



Part B

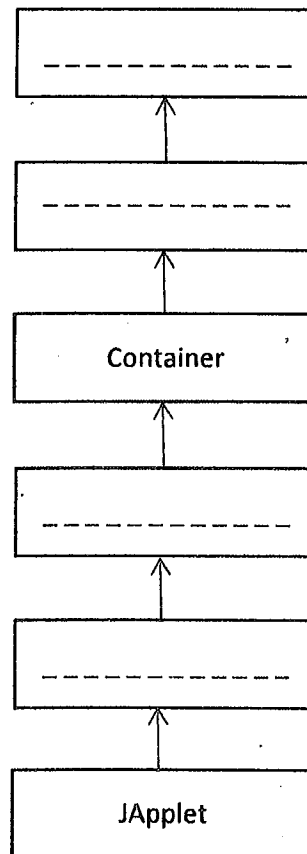
Instructions to candidates

Number of questions: Six (06) structured questions

Answer all questions on the given space

Mark allocation: 20

1. Fill missing classes/interfaces in hierarchy of Applet class given below.



(4 mark)

2. List three (03) advantages of the Hibernate framework.

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(3 mark)



3.

a. Fill in the blanks using suitable java codes in below java multi-threaded program

```
class Animal implements Runnable{
    String type= "Animal";
    @Override
    public void run() {
        System.out.println("I'm a " + type);
    }
}

class Dog extends Animal{
    Dog(){
        this.type="Dog";
    }
}

public class Pets {
    public static void main(String[] args) {
        Animal dog= new Dog();

        Thread dogT= -----
        //set dog thread's priority to 10

        -----

        //run dog thread as a separate thread

        -----

    }
}
```

4. List three (03) solid principles in Object Oriented Programming.

5. For each of the following sentences, fill in each blank with the best word selected from the list below. Not all words or phrases will be used.

ORM , change , yield , Interceptor , Filter , join , sleep , ActionInvocation , ValueStack , JDBCActionContext , influence

- a. _____ is an object that is invoked at the preprocessing and post processing of a request.
- b. _____ provides Java API for accessing the relational databases from Java program.
- c. A Programmer can _____ the thread scheduler.
- d. _____ is supposed to do operating system make the currently running thread head back runnable to allow other threads off the same priority to get their turn.
- e. The _____ represents the execution state of an action. It holds the action and interceptors objects.

(5 mark)

6. Briefly explain why multiple asserts are not used in a single test case?

(2 mark)

