



Kuis Algorithms (OOP) - Kelas C
39 Questions

NAME : _____

CLASS : _____

DATE : _____

1. What is a Class?

- | | | | |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------|
| <input type="checkbox"/> A | A blueprint that defines and describes the static attributes and dynamic behaviors common to all objects of the same kind. | <input type="checkbox"/> B | It is a realization of a particular item of an object |
| <input type="checkbox"/> C | A block of code which only runs when it is called. | <input type="checkbox"/> D | A data field that has unique attributes and behavior |

2. The mechanism of hiding of data implementation by restricting access to public methods, is the definition of?

- | | | | |
|----------------------------|-----------------------------|----------------------------|---------------|
| <input type="checkbox"/> A | Abstraction | <input type="checkbox"/> B | Encapsulation |
| <input type="checkbox"/> C | Object Oriented Programming | <input type="checkbox"/> D | Polymorphism |

3. The best way to naming a class based on the Class Naming Convention are... (3 answers)

- | | | | |
|----------------------------|--------------------------------------------------------------|----------------------------|-----------------------------------------------------|
| <input type="checkbox"/> A | It shall be a noun or a noun phrase made up of several words | <input type="checkbox"/> B | Choose a meaningful and self-descriptive classname. |
| <input type="checkbox"/> C | All the words shall be initial-capitalized (camel-case). | <input type="checkbox"/> D | They are denoted with a pair of parentheses |

4. What is a Constructor?

- | | | | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> A | A block of code that initializes the newly created object. | <input type="checkbox"/> B | It resembles an instance class in java but it's not a method as it doesn't have a return type. |
| <input type="checkbox"/> C | It only reveal internal mechanisms that are relevant for the use of other objects, hiding any unnecessary implementation code. | | |

5. A concept of having more than one constructor with different parameters list, in such a way so that each constructor performs a different task.

(a) _____

- | | | | |
|----------------------------|-------------------------|----------------------------|------------------------|
| <input type="checkbox"/> A | Constructor Overloading | <input type="checkbox"/> B | Constructor Overriding |
| <input type="checkbox"/> C | Constructor Listing | <input type="checkbox"/> D | Default Constructor |

6. What is the differences of public and private access modifiers?

- | | | | |
|----------------------------|-------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------|
| <input type="checkbox"/> A | The public method is accessible and available within this class only. | <input type="checkbox"/> B | A private variable is accessible and available to all the other objects in the system. |
| <input type="checkbox"/> C | A public method is accessible and available to all the other objects in the system. | <input type="checkbox"/> D | The private variable could not be accessed anywhere |

7. Which is the correct syntax to instantiate a class?

- | | | | |
|----------------------------|------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------|
| <input type="checkbox"/> A | <pre>c1 = new Circle();
System.out.println(c1.toString());</pre> | <input type="checkbox"/> B | <pre>Circle c1;
c2 = new Circle(2.5);
System.out.println(c2.toString());</pre> |
| <input type="checkbox"/> C | <pre>Circle c3, c3 = new Circle(2.5);
System.out.println(c3.toString());</pre> | | |

8. Which one is a constructor?

- | | | | |
|----------------------------|----------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------|
| <input type="checkbox"/> A | <pre>Circle c1;
c2 = new Circle(2.5);
System.out.println(c2.toString());</pre> | <input type="checkbox"/> B | <pre>public Circle (double rad) {
 radius = rad;
 color = "red";
}</pre> |
| <input type="checkbox"/> C | <pre>public double getRadius() {
 return radius;
}</pre> | | |

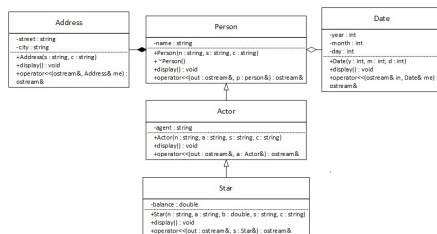
9. What is the best way to describe Composition?

