

OOPJ Question Paper

D

B4D372

Pages: 2

Reg. No. _____

Name: _____

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2017**

Course Code: CS206

Course Name: OBJECT ORIENTED DESIGN AND PROGRAMMING (CS)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions.

1. Write short notes on any two Object Oriented concepts. (3)
2. Differentiate between while and do-while iterative statements. (3)
3. What are the roles of a constructor? (3)
4. Compare private, protected, and public access modifiers. (3)

PART B

Answer any two questions.

5. a. What is the role of a Java Virtual Machine? (3)
b. Describe any six features of Java language. (6)
6. a. Summarize the different data types in Java. (4.5)
b. Implement the following entities as Java classes with suitable instance variables and methods: i) Bank Account, ii) Vehicle. (4.5)
7. a. Implement the following entities as Java classes with suitable instance variables and methods: i) Student. (4.5)
b. Describe the control statements in Java. (4.5)

PART C

Answer all questions.

8. Explain the concept of method overriding with an example. (3)
9. What happens if exceptions are not handled? (3)
10. Write the Java code for reading the contents of a file. (3)
11. Show using Java code how three threads can be created using Runnable interface. (3)

PART D

Answer any two questions.

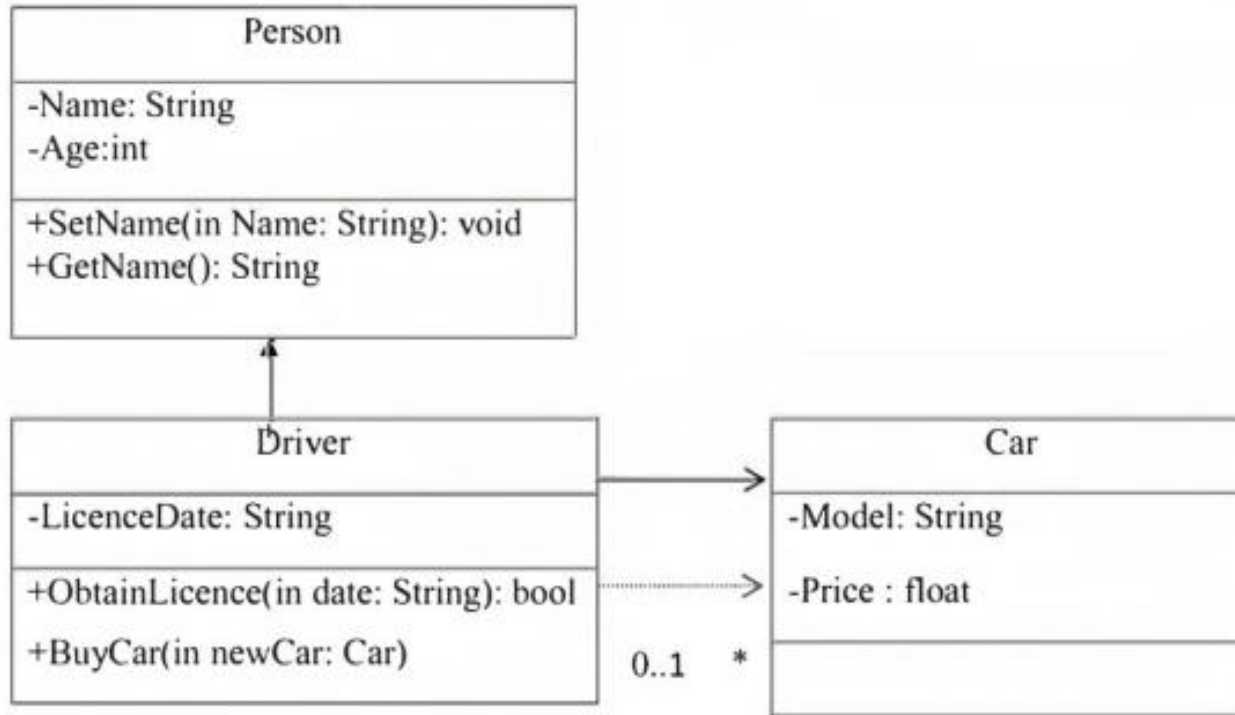
12. a. List any six built-in packages in Java. (2)
b. Explain the role of access modifiers when packages are used in Java. (2.5)
c. Differentiate between try-catch and throws statements. (4.5)
13. a. Describe the concept of interface in Java. (1)

