

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

CLASS: BE
BRANCH: CSE

SEMESTER : III
SESSION : MO/16

SUBJECT: CS3005-OBJECT ORIENTED PROGRAMMING USING JAVA

TIME: 1.5 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The total value of the questions are 30 marks.
2. Candidates may attempt for all 30 marks.
3. In those cases where the marks obtain exceed 25 marks. The excess will be ignored.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. The missing data, if any, may be assumed suitably.

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- Q1. (a) What do you mean by object oriented programming? Explain the main features of OOPS. [2]
(b) How does a java program maintain platform independency with the help of JVM? [3]
- Q2. (a) What are the rules for casting primitive types? With a suitable example discuss the automatic type promotion in expressions in java. [2]
(b) Explain Why do we need public static void main(String args[]) method in Java. [3]
- Q3. (a) What is the difference between constructor and method? What do you mean by constructor overloading in java? Explain with an example. [3]
(b) Show by a suitable example, how constructors are called in a multilevel inheritance. [2]
- Q4. (a) Create your own package name "PKG" contains "Maths" and "Bsort" classes. "Maths" class contains member function "sine" and "cose" and in "Bsort" class contain member function "bubbleSort" that can able to sort integer numbers. Demonstrate your program which can retrieve those member functions. Your program can only import package "PKG". [5]
- Q5. What is method overloading & Method overriding? Explain with suitable example. Can you overload operators and overriding in java? [5]
- Q6. (a) Explain the advantages of using interfaces in Java? How they are different from Abstract Classes? [3]
(b) Describe the uses of final and super keywords with respect to inheritance. [2]