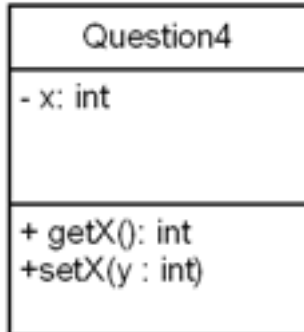


OOADP Exam 2010 Answers

1. (5) D
2. (5) C
3. (5) C
4. (5)



5. (5)

```
public class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Hello world!");  
    }  
}
```

6. (5)
-5d-5
-2
-2

7. (5)
5 0
4 2
3 4

8. (5)
behaviour, state and identity (in any order).

9. (5)
(a) public (+)
(b) getY(int)
(c) getY
(d) int
(e) x : int

10. (5)
A

11. (5)
0 0

12. (5)
user, article, system, subscriber information, journal, method of payment,
payment, credit card, organisational account number

13. (5)
a. UML class diagram
b. That this is an aggregation.
c. 12 or more
d. 1 or more

- e. Nothing, provided there is at least one degree programme to which a course belongs.
14. (5)
- a. subclass
 - b. d
 - c. f
 - d. No – c is private so it is only visible within objects of class B.
15. (5)
- Line 5, because the instance variable x is final and has already been assigned a value.
16. (5)
- XXX = meth1, ZZZ = meth2, YYY = meth3
17. (10)
- a. A sequence diagram.
 - b. A found message.
 - c. Asynchronous message.
 - d. A synchronous message.
 - e. If x is equal to 2.
 - f. An object.
 - g. An object.
 - h. A class.
 - i. Don't know – different threads.
 - j. msg3
18. (10)
- a. A UML class diagram
 - b. ArrayList and Order
 - c. AbstractList
 - d. equals and add from the Collection interface; get from the List interface; get in AbstractList abstract class.
 - e. That AbstractList implements the List interface.
 - f. That List is a subinterface of Collection, i.e., that List inherits from Collection.
 - g. That Order requires or uses the List interface.
 - h. That ArrayList is a subclass of AbstractList.
 - i. No. Because it contains an abstract method, get.
 - j. ArrayList.
19. (10)
- AAAAAAA = DDDDDDD = implements Shape
 BBBBBBB = EEEEEEE = display
 CCCCCC = FOO
 FFFFFFF = BAR
 GGGGGG = HHHHHH = <Shape>
20. (10)
- Barp
 - Blip
 - Invalid
 - Invalid
 - Boop

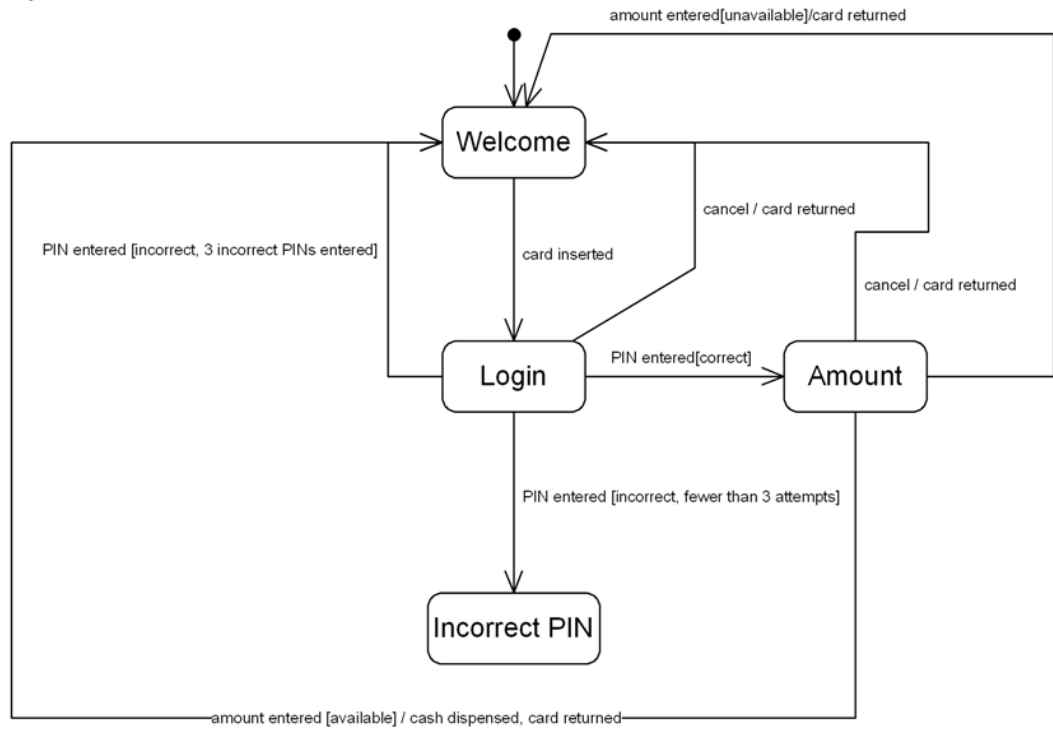
21. (10)

a. Activity diagram

b. A = Initial node or start marker

B = fork, C = action, D = flow or edge, E = join, F = activity final or stop marker, G = merge, H = decision diamond, I = guard

22. (10)



23. (10 marks)