- | | | | |
|----------------------------|---------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> A | A new class extends the definition of an existing class by adding fields and methods. | <input type="checkbox"/> B | The derived classes can reuse the code of existing super classes. |
| <input type="checkbox"/> C | All answers are wrong. | <input type="checkbox"/> D | A class has a field that is an object. |

10. What is Inheritance?

- A It is the mechanism whereby the implementation details of a class are kept hidden from the user. B It is the mechanism of basing an object or class upon another object or class, retaining similar implementation.
- C It is a feature that allows a class to have more than one method having the same name, if their argument lists are different. D It defines the behavior of the objects that are created from the class.

11.



Look at the picture, which one is the Class Inheritance?

- A Class Actor to Class Person B Class Address to Class Person
- C OutStream() in each class D Class Person to Class Address and Class Date

12.

```
public class Animal{}
public class Deer extends Animal
```

Which statements are correct to describe class Deer? (3 answers)

- A A Deer is an Animal B A Deer is an Object
- C Class Deer is the super-class of Animal D Class Deer inherits all behavior from Animal

13.

```
class Animal {
    public void animalSound() {
        System.out.println("The animal makes a sound");
    }
}

class Pig extends Animal {
    public void animalSound() {
        System.out.println("The pig says: wee wee");
    }
}

class Dog extends Animal {
    public void animalSound() {
        System.out.println("The dog says: bow wow");
    }
}
```

The correct syntax to instantiate all the objects are... (3 answers)

- A Animal myDog = new Dog(); B Pig myPig = new Pig();
- C Pig myPig = new Animal(); D Animal myFish = new Dog();
- E Dog theDog = new Pig();

14. kemampuan untuk menggunakan kembali kelas yang sudah ada disebut

- | | | | |
|----------------------------|--------------|----------------------------|-------------|
| <input type="checkbox"/> A | Enkapsulasi | <input type="checkbox"/> B | Modularity |
| <input type="checkbox"/> C | Reuseability | <input type="checkbox"/> D | Inheritance |

15. What is the main advantage of using Composition in object-oriented programming?

- | | | | |
|----------------------------|---------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> A | A new class extends the definition of an existing class by adding fields and methods. | <input type="checkbox"/> B | The derived classes can reuse the code of existing super classes. |
| <input type="checkbox"/> C | It allows a program to be divided into separate, interchangeable components. | <input type="checkbox"/> D | A class has a field that is an object. |

16. Organize these options into the right categories
Groups: (a) Data Types , (b) Classes , (c) Methods

- | | | | | | |
|----------------------------|---------------|-------|----------------------------|-----------------|-------|
| <input type="checkbox"/> A | Integer | _____ | <input type="checkbox"/> B | Float | _____ |
| <input type="checkbox"/> C | String | _____ | <input type="checkbox"/> D | Circle | _____ |
| <input type="checkbox"/> E | Car | _____ | <input type="checkbox"/> F | Person | _____ |
| <input type="checkbox"/> G | getRadius() | _____ | <input type="checkbox"/> H | Boolean | _____ |
| <input type="checkbox"/> I | Double | _____ | <input type="checkbox"/> J | Character | _____ |
| <input type="checkbox"/> K | Rectangle | _____ | <input type="checkbox"/> L | Triangle | _____ |
| <input type="checkbox"/> M | Animal | _____ | <input type="checkbox"/> N | calculateArea() | _____ |
| <input type="checkbox"/> O | startEngine() | _____ | <input type="checkbox"/> P | getName() | _____ |
| <input type="checkbox"/> Q | accelerate() | _____ | <input type="checkbox"/> R | stop() | _____ |

17. Sesuaikan pernyataan-pernyataan berikut ini sesuai dengan konvensi Groups: (a) Methods , (b) Class , (c) Constructors

