UNIVERSITY OF ELDORET

COM 413 (O.O.P.) CAT 1

- 1. (a) Explain what the following operators in C++ are used to do.
 -) . (ii) -> (iii) :

(3 Marks)

- (b) Explain the meanings of the following OOP terms.
 - (i) Object
- (ii) Destructor

(2 Marks)

- 2. Assume a class named **m** with a void member function named **a()**. Write appropriate statements to input the size of instances that we want, create an array instance of that size, and then call the member function **a()** for each of the instances. **Hint**: Use a pointer. **(2 Marks)**
- 3. (i) Write a <u>class</u> named **student** with two data members named **regno** (a string) and **year** (an integer). The class should also have prototypes of the following member functions which should also be defined outside the class;
 - assign() that receives a string and an integer and assigns them to the data members.
 - get_year() that returns year.

(5 Marks)

(ii) Write <u>code</u> to invoke the above two member functions using a pointer.

(2 Marks)

155ignment 1

4. Consider the following class for storing the code and name of a member of staff at University of Eldoret.

```
class staff
{
    int code;
    char name[50];
};
```

Required .

- (i) Rewrite the <u>class</u> to include the following prototypes of member functions: A parameterized constructor, a copy constructor, and member function named **show()** that displays the details of the staff.(1.5 Marks)
- (ii) Write the <u>definitions</u> of the above three member functions when defined outside the class. (4.5 Marks)