



B.E DEGREE EXAMINATIONS: MAY 2017

(Regulation 2014)

Sixth Semester

ELECTRONICS AND INSTRUMENTATION ENGINEERING

U14CST905: Java Programming

COURSE OUTCOMES

CO1: Explain the basic concepts of Object oriented programming using JAVA

CO2: Illustrate the concepts of Packages and Interfaces

CO3: Build applications using utility and I / O packages

CO4: Make use of Applet classes for designing GUI

CO5: Develop solution for problems using server side programming

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Matching type item with multiple choice code

CO1 [K₂]

List I	List II
A.Set	i.ArrayList
B.List	ii. Vector
C.List Interface	iii. HashSet
D.SortedSet	iv.Treeset

- | | A | B | C | D |
|----|-----|----|-----|----|
| a) | ii | i | iii | iv |
| b) | iii | iv | ii | i |
| c) | ii | iv | iii | i |
| d) | iii | ii | i | iv |

2. Which of these is a super class of wrappers Long, Character & Integer?

CO1 [K₁]

- | | |
|----------|-----------|
| a) Long | b) Digits |
| c) Float | d) Number |

3. Find the Correct way of String initializing from the following :

CO 2 [K₃]

- String title = "Captain";
- String poem = Console.readLine("Enter the string");
- String greeting;
greeting = "Hello /n";
- String title = 'Captain';

- | | |
|--------|--------|
| a) 1,3 | b) 1,4 |
| c) 1,2 | d) 2,3 |

10. Beans can communicate with objects by generating _____ CO 5 [K₁]
- a) Properties b) Method
c) Events d) Attributes

PART B (10 x 2 = 20 Marks)

(Answer not more than 40 words)

11. Enumerate two situations in which static methods are used. CO 1 [K₁]
12. How do you convert string to number in Java .Give an example CO 1 [K₃]
13. List out two main Stream classes and sub class of each stream class used in JAVA CO 2 [K₁]
14. What is java virtual machine? CO 1 [K₁]
15. List any two uses of super keyword in Java CO 2 [K₂]
16. What will be the output of the following program? CO 1 [K₅]

```
public class Test{  
    public static void main(String args[]){  
        int i = 0, j = 5 ;  
        for( ; (i < 3) && (j++ < 10) ; i++ ){  
            System.out.print(" " + i + " " + j );  
        }  
        System.out.print(" " + i + " " + j );  
    }  
}
```

17. What are the differences between array list and Vector in java CO 3 [K₁]
18. List the AWT controls. CO 4 [K₂]
19. Which containers use a Flow Layout as their default layout? CO 4 [K₄]
20. State the role of EJB Home object CO 5 [K₁]

Answer any FIVE Questions:-

PART C (5 x 14 = 70 Marks)

(Answer not more than 300 words)

Q.No. 21 is Compulsory

21. How to declare and initialize a string in Java and also explain the different string handling functions with suitable examples CO 1 [K₄]

22. i) Can java directly support multiple inheritance? Illustrate your answer with an example JAVA Program (8) CO 2 [K₄]
- ii) With the help of Java Program, explain the concept of Packages (6) CO 2 [K₁]
23. Write a Java program to perform the following activities : CO 1 [K₃]
- i) sum of rows and columns in array
- ii) interchange rows and columns in java
24. Write a Java program to remove a specific element from a collection. CO 3 [K₃]
25. i) What is mean by Exception in JAVA and also explain in detail about exception hierarchy in Java. (10) CO 3 [K₁]
- ii) Predict the output for the following program : (4) CO 3 [K₃]
- ```
class Test extends Exception { }
class Main {
public static void main(String args[]) {
 try {
 throw new Test();
 }
 catch(Test t) {
 System.out.println("Got the Test Exception");
 }
 finally {
 System.out.println("Inside finally block ");
 } } }
```
26. i) Write an applet for each of following graphics methods (8) CO 4 [K<sub>3</sub>]
- drawoval() drawrect()
- drawline() filloval()
- ii) Explain about Applet lifecycle. How are applets prepared and executed? (6) CO 4 [K<sub>1</sub>]
27. Explain how cookies are created and sessions are tracked by Servlet in detail with suitable example. CO 5 [K<sub>4</sub>]

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