BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (END SEMESTER EXAMINATION)

CLASS: BE BRANCH: CSE

SEMESTER : III SESSION : MO/16

SUBJECT: CS3005 OBJECT ORIENTED PROGRAMMING USING JAVA

TIME:

FULL MARKS: 60

INST	при	10.7	ma.	мс

- 1. The question paper contains 7 questions each of 12 marks and total 84 marks.
- 2. Candidates may attempt any 5 questions maximum of 60 marks.
- 3. The missing data, if any, may be assumed suitably.
- 4. Before attempting the question paper, be sure that you have got the correct question paper.
- 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
- 6. Nothing should be written on front or back of the question paper except tick marking.
- Q:1(a) Distinguish between JDK and JVM? (b) What do you mean by platform independence? [4] [6] (c) What is an OOP? What is the difference between Procedural language and OOPs? Q.2(a) What is the purpose of garbage collection? (b) What restrictions are placed on method overriding? (c) Explain function Overloading . Give an Example. List out some of the standard overloaded methods in [2] Q.3(a) Explain how multiple inheritance is achieved in java. [4] (b) Compare & contrast Interface & abstract class Final class & abstract class (c) Write a program in java. A class Teacher contains two fields, Name and Qualification. Extends the [6] class to department it contains Dept. No & Dept name. An interface named as college it contains one field name of the college. Using the above classes & Interface get the appropriate information & display it Differentiate between throw & throws clause in exception handling. Q.4(a) What do you mean by synchronization in multithreading? How it can be implemented in the program? [4] (b) Explain its ways with Examples. [6] Write a program to check IP address validation with possible exceptions and errors, that is (c) 0-255.0-255.0-255.0-255 Discuss the different level of access control available in java Q.5(a) Write a program that reads a number from the keyboard and displays its equivalent ASCII character. [4] (b) [6] What is the difference between Reader/Writer and Input Stream/Output Stream? (c) Why do applet classes need to be declared as public? Q.6(a) What is the difference between the initialize and start life cycle stages? (b) Write a program to read a character from a file and display it to standard output and also check for (c) end of file. Explain the class hierarchy of AWT? Q.7(a) [4] (b) Explain the various types of controls supported by AWT. (c) Write short notes on each of the following, giving examples for each.

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iii) Window

ii) Frame

i)Panel

