

Your Roll No.....

Sr. No. of Question Paper : 1740 F-8

Unique Paper Code : 2341801

Name of the Paper : Web Technologies

Name of the Course : B.Tech Computer Science

Semester : VIII

Duration : 3 Hours Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.

Section A

Attempt all questions from this section.

1. (a) (i) What is the output of following JavaScript code ?

```
<script type="text/javascript">
```

```
x=6+5+ "4";
```

```
document.write(x);
```

```
</script>
```

(1)

- (ii) Java Script is a loosely typed language. Comment.

(3)

P.T.O.

(iii) How can we embed JavaScript code into an HTML Page? (2)

(iv) Explain the purpose of onBlur and onClick events in Javascript. (2)

(v) What is the output of following code?

```
<script type="text/javascript">  
var fruits=["Banana", "Orange", "Apple", "Mango"];  
var energy= fruits.join();  
document.write(energy);  
</script>
```

(1)

(b) (i) Explain any three types of JSP elements with the help of examples. (3)

(ii) Explain the following statement :

```
<jsp:useBean id="stu" class="college.course.year.  
student">  
</jsp:useBean>
```

(3)

(c) What is the use of statement objects in JDBC? Explain the use of different statement objects in JDBC. (4)

(d) (i) Should we use AJAX in all HTTP requests? Comment. (2)

(ii) Design a style sheet with the following specification :

- set the body background colour to light blue
- set colour of H1 header to white
- center align the text of H1 header
- set font-family of paragraph to verdana (4)

(e) (i) What is the difference between an abstract class and an interface? Can we have instances of an interface? What is meant by default methods in an interface? Give an example of an interface with default method. (4)

(ii) Explain the difference between

myClass obj;

And

myClass obj = new myClass(); (1)

(iii) Explain the garbage collector feature of Java. (3)

(iv) How can a class call constructor of its superclass? Explain with an example. (2)

Section B

Attempt any FOUR questions from this section.

2. (a) Explain HTTP request/response processing in detail. (5)

P.T.O.

- (b) Explain the anatomy of a JSP page. Give an example. (5)
3. (a) Name different JDBC drivers. Explain different types of JDBC drivers. (5)
- (b) Write a JDBC program to call a stored procedure named PROC1 with one OUT parameter of type int. (5)
4. (a) Write a JSP page to access the employee details (Employee name, Employee Id, Salary and Department) from an HTML form using JSTL actions. (5)
- (b) How can you use custom tags in a JSP page? Explain with the help of a diagram. (5)
5. (a) What is the difference between internal and external style sheets? Give examples. (5)
- (b) What is AJAX? What are the advantages of AJAX over other existing Web Technologies? (5)
6. (a) Design an HTML form to input the Order details (Customer name (String having less than 20 characters), Item type (Grocery or Cloths), Price Range (1-5000)) and check whether all the fields have been filled with valid values, at the time of submitting the form. (5)

- (b) Explain the use of prompt dialog box in JavaScript using an example. (5)

7. (a) Point out the errors in the following code :

(i) class myClass (3)

```
{  
    int my-var;  
    final void func 1(int i)  
    { // Statements  
    }  
}  
  
class mySubClass extends myClass  
{  
    int my-var;  
    final void func 1(int i)  
    {  
        // Statements  
    }  
    public void func2()  
    { // Statements  
    }  
    public static void main(String[] args)  
    {  
        myClass ob = new myClass();  
        ob.func2();  
    }  
}
```

P.T.O.

```
(ii) interface my Interface{ (3)
    int var = 10;
    void func 1();
}
class myClass implements myInterface{
    void func2();
    public static void main(String[] args)
    {
        myInterface objInt = new myClass();
        objInt.var = 20;
    }
}
```

(b) What is the purpose of import statement in a package ?
Assume that there are two packages myPack1, myPack2,
with a class myClass1 in myPack1 and myClass2 in
myPack2. myClass1 uses a method meth() of myClass2.
Give skeleton of class myClass1

- (i) using import statement
- (ii) without using import statement (4)

(1600)