**National Textile University, Faisalabad**



**Department of Computer Science**

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| **Section** | BSSE (B) |
| **Registration No** | 24-NTU-CS-FL-1207 |
| **Course Name** | OOP |
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**Question no.01**

**Book.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Classes\_and\_Objects\_01

{

internal class Book

{

public string Title;

public string Author;

public string ISBN;

public double Price;

public void DisplayBookInfo()

{

Console.WriteLine("Book Info is :");

Console.WriteLine($"Book Title is {Title}");

Console.WriteLine($"Book Author is {Author}");

Console.WriteLine($"Book ISBN is {ISBN}");

Console.WriteLine($"Book Price is {Price}");

}

public void ApplyDiscount(double percentage)

{

if (percentage >= 0 && percentage <= 100)

{

Price = Price - (Price \* percentage / 100);

Console.WriteLine($"Discount Applied is {Price} ");

}

else

{

Console.WriteLine("Invalid Discount Percentage");

}

}

}

}

**Program.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Classes\_and\_Objects\_01

{

internal class Program

{

static void Main(string[] args)

{

Book book1 = new Book();

book1.Title = "English";

book1.Author = "Khaldoon Ahmed";

book1.ISBN = "345677";

book1.Price = 50.0;

book1.DisplayBookInfo();

book1.ApplyDiscount(10);

Console.Write("Updated Book Details: ");

book1.DisplayBookInfo();

}

}

}

**Question 02**

**Employee.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Classes\_and\_Objects\_02

{

internal class Employee

{

public int EmployeeID;

public string Name;

public string Department;

public double Salary;

public Employee(int id, string name, string department, double salary)

{

EmployeeID = id;

Name = name;

Department = department;

Salary = salary;

}

public void DisplayDetails()

{

Console.WriteLine("Employee Details are : ");

Console.WriteLine($"Employee ID is {EmployeeID}");

Console.WriteLine($"Employee Name is {Name}");

Console.WriteLine($"Employee Department is {Department}");

Console.WriteLine($"Employee Salary is {Salary}");

}

public void IncreaseSalary(double amount)

{

if (amount > 0)

{

Salary += amount;

Console.WriteLine($"Salary increased is {Salary}");

}

else

{

Console.WriteLine("Invalid Salary Increases Amount");

}

}

}

}

**Program.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Classes\_and\_Objects\_02

{

internal class Program

{

static void Main(string[] args)

{

Employee employee = new Employee(1207, "Muskan", "Software Engineer", 70000.0);

employee.DisplayDetails();

employee.IncreaseSalary(20000);

employee.DisplayDetails();

}

}

}