

13. Explain multiple thread concepts with suitable example.

(OR)

14. Explain any six methods in StringBuffer class with sample snippets".
15. Implement a java application using applet to design a simple calculator. Apply Grid Layout. Add buttons numbers 0 to 9 and for basic operations such as +, -, \*, / and =. Use Text Field and array of Buttons. Use ActionListener interface to implement the appropriate functionalities when clicking the buttons.

(OR)

16. Write a java program to transfer a message from one machine to another machine with connection oriented service protocol.
17. Explain the role of scrollable and updateable result sets in java database connectivity.

(OR)

18. Write a java program to demonstrate the concept of establish a connection with database and delete a record in a database from java.

### PART – C

**Answer the following**

**1 x 20 = 20 Marks**

19. a) Write a tiny text editor program using file concept to enter 100 lines of text or until you enter "stop". (10)
- b) Create a class Height to store height in feet and inches. Write a program to input height in inches in a text box and store it in an object and then convert it into feet and inches. Display the result in respective text boxes. (10)

9. State the major requirements of event listener.
10. When is WindowEvent generated?
11. Write the subclasses of container.
12. Name the methods used to draw an arc.
13. Clearly define the constructors of color class.
14. What is a network socket? Why do we need it?
15. List out the interfaces defined in java.net package.
16. 'DriverManager is considered the backbone of JDBC architecture' – Justify.
17. In which of the Java package, ResultSet interface is defined?
18. Is there any standard Java API for database independent connectivity between java application and databases? Why?
19. Sketch the architecture diagram of JDBC.
20. Given below some of the exceptions, identify the exceptions defined in java.sql package:  
SQLArithmeticException.  
BatchupdateException  
SQLException.  
SQLWarning.



# SASTRA UNIVERSITY

(A University under section 3 of the UGC Act, 1956)

B.Tech. Degree Examinations

November 2015

Fifth Semester

Course Code: BEEDCS 502R01 / MPSDCS 502R01

Course: JAVA PROGRAMMING

Question Paper No. : B0343

Duration: 3 hours

Max. Marks: 100

## PART - A

Answer all the questions

20 x 2 = 40 Marks

1. Which of the following are java keywords?  
strictfp, synchronized, transient, volatile.
2. Identify errors, if any, in the following java statement:  
int x = 2, 147, 483, 647;
3. Convert the following C statement into java equivalent:  
#define STRENGTH 50
4. Does Java support inner class? Explain.
5. What is the name of the exception, defined in java.lang, which meant 'access to a class is denied'?
6. Give the syntax of 'sleep' method.
7. Mention the usage of 'notify' method.
8. What is an event? Give an example.

A Java Swing window titled "Enter Height(in inches)" with standard window controls (minimize, maximize, close) in the top right corner. The window contains three text input fields and a button. The first line shows the label "Enter Height(in inches)" followed by a text field labeled "jTextField1". The second line shows the label "Height is" followed by a text field labeled "jTextField2", the text "feet and", a text field labeled "jTextField3", and the text "inches". Below these fields is a button labeled "convert".

\* \* \*



# **SASTRA UNIVERSITY**

(A University under section 3 of the UGC Act, 1956)

## **B.Tech Degree Examinations**

**November 2011**

### **Fifth Semester**

**Course Code: BCSCCS 503 / BITCIT 503 / BICDIC 504**

**Course: JAVA PROGRAMMING**

**Question Paper No. : B819**

**Duration: 3 hours**

**Max. Marks: 100**

### **PART – A**

**Answer all the questions**

**20 x 2 = 40 Marks**

1. Explain any two features of OOPs.
2. Is java a complete object oriented programming language? Discuss.
3. Discuss why java is important to the Internet.
4. What is the role of JVM?
5. What is a java applet?
6. Explain the usage of finalize ( ).
7. What is multithreaded programming?
8. What are the two ways to create threads in a java program?
9. What is a deadlock?

