

Network connection lost. (Autosave failed).

Dashboard (<http://kmitonline.com/student/dashboard.php>) / Quiz

Make a note of any responses entered on this page in the last few minutes, then try to re-

connect.

Given:

Question

1

Once connection has been re-established, your responses should be saved and this message will disappear.

Not yet
answered

Marked out of
1.00

```
3. public class Ebb {  
4.     static int x = 7;  
5.     public static void main(String[] args) {  
6.         String s = "";  
7.         for(int y = 0; y < 3; y++) {  
8.             x++;  
9.             switch(x) {  
10.                 case 8: s += "8 ";  
11.                 case 9: s += "9 ";  
12.                 case 10: { s+= "10 "; break; }  
13.                 default: s += "d ";  
14.                 case 13: s+= "13 ";  
15.             }  
16.         }  
17.         System.out.println(s);  
18.     }  
19.     static { x++; }  
20. }
```

What is the result?

Select one:

- ☐ a. 9 10 d
- ☐ b. 8 9 10 10 d 13
- ☒ c. 9 10 10 d 13
- ☐ d. 8 9 10 9 10 10 d 13
- ☐ e. 8 9 10 d
- ☐ f. 9 10 10 d
- ☐ g. Compilation fails

Question 2

Not yet answered

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Given:

```
3. class Infinity {  
4.     public class Beyond extends Infinity {  
5.     static Integer i;  
6.     public static void main(String[] args) {  
7.         int sw = (int)(Math.random() * 3);  
8.         switch(sw) {  
9.             case 0: { for(int x = 10; x > 5; x++)  
10.                 if(x > 10000000) x = 10;  
11.                 break; }  
12.             case 1: { int y = 7 * i; break; }  
13.             case 2: { Infinity inf = new Beyond();  
14.                 Beyond b = (Beyond)inf; }  
15.         }  
16.     }  
17. }
```

And given that line 7 will assign the value 0, 1, or 2 to sw, which are true?
(Choose all that apply.)

Select one or more:

- ☐ a. A `ClassCastException` might be thrown
- ☐ b. The program will always complete without exception.
- ☐ c. An `IllegalStateException` might be thrown
- ☒ d. The program might hang without ever completing
- ☐ e. A `StackOverflowError` might be thrown
- ☒ f. A `NullPointerException` might be thrown
- ☐ g. Compilation fails

Question 3

Not yet answered

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Given:

```
class CardBoard {
    Short story = 200;

    CardBoard go(CardBoard cb) {
        cb = null;
        return cb;
    }

    public static void main(String[] args) {
        CardBoard c1 = new CardBoard();
        CardBoard c2 = new CardBoard();
        CardBoard c3 = c1.go(c2);
        c1 = null;
        // do Stuff
    }
}
```

When // doStuff is reached, how many objects are eligible for GC?

Select one:

- ☐ a. Compilation fails
- ☒ b. 2
- ☐ c. An exception is thrown at runtime
- ☐ d. 0
- ☐ e. 1
- ☐ f. It is not possible to know

Question

4

Not yet
answered

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```
class Bird {  
    { System.out.print("b1 "); }  
    public Bird() { System.out.print("b2 "); }  
}  
  
class Raptor extends Bird {  
    static { System.out.print("r1 "); }  
    public Raptor() { System.out.print("r2 "); }  
    { System.out.print("r3 "); }  
    static { System.out.print("r4 "); }  
}  
  
class Hawk extends Raptor {  
    public static void main(String[] args) {  
        System.out.print("pre ");  
        new Hawk();  
        System.out.println("hawk ");  
    }  
}
```

What is the result?

Select one:

- ☐ a. pre b2 b1 r2 r3 hawk r1 r4
- ☐ b. r1 r4 pre b2 b1 r2 r3 hawk
- ☐ c. pre r1 r4 b2 b1 r2 r3 hawk
- ☐ d. Compilation fails
- ☐ e. pre b2 b1 r2 r3 hawk
- ☐ f. The order of output cannot be predicted
- ☐ g. pre r1 r4 b1 b2 r3 r2 hawk
- ☐ h. pre b1 b2 r3 r2 hawk
- ☒ i. r1 r4 pre b1 b2 r3 r2 hawk

Question

5

Not yet
answered

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```
3. public class Bertha {
4.     static String s = "";
5.     public static void main(String[] args) {
6.         int x = 4; Boolean y = true; short[] sa = {1,2,3};
7.         doStuff(x, y);
8.         doStuff(x);
9.         doStuff(sa, sa);
10.        System.out.println(s);
11.    }
12.    static void doStuff(Object o)    { s += "1"; }
13.    static void doStuff(Object... o) { s += "2"; }
14.    static void doStuff(Integer... i) { s += "3"; }
15.    static void doStuff(Long L)     { s += "4"; }
16. }
```

What is the result?

Select one:

- ☐ a. 234
- ☐ b. Compilation fails
- ☐ c. 312
- ☐ d. 332
- ☐ e. 232
- ☒ f. 212
- ☐ g. 334

Question

6

Not yet
answered

Marked out of
1.00

In student3 (Sno integer PRIMARY KEY), after inserting (101, 'Arun'), what happens if you update Sno=101 to NULL?

