

Topic: Switch Case Statements

Time: 1 Hour | Total Marks: 50

Exam Description:

This examination assesses your understanding of the **switch-case statement** in C programming. Each problem requires you to implement structured decision-making logic using <code>switch</code>. Ensure your program is properly commented, indented, and produces the correct **input/output**.

Instructions:

- Attempt **any five** questions.
- Each question carries 10 marks.
- Use switch-case for decision-making tasks.
- Include input and output statements in your programs.
- Ensure neat and readable code formatting.

1. Calculator Program

Write a program that performs basic arithmetic operations (addition, subtraction, multiplication, division) using switch-case. Display a menu for user choice and perform the selected operation.

```
Sample Input:
Enter choice: 1
Enter two numbers: 10 5

Sample Output:
Sum = 15
```

2. Day of the Week Finder

Write a program that takes an integer (1–7) and prints the corresponding day of the week using switch.

```
Sample Input:
Enter number: 3

Sample Output:
Wednesday
```

3. Month Name Finder

Create a C program that takes a number (1–12) and displays the corresponding month name using a switch-case structure.

```
Sample Input:

Enter month number: 12

Sample Output:

December
```

4. Grade Evaluation System

Write a program that accepts a grade character (A, B, C, D, F) and prints the meaning of the grade using switch. Example: A \rightarrow Excellent, B \rightarrow Good, C \rightarrow Average, D \rightarrow Pass, F \rightarrow Fail.

```
Sample Input:

Enter grade: B

Sample Output:

Good
```

5. Electricity Bill Calculator

Write a program to calculate the total electricity bill using switch-case as per the following rates:

- o 0–100 units → ₹5/unit
- o 101–200 units → ₹7/unit
- o 201–500 units → ₹10/unit
- o Above 500 units → ₹15/unit

Sample Input:

Enter units consumed: 150

Sample Output:

Total Bill = ₹1050

6. Vehicle Type Checker

Develop a program that accepts a number (1–5) from the user and displays the corresponding vehicle type and number of wheels.

Sample Input:

Enter your choice: 2

Sample Output:

Bike → 2 wheels

7. Mobile Recharge Plan

Create a C program to display mobile recharge plans using switch-case. The program should show validity and price details for the selected plan.

Sample Input: Enter plan number: 3 Sample Output: You selected ₹399 plan - 56 days validity.

8. Movie Ticket Booking

Write a C program that shows ticket categories and uses switch-case to display ticket price for the chosen type.

```
Sample Input:
Enter seat type: 4

Sample Output:

VIP Ticket - ₹500
```

9. Restaurant Menu

Write a program that displays a restaurant food menu and uses switch-case to display the selected item's price.

```
Sample Input:
Enter your order: 2

Sample Output:
You ordered Pizza - ₹150
```

10. ATM Operation Simulator

Updated Balance = ₹15000

Create a program that simulates basic ATM operations: check balance, deposit money, withdraw money, and exit. Implement each operation using switch-case.

```
Sample Input:
Enter your choice: 2
Enter amount to deposit: 5000

Sample Output:
₹5000 deposited successfully.
```