T.Y. B. SC. (Computer Science) SEM –V (CBCS - 2016 COURSE) : SUMMER - 2019

SUBJECT: CORE JAVA

Day Time: 11.00 AM TO 02.00 PM Saturday S-2019-1108 **Date** Max. Marks: 60 27/04/2019 N.B. All questions are **COMPULSORY**. 1) 2) Figures to the **RIGHT** indicate **FULL** marks. **Q.1** Answer **ANY TWO** of the following. (12)a) Describe various features of JAVA. b) Write a JAVA program to define class Rectangle having data members length and breadth. Accept and display data using class and object. c) Explain parameterized constructor with an example. **Q.2** Answer **ANY TWO** of the following. (12)a) What is an exception? How it is handled? Explain with suitable example. **b)** Write a java program to sort the numbers using an array. c) Describe system defined packages with their purposes. **Q.3** Answer **ANY TWO** of the following. (12)a) Explain public, private and protected access modifiers with suitable example. Write a JAVA program to find area of circle and square using method overloading. c) Describe various methods of StringBuffer class with an example. **Q.4** Answer **ANY THREE** of the following. (12)a) Explain single inheritance with proper example. **b)** Describe various data types in JAVA. c) Write a JAVA program to check whether given number is Armstrong or not. d) Explain Jdk Environment with different tools. Q.5 Answer ANY FOUR of the following. (12)a) Differentiate between C++ and JAVA. **b)** Explain method overriding with an example. c) Write various types of errors.d) What is interface? Write the declaration and implementation of an interface. e) Explain Java Virtual Machine. Write JAVA program to display grade of student depending on percentage.