

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**B.Tech. Winter 2019 - 20 Examination**

**Semester: 5****Subject Code: 03105331****Subject Name: Java and Internet Technology****Date: 03/12/2019****Time: 10:30 am to 1:00 pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1 Objective Type Questions -****(15)**

1. The java compiler
  - a. creates executable
  - b. translates java source code to byte code
  - c. creates classes
  - d. produces java Interpreter
2. All standard classes of Java are included within a package called \_\_\_\_\_.
3. Object class is a superclass of all other classes?  
True/False

4. class Output {
 

```
public static void main(String args[])
{
    int x , y;
    x = 10;
    x++;
    --x;
    y = x++;
    System.out.println(x + " " + y);
}
}
```

- A. 11 11
- B. 10 10
- C. 11 10
- D. 10 11

5. Any user-defined exception class is a subclass of the \_\_\_\_\_ class.
6. \_\_\_\_\_ class cannot be instantiated?

7. class Output {
 

```
public static void main(String args[])
{
    int x , y = 1;
    x = 10;
    if (x != 10 && x / 0 == 0)
        System.out.println(y);
    else
        System.out.println(++y);
}
}
```

- a) 1
- b) 2
- c) Runtime error owing to division by zero in if condition.
- d) Unpredictable behavior of program.

8. Which tag inert a line horizontally on your web page?

1. <hr>
  2. <line>
  3. <line direction="horizontal">
  4. <tr>
9. The switch statement does not require a break.  
True/False
10. Which of the following property is used to control the scrolling of an image in background.
- a. background-attachment
  - b. background
  - c. background-repeat
  - d. background- position
11. JRE stands for \_\_\_\_\_
12. final method can not be override.  
True/False
13. HTTP stands for \_\_\_\_\_
14. In Java main() method can be overload.  
True/False
15. A constructor is automatically called when an object is instantiated  
True/False

**Q.2** Answer the following questions. (Attempt any three) **(15)**

- A) List out features of JAVA. Explain any two in detail.
- B) Explain following:
  1. this
  2. Static
- C) Explain following:
  1. <img>
  2. <a>
  3. compareTo
  4. indexOf()
  5. toCharArray()
- D) Explain Garbage collection and finalize() with example.

**Q.3** A) Explain Exception Handling in JAVA. Write an application that generates user define exception if any value from its command line arguments is negative. **(07)**

- B) 1. Explain life cycle of Servlet. **(04)**
2. Explain Dynamic Method Dispatch with Example. **(04)**

**OR**

- B) 1. Explain life cycle of Applet. **(04)**
2. Types of JDBC Driver. **(04)**

**Q.4** A) Write a java program to count total no of words, characters and lines in given file. File name should be given as command line input. If the file does not exist, the program should handle FileNotFoundException. **(07)**

**OR**

- A) Write an application that executes two threads. One thread displays "I am Thread One" every 2000 milliseconds & another thread displays "I am Thread Two" every 4000 milliseconds. Create the threads by implementing the Runnable interface. **(07)**

- B) Write a Program using Java Script to Given a number, report if it is a prime number. The code should contain a function which takes a number as input and displays a Boolean value whether that number is prime or not on the console of the web browser. **(08)**