

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

**CLASS: BTECH  
BRANCH: ALL**

**SEMESTER: V  
SESSION: MO/2022**

**SUBJECT: CS204 OBJECT ORIENTED PROGRAMMING AND DESIGN**

**TIME: 2 HOURS**

**FULL MARKS: 25**

**INSTRUCTIONS:**

1. The total marks of the questions are 25.
  2. Candidates 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.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q1 (a) Define polymorphism.	[2]	[1]	[1]
Q1 (b) What are the different data types and corresponding input methods used in Scanner class?	[3]	[1]	[1]
Q2 (a) Name all the types of variables in java?	[2]	[2]	[1]
Q2 (b) Explain all the features of java.	[3]	[1]	[2]
Q3 (a) What are the different bitwise operators in java? Give examples with results.	[2]	[2]	[1]
Q3 (b) Write a java class that has two integer data members and constructors- one default and one parameterized that initializes the two data members. Create two objects of this class. One object will call the method to find factorial of the two integer data members and another would call a method that would find Fibonacci series between the two numbers. Display the results.	[3]	[2]	[5]
Q4 (a) Write the names of access modifiers and give their accessibility within class, within package, outside package by subclass only and outside package.	[2]	[2]	[5]
Q4 (b) Write a java program to sort two integer arrays and find the intersection of the two and store it in a third array.	[3]	[2]	[5]
Q5 (a) Write the names of any five packages of java?	[2]	[2]	[5]
Q5 (b) Explain an arraylist and all its features and methods.	[3]	[2]	[2]

:::::: 30/09/2022 :::::M