

# Daffodil International University

Course Code: CSE113 | Course Title: Programming & Problem Solving

Section: 72\_M | Time: 30 Minutes | Marks: 15

## Quiz - 1

1. State the Course Outcomes (COs) of Programming and Problem Solving course and provide [5] the mapping of the COs with the corresponding Program Outcomes (POs).
2. Suppose you are developing a C program to assist a salesman in calculating the total sales [5] amount. The salesman sells three products: honey, nuts, and black seed. Write a C program that reads the selling amount of each of these three products as input and calculates and displays the total amount that the customer needs to pay.

Input: The selling amounts of Honey, Nuts, and Black Seed.

Output: The total amount payable by the customer with an appropriate message.

| Sample Input                                                           | Sample Output                                                        |
|------------------------------------------------------------------------|----------------------------------------------------------------------|
| Honey Amount: 470 ①<br>Nuts Amount: 230 ①<br>Black Seeds Amount: 335 ① | Total Bill: 1035 ①<br><br>calculation - ①                            |
| Honey Amount: 900<br>Nuts Amount: 0<br>Black Seeds Amount: 35          | Total Bill: 935<br>input - 0.5<br>condition - 2<br>calculation - 1.5 |

output - 1

3. Assume a customer's monthly electricity consumption is recorded in units. Write a C program [5] that reads the number of units consumed and calculates the electricity bill based on the following conditions: if the consumption is 100 units or less, the rate is 5 taka per unit; if the consumption is between 101 and 200 units, the rate is 7 taka per unit; otherwise, the rate is 10 taka per unit. The program should display the total electricity bill based on the applicable rate.

Input: No of units used by the user.

Output: Bill amount with an appropriate message.

| Sample Input | Sample Output          |
|--------------|------------------------|
| 200          | Electricity Bill: 1400 |
| 35           | Electricity Bill: 175  |