Encapsulation

1. Find Output

Which among the following best describes encapsulation?
a) It is a way of combining various data members into a single unit
b) It is a way of combining various member functions into a single unit
c) It is a way of combining various data members and member functions into a single unit which can operate on any data
d) It is a way of combining various data members and member functions that operate on those data members into a single unit

Output

Answer: d
Explanation: It is a way of combining both data members and member functions, which operate on those data members, into a single unit. We call it a class in OOP generally.

2. Find Output

If data members are private, what can we do to access them from the class object?

a) Create public member functions to access those data members

b) Create private member functions to access those data members

c) Create protected member functions to access those data members

d) Private data members can never be accessed from outside the class

Output

Answer: a
Explanation: We can define public member functions to access those private data members and get their value for use or alteration. They can’t be accessed directly but is possible to be access using member functions. This is done to ensure that the private data doesn’t get modified accidentally.

3. Find Output

```
class Example
{
private int n;
void set()
{
n=10;
}

}
class Test
{
   public static void main(String[] args)
   {
   Example e = new Example();
   int n=20;
      System.out.print(e.n);
   }
}
```

Output

a) Compilation error
b) Runtime error
c) 10
d) 20

Ans: a

4. Find Output

```
class Example
{
private int n;
void set()
{
n=10;
}
void display()
{
System.out.println(n);
}
}
class Test
{
   public static void main(String[] args)
   {
   Example e = new Example();
   e.set();
   int n=20;
      e.display();
   }
}
```

Output

a) 10
b) 20
c) Compilation error
d) Runtime error

Ans: a

Find Output

Output