- | | | | |
|----------------------------|---------------------------------------------------------------------------|----------------------------|------------------------------------------------------------------------------------------|
| <input type="checkbox"/> A | Menggunakan kata kerja | <input type="checkbox"/> B | Kata pertama ditulis menggunakan huruf kecil, kata berikutnya diawali dengan huruf besar |
| <input type="checkbox"/> C | Nama kelas harus berupa kata benda | <input type="checkbox"/> D | Setiap kata harus diawali dengan huruf besar (camel case) |
| <input type="checkbox"/> E | Nama constructor harus sama dengan nama kelas, termasuk cara penulisannya | <input type="checkbox"/> F | Tidak memiliki nilai pengembalian |
| <input type="checkbox"/> G | Hanya dapat dijalankan menggunakan operator "new" | | |

18. What is Abstraction?

- | | | | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> A | Process of taking away or removing characteristics from something in order to reduce it to a set of essential characteristics. | <input type="checkbox"/> B | Division into parts takes a complex system, and divides into component parts, which can then be considered in isolation. |
| <input type="checkbox"/> C | The set of actions a component can perform | <input type="checkbox"/> D | The class is the repository for behavior associated with an object. |

19. Which of the following concepts of OOPS means exposing only necessary information to client?

- | | | | |
|----------------------------|---------------|----------------------------|--------------|
| <input type="checkbox"/> A | Encapsulation | <input type="checkbox"/> B | Abstraction |
| <input type="checkbox"/> C | Data hiding | <input type="checkbox"/> D | Data binding |

20. As a blueprint is a design for a house, a class is a design for a(n):

- | | | | |
|----------------------------|----------|----------------------------|-----------|
| <input type="checkbox"/> A | object | <input type="checkbox"/> B | variable |
| <input type="checkbox"/> C | constant | <input type="checkbox"/> D | statement |

21. A single object can also be referred to as an...

- | | | | |
|----------------------------|----------|----------------------------|-----------------|
| <input type="checkbox"/> A | Object | <input type="checkbox"/> B | Singular Object |
| <input type="checkbox"/> C | Instance | <input type="checkbox"/> D | Singular |

22. Hiding internal data from the outside world, and accessing it only through publicly exposed methods is known as data ____.

- | | |
|----------------------------------------|------------------------------------------|
| <input type="checkbox"/> A inheritance | <input type="checkbox"/> B polymorphism |
| <input type="checkbox"/> C abstraction | <input type="checkbox"/> D encapsulation |

23. Refers to the bundling of data, along with the methods that operate on that data, into a single unit.

- | | |
|----------------------------------------|------------------------------------------|
| <input type="checkbox"/> A Inheritance | <input type="checkbox"/> B Polymorphism |
| <input type="checkbox"/> C Abstraction | <input type="checkbox"/> D Encapsulation |

24. Hak akses (Enkapsulasi) yang memberikan hak akses pada anggota class dan pewarisannya disebut ...

- | | |
|-----------------------------------------|-----------------------------------|
| <input type="checkbox"/> A Private | <input type="checkbox"/> B Global |
| <input type="checkbox"/> C Protected | <input type="checkbox"/> D Public |
| <input type="checkbox"/> E Polimorfisme | |

25.

```
13 public class Karyawan {
14     //variabel gaji adalah variabel private static.
15     private static double gaji;
16
17     //DEPARTEMEN adalah konstanta.
18     public static final String DEPARTEMEN="Pengembangan";
19
20     public static void main(String args[])
21     {
22         gaji=1000;
23         System.out.println(DEPARTEMEN+" Gaji Rata-rata : "+gaji);
24     }
25 }
```

Tampilkan Kode Java

Variabel yang digaris bawah pada kode pemrograman diatas disebut variabel ...

