



EASTERN UNIVERSITY, SRILANKA

DEPARTMENT OF MATHEMATICS

FIRST YEAR EXAMINATION IN SCIENCE –2007/2008

SECOND SEMESTER (Aug, /Sept, 2009)

CS 153 – PRACTICAL WORK ON CS-104

(PROPER/ REPEAT)

Answer all questions

Time allowed: 02 hours

Q1).

Create a class called **EmailUser** that contains three private data members (of type string) namely name, password, and one const data member called **userName**. Create a constructor that receives three parameters which will initialize name, userName, and password (Note that userName is const data member). Create a member function called setName() that has one parameter to set the name. Create three const member functions called getName(), getUserName(), and getPassword() that receives no parameter and will return name, userName, and password respectively. Create a non-const member function called printUserInfo(), that receives no parameters and doesn't return anything, to print user information. Given the driver program below;

```
int main()
```

```
{
```

```
EmailUser user("Jhon Right", "Kaka", "74ndlw1");
```

```
user.printUserInfo();
```

```
cout << "-----" << endl;
```

```
user.setName("Jhon Mark Right ");
```

```
user.change Password("mark1836");
```

```
cout << "Name = " << user.getName() << endl;

cout << "UserName = " << user.getUserName() << endl;

cout << "Password = " << user.getPassword() << endl;

return 0; }
```

**The output should be:**

Name : Jhon Right

UserName : Kaka

Password : 74ndlwl1

-----  
Name = Ahmad Bin Ali

UserName = Kaka

Password = mark1836

Press any key to continue



Q2).

Assume that a bank maintains two kinds of accounts for customers, one called as savings account and the other as current account. The savings account provides compound interest (10%) and withdrawal facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holders should also maintain a minimum balance of Rs. 500 and if the balance falls below this level, an 11% service charged is imposed. Create a **class** account that stores a customer name, account number and type of account. From this derive the classes **current\_acc** and **savings\_acc** to make them more specific to their requirements. Include necessary member functions in order to achieve the following tasks.

- a) Accept deposit from the customer and update the balance.
- b) Display the balance.
- c) Compute and deposit the interest.
- d) Permit withdrawal and update the balance.
- e) Check for the minimum balance, impose penalty, necessary, and update the balance.

Do not use constructors. Use member functions to initialize the class members.

Q3)

Define a class named Publisher in C++ with the following descriptions :

private members

Id long

title 40 char

author 40 char

price , stockqty double

stockvalue double

valcal() A function to find price\*stockqty with double as return type

Public members

- a constructor function to initialize price , stockqty and stockvalue as 0(zero)
- Enter() function to input the idnumber , title and author
- Takestock() function to increment stockqty by N(where N is passed as argument to this function) and call the function valcal() to update the stockvalue().
- sale() function to decrease the stockqty by N (where N is sale quantity passed to this function as argument) and also call the function valcal() to update the stockvalue
- outdata() function to display all the data members on the screen.