

Correct answer

Question 1 4 / 4 pts

What is the type of coupling presents in the following code?

```
class DataHolder {  
    public int[] data = new int[5];  
}  
  
class Processor {  
    private DataHolder holder = new DataHolder();  
  
    public void process() {  
        for (int i = 0; i < holder.data.length; i++) {  
            holder.data[i] = i; // Direct access and modification  
        }  
    }  
}
```

Content Coupling

Data Coupling

Control Coupling

Stamp Coupling

Common Coupling

No Coupling issues in this code

Content Coupling. You selected this answer.  
This was the correct answer.

Correct answer

Question 2 4 / 4 pts

What is the cyclomatic complexity of the following code?

```
int x, y;  
cin >> x >> y;  
int diff = 0;  
cin >> x >> y;  
for (int i = 0; i < x; i++) {  
    if (y != 0)  
    {  
        diff += x - y;  
    }  
    x--;  
}  
cout << diff;
```

2

3

4

1

5

Correct answer

Question 3 4 / 4 pts

What is the main issue with the following code?

```
public class DiscountCalculator {  
    public static void main(String[] args) {  
        calculateDiscount("REGULAR");  
        calculateDiscount("PREMIUM");  
    }  
  
    public static void calculateDiscount(String customerType) {  
        double amount = 1000;  
        double discount = 0;  
  
        if (customerType.equals("REGULAR")) {  
            discount = amount * 0.05;  
            System.out.println("Customer Type: " + customerType);  
            System.out.println("Original Amount: " + amount);  
            System.out.println("Discount: " + discount); // ← duplicated  
            System.out.println("Final Amount: " + (amount - discount)); // ← duplicated  
        } else if (customerType.equals("PREMIUM")) {  
            discount = amount * 0.1;  
            System.out.println("Customer Type: " + customerType);  
            System.out.println("Original Amount: " + amount);  
            System.out.println("Discount: " + discount); // ← duplicated  
            System.out.println("Final Amount: " + (amount - discount)); // ← duplicated  
        }  
    }  
}
```

Long method

Too many temporary variables

Help Center ?

```
calculateDiscount("REGULAR");  
calculateDiscount("PREMIUM");  
}  
  
public static void calculateDiscount(String customerType) {  
    double amount = 1000;  
    double discount = 0;  
  
    if (customerType.equals("REGULAR")) {  
        discount = amount * 0.05;  
        System.out.println("Customer Type: " + customerType);  
        System.out.println("Original Amount: " + amount);  
        System.out.println("Discount: " + discount); // ← duplicated  
        System.out.println("Final Amount: " + (amount - discount)); // ← duplicated  
    } else if (customerType.equals("PREMIUM")) {  
        discount = amount * 0.1;  
        System.out.println("Customer Type: " + customerType);  
        System.out.println("Original Amount: " + amount);  
        System.out.println("Discount: " + discount); // ← duplicated  
        System.out.println("Final Amount: " + (amount - discount)); // ← duplicated  
    }  
}
```

Duplicate code

Long parameter list

Long parameter list

Correct answer

**Question 4** 2 / 2 pts

According to C-K matrix, maximum recommended Number of Children per class is 10 .....(T/F)

True  
 False

Correct answer

**Question 5** 2 / 2 pts

Code refactoring is the process of modifying the code to add more functionality in increments....(T/F)

True  
 False

Correct answer

**Question 6** 3 / 3 pts

What is main issue with the following object design?

```
public class Vehicle{  
    public string model;  
    public double enginePower;  
    public Vehicle()  
    {  
        enginePower = 0;  
        model = "";  
    }  
    public void setInfo(string m, double e)  
    {  
        enginePower = e;  
        model = m;  
    }  
}
```

High Coupling  
 Low Coupling  
 Lack of Information hiding  
 High Cohesion

Canvas X Help Center ?