- | | |
|---------------------------------------|------------------------------------|
| <input type="checkbox"/> A Global | <input type="checkbox"/> B Private |
| <input type="checkbox"/> C Non-static | <input type="checkbox"/> D Lokal |
| <input type="checkbox"/> E Protected | |

26. Kosep PBO yang memungkinkan sebuah class dapat menggunakan member dari class induknya adalah ...

- | | |
|----------------------------------------|-----------------------------------------|
| <input type="checkbox"/> A Interface | <input type="checkbox"/> B Inheritance |
| <input type="checkbox"/> C Enkapsulasi | <input type="checkbox"/> D Polimorfisme |

27. Dibawah ini yang termasuk dalam attribut objek mobil adalah.....

- | | |
|---------------------------------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> A Warna, mogok, berjalan | <input type="checkbox"/> B Diperbaiki, kecepatan, warna |
| <input type="checkbox"/> C Bahan bakar, roda, kecepatan | <input type="checkbox"/> D Mogok, diperbaiki, warna |
| <input type="checkbox"/> E Diperbaiki, kecepatan, warna | |

28. Salah satu perbedaan antara pemrograman berorientasi objek dengan pemrograman terstruktur adalah....

- | | | | |
|----------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> A | Pada pemrograman berorientasi objek menggunakan method sedangkan pemrograman terstruktur menggunakan function | <input type="checkbox"/> B | Pada pemrograman berorientasi objek fungsi panggilan digunakan sedangkan pemrograman terstruktur message passing digunakan |
| <input type="checkbox"/> C | Pada pemrograman berorientasi objek algoritma diberikan penting sedangkan pemrograman terstruktur tidak | <input type="checkbox"/> D | Pada pemrograman berorientasi objek tidak ada enkapsulasi sedangkan pada pemrograman terstruktur ada enkapsulasi |
| <input type="checkbox"/> E | Pemrograman terstruktur fokus pada model obyek | | |

29. Dibawah ini yang termasuk dalam ciri-ciri dari metode overriding method adalah.....

- | | | | |
|----------------------------|--------------------------------|----------------------------|--------------------------------------|
| <input type="checkbox"/> A | Daftar parameter harus berbeda | <input type="checkbox"/> B | Return type boleh sama boleh berbeda |
| <input type="checkbox"/> C | Nama method berbeda | <input type="checkbox"/> D | Nama method harus sama |
| <input type="checkbox"/> E | Return type harus berbeda | | |

30. Metode dimana suatu keadaan beberapa method mempunyai nama yang sama tetapi mempunyai fungsionalitas yang berbeda adalah

- | | | | |
|----------------------------|--------------------------|----------------------------|--------------------|
| <input type="checkbox"/> A | metode overriding method | <input type="checkbox"/> B | metode overloading |
| <input type="checkbox"/> C | metode enkapsulasi | <input type="checkbox"/> D | metode parameter |
| <input type="checkbox"/> E | metode superclass | | |

31. Di bawah ini yang termasuk dalam ciri – ciri dari metode overriding method adalah

- | | | | |
|----------------------------|--------------------------------|----------------------------|--------------------------------------|
| <input type="checkbox"/> A | Daftar parameter harus berbeda | <input type="checkbox"/> B | Return type boleh sama boleh berbeda |
| <input type="checkbox"/> C | Nama method berbeda | <input type="checkbox"/> D | Nama method harus sama |
| <input type="checkbox"/> E | Return type harus berbeda | | |

32. Method getter adalah method yang disediakan agar suatu atribut private dapat dibaca nilainya dari luar kelas.

- | | | | |
|----------------------------|---------------------|----------------------------|---------------------------|
| <input type="checkbox"/> A | benar | <input type="checkbox"/> B | salah |
| <input type="checkbox"/> C | pertanyaannya salah | <input type="checkbox"/> D | pertanyaannya tidak tepat |

33. Suatu method yang dapat dijalankan otomatis pada saat object dari class dibuat, dikenal dengan ..

- | | | | |
|----------------------------|-------------------|----------------------------|-------------|
| <input type="checkbox"/> A | Constructor | <input type="checkbox"/> B | Initializer |
| <input type="checkbox"/> C | Garbage Collector | <input type="checkbox"/> D | Inheritance |

34. Abstraksi dan sesuatu yang mewakili dunia nyata seperti benda, manusia, satuan organisasi, tempat, kejadian, struktur, status, atau hal – hal lain yang bersifat abstrak dinamakan

