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

CLASS: IMSC SEMESTER: III
BRANCH: PHY/CHEM SESSION: MO/19

SUBJECT: CA201 OBJECT ORIENTED PROGRAMMING USING JAVA

TIME: 3 HOURS FULL MARKS: 50

INSTRUCTIONS:

- 1. The question paper contains 5 questions each of 10 marks and total 50 marks.
- 2. Attempt all questions.
- 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.

- Q.1(a) Explain 6 features of object oriented programming.
- Q.1(b) Write short note on different access specifiers in java.
- Q.2(a) Explain any five functions of String class with an example. [5]

[5]

[5]

[5]

[5]

- Q.2(b) Explain properties of string class and show the difference between final and immutability nature.
- Q.3(a) Write down all difference between method overloading and overriding. [5]
- Q.3(b) Explain following Keywords with appropriate example [5] 1.Super 2. Finalize() 3. toString()
- Q.4(a) Explain different Types of inheritance. Justify why multiple inheritance not possible without interface. [5]
- Q.4(b) Write a java program to calculate gross salary & net salary taking the following data. [5]

Input:empno,empname,basic

Process:

DA=50% of basic

HRA=25% of basic

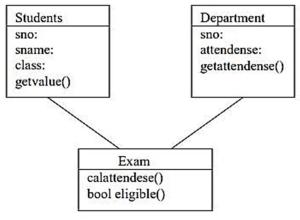
CCA=Rs240/-

PF=10%of basic

PT=Rs100/-

Use: constructor Overloading Concept and abstract class concept

- Q.5(a) Define Exception, error and give an example to handle exception?
- Q.5(b) Write a java program to find the details of the students eligible to enroll for the examination (Students, Department combined give the eligibility criteria for the enrollment class) using **interfaces**



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