High Coupling  
Low Coupling  
 Lack of Information hiding  
High Cohesion  
Low Cohesion

Wrong answer

Question 7 0 / 3 pts

What is the most suitable testing tool in this scenario?

A company is developing a web application that is expected to run on google chrome browser. This is a large scale application and running test cases to test the system needs considerable processing power. The company do not have sufficient resources to test the software in house.

Selenium IDE  
 Selenium Web Driver  
 Selenium Remote Web Driver  
 Selenium Grid  
 Equivalent Partitioning

Correct answer

Wrong answer 0 / 3 pts

Question 9

You are testing a web application but you do not have the knowledge about the internal design or the database schema. However, you know the expected output of the application functionalities. You decide to input test data into a web form to test the functionality of the web application test the output. Which type of testing are you performing? (Select the best matching answer)

Exploratory Testing  
 Black box Testing  
 White box Testing  
 Data Flow Testing  
 Gray box Testing

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**Question 10** 2 / 3 pts

Dataflow testing consists of several steps including: Label the source code nodes, develop the control flow graph, annotate the control flow graph with Definition, Usage sets for each node ...etc. Which of the following are examples of definition for variable X ? (select all that apply)

int X = 0

cin >> X

cout << X

X++

**Correct answer**

**Question 11** 4 / 4 pts

Consider the following printStars class that display start for each 100 for all the data items in the data array. What us the main issue in code?

```
import java.util.Scanner;
public class printStars
{
    public static void main(String[] args)
    {

        int [] data = {200, 678, 184};

        // Print stars
        System.out.println(" \n " + " Stars \n " + " (each * = 100)\n");
    }
}
```

Help Center ?

```
int [] data = {200, 678, 184};

// Print stars
System.out.println(" \n " + " Stars \n " + " (each * = 100)\n");

System.out.print(" \n\n Data Item 1: ");
for (star = 1; star <= data[i]/100; star++)
    System.out.print("*");

System.out.println();

System.out.print(" \n\n Data Item 2: ");
for (star = 1; star <= data[i]/100; star++)
    System.out.print("*");

System.out.println();

System.out.print(" \n\n Data Item 3: ");
for (star = 1; star <= data[i]/100; star++)
    System.out.print("*");

    System.out.println();
}
```

Information hiding

High coupling

Lack of Cohesion

Duplicate code

Low coupling

Correct answer

Question 12 3 / 3 pts

Which of the following code snippets correctly uses **Selenium WebDriver in Java** to load a website and click a button with the ID "submitBtn" ?

`"submitBtn" ?`

A)

```
WebDriver driver = new ChromeDriver();
driver.get("http://webstrar99.fulton.asu.edu/");
driver.findElement(By.name("submitBtn")).click();
```

B)

```
WebDriver driver = new ChromeDriver();
driver.load("http://webstrar99.fulton.asu.edu/");
driver.findElement(By.name("submitBtn")).click();
```

C)

```
WebDriver driver = new ChromeDriver();
driver.get("http://webstrar99.fulton.asu.edu/");
driver.findElement(By.id("submitBtn")).click();
```

D)

```
WebDriver driver = new ChromeDriver();
driver.load("http://webstrar99.fulton.asu.edu/");
driver.findElement(By.id("submitBtn")).click();
```

Select A, B, C or D

A

B

C

D

A

B

C

D

Correct answer

Question 13 2 / 2 pts

Which of the following review type focus on the status of plans and schedules, confirms requirements and their system allocation?

Management Review

Code view

Audit

Technical Review

Walkthrough

Inspections

Correct answer

Question 14 5 / 5 pts

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Walkthrough

Inspections

Correct answer

Question 14 5 / 5 pts

Consider the following annotated code segment. In the following code which of the following are correct D-U Pairs for the data variable sumTotal? (select all that apply)

(2, 15)

(2, 11)

(14, 14)

(6, 11)

(6, 7)

Quiz Score: 43 out of 5