- | | | | |
|----------------------------|--------|----------------------------|-----------|
| <input type="checkbox"/> A | Kelas | <input type="checkbox"/> B | Objek |
| <input type="checkbox"/> C | Metode | <input type="checkbox"/> D | Pewarisan |

35. Fungsi new() dalam Java adalah

- | | | | |
|----------------------------|---------------------------|----------------------------|------------------------------------------------|
| <input type="checkbox"/> A | Keperluan pewarisan | <input type="checkbox"/> B | Instansiasi obyek |
| <input type="checkbox"/> C | Keperluan pewarisan jamak | <input type="checkbox"/> D | Penanda program yang akan dijalankan oleh Java |

36. Statement yang tepat untuk membuat objek myObj dari class MyClass adalah ...

- | | | | |
|----------------------------|----------------------------|----------------------------|------------------------------|
| <input type="checkbox"/> A | class MyClass = new myObj; | <input type="checkbox"/> B | class MyClass = new myObj(); |
| <input type="checkbox"/> C | MyClass myObj; | <input type="checkbox"/> D | new myObj = MyClass(); |

37.

```
public class mahasiswa{  
    String Nim;  
    String Nama;  
    String Alamat;  
  
    public void registrasi(){  
        System.out.println("Nim :"+Nim);  
        System.out.println("Nama :"+Nama);  
        System.out.println("Alamat :"+Alamat);  
    }  
}
```

Diketahui terdapat class mahasiswa seperti gambar di atas. Buatlah deklarasi sebuah objek dengan nama objek mhs! (hanya menginstansiasi sebuah objek)

(a) _____ (b) _____

- | | | | |
|----------------------------|----------------------------------|----------------------------|-------------------------------------|
| <input type="checkbox"/> A | mahasiswa mhs = new mahasiswa(); | <input type="checkbox"/> B | Object mhs = new mahasiswa(); |
| <input type="checkbox"/> C | Object mhs = Class mahasiswa(); | <input type="checkbox"/> D | mahasiswa newMhs = new mahasiswa(); |

38. Jika diketahui terdapat sebuah class dimana class tersebut hanya bisa diakses oleh package itu sendiri, tidak dapat diakses oleh kelas lain yang berbeda package kecuali class keturunannya, maka class tersebut memiliki akses modifier ...

- | | | | |
|----------------------------|---------|----------------------------|-----------|
| <input type="checkbox"/> A | private | <input type="checkbox"/> B | public |
| <input type="checkbox"/> C | default | <input type="checkbox"/> D | protected |

39.

```
1 class Bicycle {
2     public int gear;
3     public int speed;
4
5     public Bicycle(int gear, int speed) {
6         this.gear = gear;
7         this.speed = speed;
8     }
9
10    public void applyBrake(int decrement) {
11        speed -= decrement;
12    }
13
14    public void speedUp(int increment) {
15        speed += increment;
16    }
17
18    public String toString() {
19        return("No of gears are " + gear + "\n" + "speed of bicycle is " + speed);
20    }
21 }
22
23 // derived class
24 class MountainBike extends Bicycle {
25     public int seatHeight;
26
27     public MountainBike(int gear, int speed, int startHeight) {
28         super(gear, speed);
29         seatHeight = startHeight;
30     }
31
32     public void setSeatHeight(int newValue) {
33         seatHeight = newValue;
34     }
35
36     @Override
37     public String toString() {
38         return (super.toString()+"\nseat height is "+seatHeight);
39     }
40 }
41
42 // driver class
43 public class Test {
44     public static void main(String args[]) {
45         MountainBike mb = new MountainBike(3, 100, 25);
46         System.out.println(mb.toString());
47     }
48 }
```

Perhatikan kode pada gambar.

Ketika dijalankan, nilai yang ditampilkan untuk "speed of bicycle" adalah...

A

25

B

3

C

100

D

125