**20CS303/20CB303/20DS303**

**Hall Ticket Number:**

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| **II/IV B.Tech (Regular) DEGREE EXAMINATION** | | | |
| **March, 2022** | **Common to CSE,CB,DS and IT** | | |
| **Third Semester** | **OBJECT ORIENTED PROGRAMMING** | | |
| **Time:** Three Hours | | **Maximum:7**0 Marks | |
| *Answer Question No.1 compulsorily.* | | | (14X1 = 14 Marks) |
| *Answer ONE question from each unit.* | | | (4X14=56 Marks) |
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| 1. | a) | | What is the base class for all the classes in Java? | CO1 | |  |
|  | b) | | What is size of char data type in Java? | CO1 | |  |
|  | c) | | Write the syntax for creating an array in Java. | CO1 | |  |
|  | d) | | What is the difference between a class and an object? | CO1 | |  |
|  | e) | | Mention the keyword used for inheritance. | CO2 | |  |
|  | f) | | Write the use of ‘***this’*** keyword in Java. | CO2 | |  |
|  | g) | | List out different access specifiers in Java. | CO2 | |  |
|  | h) | | What is the difference between String class and StringBuffer class? | CO2 | |  |
|  | i) | | Write about Thread Priorities. | CO3 | |  |
|  | j) | | What is the use of ***finally*** block in Java? | CO3 | |  |
|  | k) | | Mention the advantages of Applet. | CO4 | |  |
|  | l) | | Write the three methods in KeyListener interface. | CO4 | |  |
|  | m) | | List out various Listeners in Java. | CO4 | |  |
|  | n) | | What is the method used to write a message on an applet? | CO4 | |  |
| **Unit - I** | | | | | | |
| 2. | a) | "Java is called Machine Independent language" - Justify this statement with proper explanation. | | CO1 | | 7M |
|  | b) | Demonstrate various loop control structures in Java. | | CO1 | | 7M |
| **(OR)** | | | | | | |
| 3. | a) | Develop a Java program to read the size of an array from keyboard. You have to initialize the integer array and insert the elements into it and find the minimum number in that array and print the same. | | CO1 | | 7M |
|  | b) | Illustrate constructor overloading with an example program. | | CO1 | | 7M |
| **Unit - II** | | | | | | |
| 4. | a) | Explain how multiple inheritance is implemented through Interfaces in Java. | | CO2 | | 7M |
|  | b) | Illustrate the process of creating a package in Java with simple example. | | CO2 | | 7M |
| **(OR)** | | | | | | |
| 5. | a) | Demonstrate StringBuffer class methods with an example program. | | CO2 | | 7M |
|  | b) | Develop a Java Program using LinkedList <String>class to create list of fruits and perform various operation on the created list | | CO2 | | 7M |
| **Unit - III** | | | | | | |
| 6. | a) | Illustrate exception handling mechanism in Java with simple example. | | CO3 | | 7M |
|  | b) | Explain different ways of creating threads in Java. | | CO3 | | 7M |
| **(OR)** | | | | | | |
| 7. | a) | Demonstrate PrintWriter class with an example program | | CO3 | | 7M |
|  | b) | Explain the concept of synchronization in Java | | CO3 | | 7M |
| **Unit - IV** | | | | | | |
| 8. | a) | Explain the following with examples i. Events ii. Event Sources iii. Event Listeners. | | | CO4 | 7M |
|  | b) | Illustrate the Applet life cycle methods with an example program. | | | CO4 | 7M |
| **(OR)** | | | | | | |
| 9. | a) | What is a Layout manager? Explain different layout managers. | | CO4 | | 7M |
|  | b) | Draw a neat sketch of swing components. Develop a program using JButton class. | | CO4 | | 7M |

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