D

B4D372

Pages: 2

b. Give an outline of the java implementation of the class diagram shown below.(3.5)



c.) What are the various ways of using import statement? (4.5)

14. Summarize the Character stream classes with the help of class hierarchy diagram. (9)

PART E

Answer any four of the following questions

15. a. Write short notes on any four methods of string class (8)
b. What is the difference between using “==” and *equals()* method when comparing string type? (2)
16. a. Differentiate between an Applet and a Frame. (5)
b. Write a java program using JDBC API to verify the login credentials of a user. (5)
17. a. Explain the Delegation Event Model. (5)
b. Identify two event types each generated by a Button, TextField, Checkbox, and Frame. (5)
18. Write an AWT based Java program to implement a basic calculator. (10)
19. a. Summarize any three features of Swing API. (5)
b. List any four Containers and Component classes of Swing API. (4)
20. a. Write an applet based java program to add two numbers. (5)
b. Explain the steps using Java code for connecting a Java program to a data base using JDBC API. (5)

Q 6.b.i

```
import java.io.*;
class BankAccount1 {
String name;
long id;
public int bal;
BankAccount1 ()
{   name=" "; id=0; bal=0; }
void assignvalues() throws IOException {
BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
System.out.println("Enter name");
name=br.readLine();
System.out.println("Enter Acct no");
id=Integer.parseInt(br.readLine());
System.out.println("Enter initila balance");
bal=Integer.parseInt(br.readLine());   }
```

```
int depositmoney() throws IOException {
    BufferedReader br=new BufferedReader(new InputStreamReader(System.in));
    System.out.println("Enter amount to be deposited");
    int dep=Integer.parseInt(br.readLine());
    bal=bal+dep;
    return bal; }

public static void main(String args[]) throws IOException {
    BankAccount1 b=new BankAccount1();
    int c;
```

```
do {  
    System.out.println("1.Assign values 2. DepositMoney 3.exit");  
    BufferedReader br=new BufferedReader(new InputStreamReader(System.in));  
    c=Integer.parseInt(br.readLine());  
    switch(c){  
        case 1: b.assignvalues();  
        break;  
        case 2:  
            int balance=b.depositmoney();  
            System.out.println("New balance is "+balance);  
            break;  
        case 3:  
            System.out.println("You are exiting");  
            break;  
        }  
    }while(c!=3);    }    }
```


Q12)

java.lang

java.io

java.util

java.applet

java.awt

java.awt.event

```
Q 12) class Person {
private String Name;
private int age;
public void SetName(String name) {
Name=name; }
public String GetName(){
return Name; }
}
class Driver extends Person {
private String LicenceDate="2020";
public boolean ObtainLicence(String date) {
if(...)
return true;
else
return false; } }
```

```
public void Buycar(car car1)
{
.....
}
class car
{
....
}
class Test
{
public static void main(String args[])
{
Person p=newPerson();
p.SetName("aby");
.... } }
```

Q 13.c

1. Using fully qualified name

```
package pack1;  
public class A {---  
}
```

```
package pack2;  
class b {  
public static void main(String args[])  
{  
pack1.A obj=new pack1.A();
```

2. Import the only class

```
import pack1;
```

3. Import all classes in packages

```
import pack1.*;
```

Q 20) public class Calc extends Applet implements ActionListener

```
{  
TextFiled t1=new TextField(10);  
TextFiled t2=new TextField(10);  
TextFiled t3=new TextField(10);  
Label l1=new Label("First no");  
Label l2=new Label("Second no");  
Label l3=new Label("Sum");  
Button b=new Button("ADD");  
public void init() {  
add(t1);add(t2).....  
b.addActionListener(this); }  
public void actionPerformed(ActionEvent e)  
{  
if(e.getSource()==b) {  
int n1=Integer.parseInt(t1.getText());
```

```
int n2=Integer.parseInt(t2.getText());  
t3.setText( n1+n2);  
} //close if  
} // close actionPerformed  
} // close Calc
```