## QUESTION ONE:

- (1) Base-class constructors are not inherited by derived classes
  Ans:True
- (2) An is-a relationship is implemented via composition.

Ans:False

Revise: An has-a relationship is implemented via compostion.

(3) A Student class has an *is-a* relationship with the Faculty and Course classes.

Ans:False

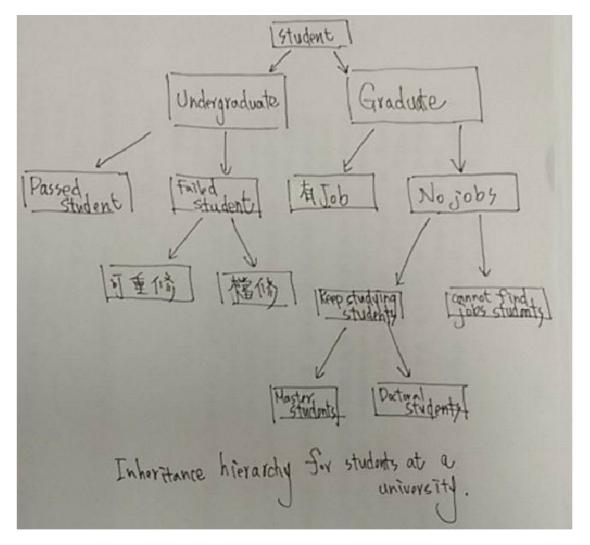
Revise: A Student class has an *has-a* relationship with the Faculty and Course classes.

(4) Private members of a private base class are inaccessible to the derived class.

Ans:True

(5) A base class's protected members can be accessed in the base-class definition, in derived-class definitions and in friends of the base class and its derived classes.

## **QUESTION TWO:**



The "student" class is the base class.

And the classes below it are all derived class.

The relationship between the "undergraduate" and "failed or passed students class" is grade.

The relationship between the "failed class" and "可重修"or"擋修" class is the rules.

The relationship between "Graduate student class" and the two derived classes below is the job.

The relationship between "jobless class" and the two derived classes below is the reason.

The relationship between "keep studying students" and the two derived classes below is the grade.