

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

CLASS: BTECH
BRANCH: EEE

SEMESTER: IV
SESSION: SP/2020

SUBJECT: CA201 OBJECT ORIENTED PROGRAMMING USING JAVA

TIME: 2 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.
 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) Write any two important features of Object Oriented Programming.	[2]	1	I
Q1	(b) Explain briefly the structure of a typical Java Program.	[3]	1	I
Q2	(a) Why the main() method in Java is declared as public?	[2]	1,2	II
Q2	(b) What happen when the following code snippet is executed: char c='a'; switch(c) { case 'a': System.out.println("a"); default: System.out.println("Default"); }	[3]	1,3	IV
Q3	(a) Compare instance variable and static variable in Java. Give example for both types of variable.	[2]	1	II
Q3	(b) What is the extension of file generated after compiling a program with java extension? What is byte code?	[3]	2	I
Q4	(a) Write general form of method definition in Java.	[2]	1	I
Q4	(b) Write a program in Java to calculate and print marks of five subjecs. Use array to store and initialize the marks of the subjects and a function calculate() to perform the task of adding 5 marks.	[3]	1,3	III
Q5	(a) Give an example of while loop in Java.	[2]	1	I
Q5	(b) Your Institute has introduced a scholarship policy for all its registered students. The policy is as follows: A Scholarship of 1% of total annual fees is given to all students irrespective of their GPA and 5% is given to female students if their GPA is more than 8.0. Represent this logic using nested if..else statement.	[3]	1,3	III

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