CLASS: **IMSc**   SEMESTER: III
BRANCH: **PHYSICS/CHEMISTRY**   SESSION : MO/2019

SUBJECT : CA201 OBJECT ORIENTED PROGRAMMING USING JAVA

TIME: **2:00 HOURS**   FULL MARKS: 25

INSTRUCTIONS:
1. The total marks of the questions are 25.
2. Candidates may attempt for all 25 marks.
3. Before attempting the question paper, be sure that you have got the correct question paper.
4. The missing data, if any, may be assumed suitably.

Q1   (a) How java is platform independent and explain it with proper diagram?   [2]
Q1   (b) Write down six differences between POP and OOP.   [3]

Q2   (a) Briefly explain what is JVM, JRE and JDK.   [2]
Q2   (b) Explain any 6 features of Java.   [3]

Q3   (a) Write down the differences between instance variable and class variable.   [2]
Q3   (b) What is static polymorphism and explain it with an example?   [3]

Q4   (a) Write a short note on type casting in java with the help of an example.   [2]
Q4   (b) Write a java code for Fibonacci series with the help of one dimensional array. [3]

Q5   (a) What do you mean by Architectural Neutral?   [2]
Q5   (b) Write a java program to calculate the area of different shape   [5]
          I.   Declare a class namely "Shape"
          II.   Declare 3 function in the class which are taking two integer parameters.
          III.   Declare a parameterized constructor which will initialize two instance
                 variables.
          IV.   Create an object of the class in **Main()** function and call the functions to show
                 the output.

Shape

Instance variables :
Length ,breath ;

Shape(); //Constructor

Functions :
Area_Triangle();
Area_reactangle();
Area_Square();