 - iii Check Advanced**

The screenshot shows the 'Business Rule' configuration page. At the top, there are fields for 'Name' (Family Expenses BR) and 'Table' (Daily Expenses [u_daily_expenses...]). On the right, there are checkboxes for 'Application' (Global), 'Active' (checked), and 'Advanced' (checked). Below these, there is a large, mostly empty text area labeled 'When to run'.

- iv**
- 4. In when to run Check Insert and Update**

The screenshot shows the 'When to run' tab of the Business Rule configuration. It includes sections for 'Actions' (Insert checked, Update checked, Delete unchecked, Query unchecked) and 'Filter Conditions' (Add Filter Condition, Add OR Clause). There is also a 'Role conditions' section with a pencil icon.

- i**
- 5. In Advance(we write the code): Write the below code**
- >>**
- 6.**

- i (function executeRule(current, previous /*null when async*/ {**
- 7.**
- i var Family Expenses = new GlideRecord('u_family_expenses');**

```

ii FamilyExpenses.addQuery('u_date',current.u_date);
iii FamilyExpenses.query();
iv if(FamilyExpenses.next())
v {
vi FamilyExpenses.u_amount += current.u_expense;
vii FamilyExpenses.u_expense_details +=
">" + current.u_comments + ":" + "Rs." + current.u_
expense + "/-";
viii FamilyExpenses.update();
ix }
x else
xi {
xii var NewFamilyExpenses = new
GlideRecord('u_family_expenses');
xiii NewFamilyExpenses.u_date = current.u_date;
xiv NewFamilyExpenses.u_amount =
current.u_expense;
xv NewFamilyExpenses.u_expense_details +=
">" + current.u_comments + ":" + "Rs." + current.u_
expense + "/-";
xvi NewFamilyExpenses.insert();
xvii }

```

8.

i })(current, previous);

9. Go to the Header and right click there>> click on Save

```

1 (function executeRule(current, previous /*null when async*/) {
2
3     var FamilyExpenses = new GlideRecord('u_family_expenses');
4     FamilyExpenses.addQuery('u_date',current.u_date);
5     FamilyExpenses.query();
6     if(FamilyExpenses.next())
7     {
8         FamilyExpenses.u_amount += current.u_expense;
9         FamilyExpenses.u_expense_details += ">" + current.u_comments + ":" + "Rs." + current.
10        u_expense + "/";
11    }
12    else
13    {
14        var NewFamilyExpenses = new GlideRecord('u_family_expenses');
15        NewFamilyExpenses.u_date = current.u_date;
16        NewFamilyExpenses.u_amount = current.u_expense;
17        NewFamilyExpenses.u_expense_details += ">" + current.u_comments + ":" + "Rs." + current.
18        u_expense + "/";
19        NewFamilyExpenses.insert();
}

```

Milestone 9: Configure the Relationship

Activity 1: Configure the Relationship

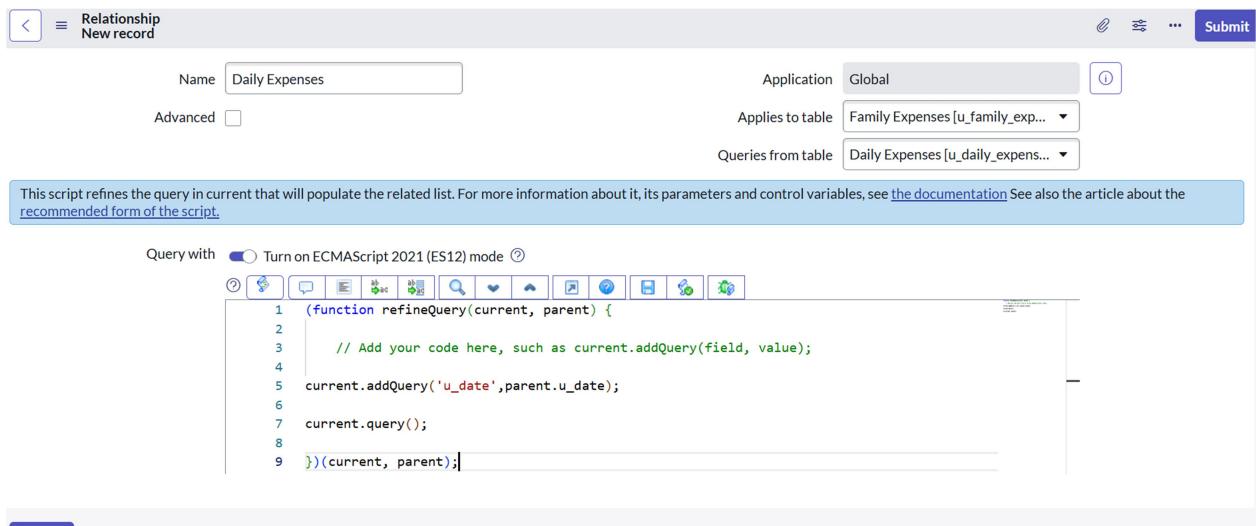
- 1. Go to All >> In the filter search for Relationships >> Open Relationships.**
- 2. In that, open Daily Expenses Relationship.**
- 3. For Applies to table: Select Family Expenses.**
- 4. In Query with: write the below Query.**

(function refineQuery(current, parent) {

**// Add your code here, such as
**current.addQuery(field, value);
current.addQuery('u_date',parent.u_date);
current.query();****

})(current, parent);

5.Click on Update.



6.Go to the Header and right click there>> click on Save.

- Creation Of Relationship
 - Creation Of Relationship Between Family Expenses And Daily Expenses Tables
- Configuring Related List On Family Expenses
 - Configuring Related List On Family Expenses
- Creation Of Business Rules
 - Creation Of Business Rules

Conclusion

Filename: SN_Document
Directory: C:
Template: C:\Users\ADMIN\AppData\Roaming\Microsoft\Templates\Normal.d
otm
Title:
Subject:
Author: Microsoft account
Keywords:
Comments:
Creation Date: 10/09/2025 19:42:00
Change Number: 3
Last Saved On: 10/09/2025 19:54:00
Last Saved By: ADMIN
Total Editing Time: 6 Minutes
Last Printed On: 10/09/2025 20:14:00
As of Last Complete Printing
Number of Pages: 21
Number of Words: 1,314 (approx.)
Number of Characters: 7,490 (approx.)