**20EC506/JO**

**Hall Ticket Number:**

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| **III/IV B.Tech (Regular/Supplementary) DEGREE EXAMINATION** | | | |
| **January, 2024** | **Electronics and Communications Engineering** | | |
| **Fifth Semester** | **Programming with Java** | | |
| **Time:** Three Hours | | **Maximum:** 70 Marks | |
| ***Answer question 1 compulsory.*** | | | **(14X1 = 14Marks)** |
| ***Answer one question from each unit.*** | | | **(4X14=56 Marks)** |
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|  | |  |  | CO | BL | M |
| 1 | | a) | List primitive data types in JAVA. | CO 1 | L4 | 1M |
|  | | b) | Define Polymorphism. | CO 1 | L4 | 1M |
|  | | c) | Difference between interpreter and compiler. | CO 1 | L3 | 1M |
|  | | d) | Is JVM is compiler or interpreter. | CO 1 | L4 | 1M |
|  | | e) | List any two methods of String class. | CO 2 | L4 | 1M |
|  | | f) | Write the difference between object and reference variable. | CO 2 | L4 | 1M |
|  | | g) | Write the difference between method and constructor. | CO 2 | L4 | 1M |
|  | | h) | Define abstract class. | CO 3 | L4 | 1M |
|  | | i) | Difference between abstract class and interface. | CO 3 | L4 | 1M |
|  | | j) | Define package. | CO 3 | L4 | 1M |
|  | | k) | Write the use of super keyword. | CO 3 | L4 | 1M |
|  | | l) | Write the importance of throws in exceptions. | CO 4 | L4 | 1M |
|  | | m) | Draw thread life cycle. | CO 4 | L4 | 1M |
|  | | n) | What is a deadlock?. | CO 4 | L4 | 1M |
| **Unit-I** | | | | | | |
| 2 | | a) | Outline and explain briefly the features of JAVA. | CO 1 | L3 | 7M |
|  | | b) | Interpret type casting and type promotion with simple examples | CO 1 | L3 | 7M |
| **(OR)** | | | | | | |
| 3 |  | | Describe the concept of decision making statements and control flow statements with example program | CO 1 | L3 | 14M |
| **Unit-II** | | | | | | |
| 4 | | a) | Write the purpose of constructor. Explain passing parameters to constructors with simple example. | CO 2 | L3 | 7M |
|  | | b) | Construct a class called Employee to store empno, name and salary. Also add three behaviors such as read(), display() and salary() to read, display and to return the salary of employee. In the main () method class, read n employee details, print the employee details and also find the average salary of the employees. | CO 2 | L2 | 7M |
| **(OR)** | | | | | | |
| 5 | | a) | Define method overloading in JAVA. Illustrate this with simple example program. | CO 2 | L3 | 7M |
|  | | b) | “this keyword refers to the current object in a method or constructor”. Interpret this statement with a simple example. | CO 2 | L3 | 7M |
| **Unit-III** | | | | | | |
| 6 | | a) | Illustrate the use of dynamic method dispatch with example. | CO 3 | L3 | 7M |
|  | | b) | Identify the use of super keyword to call the parent class constructor (parameterized) with an example program | CO 3 | L2 | 7M |
| **(OR)** | | | | | | |
| 7 | | a) | “Final keyword can be used to stop inheritance”. Support this with an example program. | CO 3 | L1 | 7M |
|  | | b) | Discuss in detail about the inheritance with example program. | CO 3 | L3 | 7M |
| **Unit-IV** | | | | | | |
| 8 | |  | Explain different types of exceptions with example program. | CO 4 | L3 | 14M |
| **(OR)** | | | | | | |
| 9 | | a) | Explain the procedure of creating user defined exception in JAVA with simple example. | CO 4 | L3 | 7M |
|  | | b) | Illustrate the use of thread priorities in JAVA with a simple example. | CO 4 | L3 | 7M |

