

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination (Regular/Backlog), Nov.-Dec. 2015

B. Tech in Computer Science & Engineering, Semester V Sem

Roll No.....

CSE505: Web Technologies

Time: 3 hours

Max. Marks: 100

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

Q.1A	Objective type multiple choice questions (10 questions @ 1 mark)	10
i.	The new operator [A] returns a pointer to a variable [B] creates a variable called new [C] obtains memory for a new variable [D] tells how much memory is available	
ii.	The java compiler [A] creates executable [B] translates java source code to byte code [C] creates classes [D] produces java Interpreter	
iii.	The order of the three top level elements of the java source file are [A] Import, Package, Class [B] Class, Import, Package [C] Package, Import, Class [D] Random order	
iv.	Which of the following is correct way of implementing an interface salary by class manager? [A] class manager extends salary {} [B] class manager implements salary {} [C] class manager imports salary {} [D] None of the mentioned.	
v.	Which of the following package stores all the standard java classes? [A] lang [B] java [C] util [D] java.packages	
vi.	Which of the following statements is NOT correct? (A) We can use a new operator on String to create a "String" object. (B) We can use the new operator on int to create an "int" object. (C) Variables of type "int" can be assigned a value just after being declared. (D) Variables of type "String" can be assigned a value just after being declared.	
vii.	Which of the following statements can provide the output "180"? (A) String str = "CS180"; System.out.print(str.substring(2, 4));	

(B) String str = "CS180";
 System.out.print(str.substring(3, 5));
 (C) String str = "P";
 System.out.print(str.length() + "80");
 (D) String str = "P";
 System.out.print(str.length() + 80);

- viii. Which of the following statements is TRUE?
 (A) The Java compiler always adds a default constructor to a user defined class.
 (B) Each instantiated object will have its own copy of a class variable.
 (C) When an object is passed to a method, a copy of each of the object's data members are created and passed to the method.
 (D) A class can have multiple constructors.

- ix. Which of the following variables contains null?

String a;
 String b = new String();
 String c = "";
 String d = "null";

- (A) a
 (B) b
 (C) c
 (D) d

- x. What is the output of the following program?

```
public class Test
{
    public static void main( String[] args )
    {
        private static final int value = 5;
        float total;
        total = value + value / 2;
        System.out.println( total );
    }
}
```

- (A) 7.5
 (B) 7.0
 (C) 5.0
 (D) None of the above

Q.2	Short answer type questions (4 questions @ 2.5 marks)	10
A	Differentiate between run() and start()?	
B	Discuss the significance of static method and variable.	
C	Differentiate final and finally.	
D	Explain this pointer in java.	
Q.3A	Discuss utility of java.net package.	05
Q.3B	Explain how to create threads. Write a java program that prints numbers from 1 to 10 line by line after every 5 seconds.	05

4A	Explain briefly about access modifiers and their usage.	05
Q.4B	Explain J2EE architecture? How do you connect to the Database?	05
Q.5A	In the Java programming language, what is a package, and why do packages exist. The main subroutine of a program begins with the line public static void main (String[] args). What does the word "public" mean here, and why is it necessary?	05
Q.5B	Can interface be final? Can abstract class contain main method in Java? Explain in detail.	05
Q.6A	Explain Event Listener and Action Listener using example.	05
Q.6B	Write a JavaScript program to check whether a textfield is empty or not.	05
OR		
Q.6B	How do you implement multiple inheritance in java? What happens if super class and sub class having same field name?	05
Q.7A	Create a servlet "Hello World" using HttpServletResponse and HttpServletRequest. Explain the significance of deployment descriptor "web.xml" in servlet programming.	05
Q.7B	What is a string buffer? How it is different from string? Give the three ways of creating a string object.	05
OR		
Q.7B	Write statements to create data streams for the following operations:- a. Reading primitive data from a file. b. Writing primitive data to a file.	05
Q.8	Write a program to create a sequential file that could store details about five products. Details include product code, cost, and number of items available and are provided through the keyboard.	10
Q.9A	Construct Sign Up functionality using JSP. Under "Sign Up", take input from user - name, e-mail id, username and password. Store them in database, if stored, then display, Successfully registered, otherwise, display registration failed.	10
Q.9B	Write Javascript script which has five buttons labelled five different colors. The event handler for these buttons must produce a message starting the chosen favorite color. The event handler must be implemented as a function, name must be assigned to the onclick attribute of the radio button element. The chosen color must be sent to the event handler as a parameter use a onclick event to trigger a call to alert, which should display description of the selected color.	10
OR		
Q.9B	Define a class called Triangle with three integer data members a, b, and c as the lengths of its three edges. This class should have the following methods: (a) a constructor with 3 parameters representing the 3 edges (b) a method isTriangle() which returns true if the 3 edges are all positive and they satisfy the triangle inequality where $a+b > c$, $a+c > b$, $b+c > a$. (c) a method getAngle() with 1 parameter, an edge, which returns the angle in degrees.	10