**V23**

Course code: **V23CST05 HTNO**

**SRI VASAVI ENGINEERING COLLEGE (Autonomous)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |

**B.Tech III Semester Regular Examinations,December-2024**

**(Model Paper)**

**OBJECT ORIENTED PROGRAMMING THROUGH JAVA**

(Common To CSE, CST, CSE(AI) & AIML)

Time: 3 Hrs Max. Marks: 70

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | PART-A **Answer All the Questions.** |  |
| 1. |  |  |  | **20 M** |
|  | a |  | List the tokens in java programming. | CO1-K1(2M) |
|  | b |  | Describe implicit type conversion. | CO1-K2(2M) |
|  | c |  | Discuss about class and object creation. | CO2-K1(2M) |
|  | d |  | Explain method overriding. | CO2-K2(2M) |
|  | e |  | List the uses of super keyword. | CO3-K1(2M) |
|  | f |  | Discuss about multiple inheritance. | CO3-K2(2M) |
|  | h |  | Discuss about Wrapper class auto-boxing. | CO4-K1(2M) |
|  | g |  | Differentiate checked and unchecked exception. | CO4-K2(2M) |
|  | h |  | Define multithreading. | CO5-K1(2M) |
|  | i |  | Describe any two JavaFX mouse events. | CO5-K2(2M) |
|  |  |  | PART-B **All Questions Carry Equal Marks** |  |
| 2. |  |  |  | **10 M** |
|  | A. | i. | Discuss about Object Oriented Programming principles. | CO1- K2(5M) |
|  |  | ii. | Develop a java program using static variables and static methods. | CO1- K3(5M) |
|  |  |  | OR |  |
|  | B. | i. | Differentiate implicit and explicit type conversion with examples. | CO1- K2(5M) |
|  |  | ii. | Demonstrate the concept of for and for-each with sample code | CO1- K3(5M) |
|  |  |  |  |  |
| 3. |  |  |  | **10 M** |
|  | A. | i. | Discuss about class and object creation with an example. | CO2- K2(5M) |
|  |  | ii | Develop a java program to implement method overloading. | CO2- K3(5M) |
|  |  |  | OR |  |
|  | B. | i. | Explain parameterized and non-parameterized constructors with suitable examples. | CO2- K2(5M) |
|  |  | ii | Demonstrate the concept of final keyword with a java program. | CO2- K3(5M) |
|  |  |  |  |  |
| 4. |  |  |  | **10 M** |
|  | A. | i. | Explain dynamic method dispatch. | CO3- K2(5M) |
|  |  | ii. | Develop a java program to perform binary search without using built-in class Arrays methods. | CO3- K3(5M) |
|  |  |  | OR |  |
|  | B. | i. | Explain the methods of vector class. | CO3- K2(5M) |
|  |  | ii. | Develop a java program to implement multiple inheritance using interfaces | CO3- K3(5M) |
|  |  |  |  |  |
| 5. |  |  |  | **10 M** |
|  | A. | i. | Differentiate between checked and unchecked exceptions. | CO4- K2(5M) |
|  |  | ii. | Develop a java program to create and access user-defined package | CO4- K3(5M) |
|  |  |  | OR |  |
|  | B. | i. | Explain about access specifiers in java. | CO4- K2(5M) |
|  |  | ii. | Develop a java program to create user-defined exception. | CO4- K3(5M) |
|  |  |  |  |  |
| 6. |  |  |  | **10 M** |
|  | A. | i. | Explain any four StringBuffer methods. | CO5- K2(5M) |
|  |  | ii. | Develop a java program where first thread displays “Hello” every 1 second thread displays “welcome” every 2 seconds and thread 3 displays “thank you” every three seconds. | CO5- K3(5M) |
|  |  |  | OR |  |
|  | B. | i. | Explain the following JavaFX layouts.   1. GridPane b) VBox | CO5- K2(5M) |
|  |  | ii. | Develop a java program using isAlive() and join() methods. | CO5- K3(5M) |
|  |  |  | **\* \* \*** |  |