

Department of Computer Science & Engineering

Semester III

OOPs With C++(TCS-307)

Assignment-2

Note:

Date of Assignment: 15 Oct 2022

Date of Submission: 31 Oct 2022

Q1. Q1. Define a class employee having the following description: C01

<u>Data Members</u>	<u>Description</u>
Pan	To store personal account number
Name	To store name
Taxincome	To store annual taxable income
Tax	To store tax that is calculated

<u>Member Functions</u>	<u>Description</u>
InputInfo()	Store the pan number,name,taxableincome
TaxCalc()	Calculate tax for an employee
DisplayInfo()	Output details of an employee

Write a C++ program to compute the tax according to the given conditions and display the output.

<u>Total Annual Taxable Income</u>	<u>Tax Rate</u>
Upto 2,50,000	No tax
From 2,50,000 to 3,00,000	10 % of the income exceeding 2,50,000
From 3,00,000 to 4,00,000	Rs. 5000+20 % of the income exceeding 3,00,000
Above 4,00,000	Rs 25000 + 30 % of the income exceeding 4,00,000

Q2. Define a class named FriendDemo with following description:

C02

Data Members	Description
string str	
Member Functions	Description
void setstr(string)	This function will assign a sentence into str.
Friend Class	Description
friend class VowelCheck	

Define another class named VowelCheck with following description:

Member Functions	Description
void maxVowel(FriendDemo)	Display the word of the sentence that contains maximum number of vowels. Sample Input: HAPPY NEW YEAR Sample Output: The word with maximum number of vowels: YEAR

Q3. Create a class **Complex** having two int type variable named **real** & **img** denoting real and imaginary part respectively of a complex number. Overload + , - , = = **operator** to add, to subtract and to compare two complex numbers being denoted by the two complex type objects.

C03