Select one:

- ☐ a. Update fails due to UNIQUE violation.
- ☐ b. Update succeeds.
- ☐ c. Update fails due to PRIMARY KEY's NOT NULL requirement.
- ☐ d. Update succeeds but deletes the row.

Question 5

Not answered

Marked out of 1.00

Given:

```
3. public class Bertha {
4.     static String s = "";
5.     public static void main(String[] args) {
6.         int x = 4; Boolean y = true; short[] sa = {1,2,3};
7.         doStuff(x, y);
8.         doStuff(x);
9.         doStuff(sa, sa);
10.        System.out.println(s);
11.    }
12.    static void doStuff(Object o)    { s += "1"; }
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14.    static void doStuff(Integer... i) { s += "3"; }
15.    static void doStuff(Long L)      { s += "4"; }
16. }
```

What is the result?

Select one:

- ☐ a. 234
- ☐ b. Compilation fails
- ☐ c. 312
- ☐ d. 332
- ☐ e. 232
- ☐ f. 212
- ☐ g. 334

Question 6

Complete

Mark 1.00 out of 1.00

In student3 (Sno integer PRIMARY KEY), after inserting (101, 'Arun'), what happens if you update Sno=101 to NULL?

Select one:

- ☐ a. Update fails due to UNIQUE violation.
- ☐ b. Update succeeds.
- ☒ c. Update fails due to PRIMARY KEY's NOT NULL requirement.
- ☐ d. Update succeeds but deletes the row.

Question 7

Complete

Mark 1.00 out of 1.00

In school(sno integer PRIMARY KEY) and library(sno integer PRIMARY KEY,FOREIGN KEY (sno) REFERENCES school(sno) ON UPDATE CASCADE),after inserting (102) in school and (102) in library, what happens if you update school.sno=102 to 103?

Select one:

- ☒ a. Both school.sno and library.sno become 103.
- ☐ b. Update fails due to PRIMARY KEY conflict.
- ☐ c. Update fails due to FOREIGN KEY.
- ☐ d. school.sno becomes 103, library.sno remains 102.

Question 8

Complete

Mark 1.00 out of 1.00

In student4, after inserting ('Ravi', 'Reddy', 40) and ('Kavita', 'Reddy', 40), can you update lastname='Reddy' to NULL for all rows?

Select one:

- ☐ a. No, because firstname must be unique.
- ☐ b. Yes, because lastname isn't NOT NULL.
- ☒ c. No, because composite PRIMARY KEY requires non-null values.
- ☐ d. Yes, but only for one row.

Question 9

Complete

Mark 1.00 out of 1.00

In student4 (firstname varchar(10), lastname varchar(10), PRIMARY KEY(firstname, lastname)),after inserting ('Ravi', 'Reddy'), can you insert ('Ravi', NULL)?

Select one:

- ☐ a. Yes, but only if firstname is unique.
- ☐ b. No, because firstname must be unique alone.
- ☐ c. Yes, because lastname isn't explicitly NOT NULL.
- ☒ d. No, because composite PRIMARY KEY requires non-null values.

Question 10

Complete

Mark 1.00 out of 1.00

In library (sno integer PRIMARY KEY, FOREIGN KEY (sno) REFERENCES school(sno) ON DELETE CASCADE), with school (sno=101) and library (sno=101), what happens if you delete sno=101 from school?

Select one:

- ☐ a. Only school row is deleted, library remains.
- ☐ b. Deletion fails due to PRIMARY KEY.
- ☐ c. Deletion fails due to FOREIGN KEY.
- ☒ d. Both school and library rows are deleted.

Question 11

Complete

Mark 1.00 out of 1.00

How can array elements be accessed?

Select one:

- ☐ a. logarithmically
- ☐ b. sequentially
- ☐ c. exponentially
- ☒ d. randomly

Question 12

Complete

Mark 1.00 out of 1.00

The prefix form of $((a/b)+c)-(d+(e*f))$ is?

Select one:

- ☒ a. - + / a b c + d * e f
- ☐ b. - / a b + c + d * e f
- ☐ c. - + a / b c d + * e f
- ☐ d. + - / a b c + d * e f

Question 13

Complete

Mark 1.00 out of 1.00

The data structure used to check whether an expression contains a balanced parenthesis is?

Select one:

- ☐ a. Queue
- ☒ b. Stack
- ☐ c. Array
- ☐ d. Tree

Question 14

Complete

Mark 1.00 out of
1.00

What is the term used when several elements compete for the same location in the hash table?

Select one:

- ☐ a. Diffusion
- ☐ b. Duplication
- ☐ c. Replication
- ☒ d. Collision

Question 15

Complete

Mark 1.00 out of
1.00

A full binary tree can be generated using

Select one:

- ☐ a. pre-order traversal
- ☒ b. post-order and pre-order traversal
- ☐ c. post-order traversal
- ☐ d. in-order traversal