Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov/Dec– 2017**

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| **Code :** | **16CS2002** | **Duration :** | **3hrs** |
| **Sub. Name :** | **FUNDAMENTALS OF JAVA PROGRAMMING** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain in detail about different types of data types in java with appropriate pseudo codes. | CO3 | 10 |
|  | b. | Write a Java code to find the sum of digits for a given number. | CO3 | 10 |
| (OR) | | | | |
| 2. | a. | Brief about significance of byte code and JVM. | CO1 | 10 |
| b. | List out various operators in java and write suitable pesudocodes showing their accessibility. | CO2 | 10 |
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| 3. |  | Describe method overloading in java and its significance. Write a program in java using method overloading to calculate volume of cone and cylinder. Also display the ratio of their areas. | CO1 | 20 |
| (OR) | | | | |
| 4. |  | Define inheritance in java. Write a program in java of your own choice to demonstrate the use of inheritance concept. | CO3 | 20 |
|  |  |  |  |  |
| 5. |  | Define string handling in java. With appropriate pseudo codes explain various string handling methods used in java. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Explain the concept of multithreading concept with java program and write a code to solve the producer & consumer problem using Threads. | CO3 | 20 |
|  |  |  |  |  |
| 7. |  | What is meant by exception handling in java? Write 3 java programs explaining any three exception handling mechanism in java. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Write a java program to load an image from local machine and perform any two effects of your own choice with UI. | CO3 | 20 |
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|  | | **Compulsory**: |  |  |
| 9. |  | Write the java program using AWT graphics for the following, with coordinates of your own   1. Drawing a line in Java2D. 2. Drawing a rectangle using Java2D. 3. Draw an ellipse using java2D. | CO3 | 20 |

ALL THE BEST