

a) Given the code snippet below,

```
Struct EmployeeRecord  
{  
int employeeNumber;  
string lastName;  
double rateOfPay;  
};
```

i) Include a class called employees that should be derived from the person's class. The class should define additional properties for employees such as salary and department and should have functions to input the additional data as well as display it.

[6 Marks]

ii) Include a menu to guide the user in selecting whether to enter employee's data or student's data.

[4 Marks]

Question Two

a) Write a C++ program that uses an array to compute and display a multiplication table like the one shown below;

*	1	2	3	4
1	1	2	3	4
2	2	4	6	8
3	3	6	9	12
4	4	8	12	16

b) Writes a c++ program that displays the pattern shown below;

*	*	*	*
1	*	*	*
2	2	*	*
3	3	3	*
4	4	4	3

[5 Marks]

Question Three

A certain class has 10 students. Each student takes three units, C++, Financial Accounting, PC maintenance. Their lecturer has requested you to develop a simple program for reading and displaying the marks scored by each student for the three units.

Required:

- > Write a program that will fulfill the above requirement.
- > Make use of functions for all calculations
- > Show intellectual use of arrays, and classes

[10 Marks]