28. Illustrate the methods of statement and resultset interfaces.

\* \* \* \* \*

377

# SASTRA DEEMED UNIVERSITY

(A University under section 3 of the UGC Act, 1956)

## End Semester Examinations

Nov 2018

Course Code: **BEEDCS 502R01 / BEIDEI 504R01 /  
MPSDCS 502R01 / MICDEI 504R01**

Course: **JAVA PROGRAMMING**

Question Paper No. : **B0395**

Duration: **3 hours**

Max. Marks: **100**

### PART – A

**Answer all the questions**

**10 x 2 = 20 Marks**

1. What are the implicit packages that need not get imported into a class file?
2. How to prevent a class from inheritance?
3. Write a simple java program to display the message "Welcome to SASTRA" without defining main () method.
4. Predict the output of the program?

```
try {  
    int x = 0;  
    int y = 5 / x;  
}  
catch (Exception e) {  
    System.out.println("Exception"); }  
catch (ArithmeticException ae) {  
    System.out.println(" Arithmetic Exception"); }  
System.out.println("finished");
```



## PART – B

Answer all the questions

4 x 15 = 60 Marks

21. Given the positive integers  $a$  and  $b$  ( $b > a$ ), design a java program to find the total number of prime and composite integers in the interval  $[a, b]$ .

(OR)

22. Compute the volume of three-dimensional objects – cube, rectangular box and cylinder using method overloading.

23. Illustrate the way of writing multithreaded program using 'extends' with suitable example.

(OR)

24. Design an applet to display five consecutive Fibonacci integers on each mouse click event.

25. Explain the methods of

(a) FlowLayout. (8)

(b) BorderLayout. (7)

(OR)

26. Illustrate the methods of

(a) TCP/IP client sockets. (8)

(b) TCP/IP server sockets. (7)

27. Write a Java application to interact with the 'electricity' database to generate the electricity bill. Perform insert, delete and update operations and print the results.

(OR)



23. (a) Explain any five functions available in thread class with examples. (10)
- (b) Write a java program using threads which prints numbers from 1 to 5 with a time delay of one millisecond between them. (5)

(OR)

24. (a) Create a java applet that sets the background color to cyan, the foreground color to red, and displays a message that illustrates the order in which the init( ), start( ), and paint( ) methods are called when an applet starts up. (5)
- (b) Create a java applet, which scrolls a message from right to left across the applet's window. (10)
25. Write a java program, which creates a frame window and responds to all mouse events.

(OR)

26. Using AWT package create a program which simulates the notepad.
27. Explain with examples any eight string functions.

(OR)

28. Explain character streams with examples.

\* \* \*

10. How to run a java applet?
11. What is a network socket?
12. What is a proxy server?
13. Explain any two AWT classes in brief.
14. Mention any four AWT controls.
15. Explain any four constants defined by BorderLayout class.
16. Write a java program which accepts a string from the user and print its length.
17. Explain the charAt( ) with examples.
18. Explain how objects are added and removed in a collection.
19. Explain how a hash table stores values.
20. What is an iterator?

### **PART – B**

**Answer all the questions**

**4 x 15 = 60 Marks**

21. What are constructors? Explain with examples how to overload a constructor.

(OR)

22. What is method overriding? Explain with example.



5. Explain how to pass parameters to the applet with simple example.
6. Give the name of the method that can be used to determine the type of event.
7. Predict the output of the following program?  

```
class String_demo {
    public static void main(String args[]){
        char chars[] = {'a', 'b', 'c'};
        String s = new String(chars);
        System.out.println(s);}}
```
8. Which class is used by server applications to obtain a port and listen for client requests?
9. What are the main steps in java to make JDBC connectivity?
10. State the use of PreparedStatement interface.

### PART – B

**Answer all the questions**

**4 x 15 = 60 Marks**

11. a) Create a class called Book with members as bookid, bookname, authorname, and price. Write methods in this class to get and display the values. In main method create 10 book objects, read values and display values of all 10 books. (8)  
 b) Explain Dynamic Dispatch with an example. (7)

(OR)

12. Create a package called N1 which contains a class Palindrome to check whether the given number is palindrome or not. Create another package named N2 which has Odd even class to check whether the given number is odd or even. Write a java program to access these packages from one main file.