

**B. Tech (Third Semester Computer Science & Engineering (C.B.C.S))**

**Winter – 2022**

**End Semester Examination**

**Course Name: Object Oriented Programming with java**

Course Code: BCS2303



ASD/EFV5/63-6K/1474

Time: 3 Hours]

[Max. Marks: 60

**Instructions to Candidates:**

1. All questions carry marks as indicated.
2. All the sub- questions (a, b, c, d, and e) of Que.1 in Section A are compulsory.
3. Solve any two sub-questions in Que. 2 to Que.6 in Section B.
4. Assume suitable data wherever necessary.
5. Use of non-programmable calculator is permitted.

**Section A**

- |         |   |   |       |
|---------|---|---|-------|
| Que. 1. | (a) Compare C++ & Java.                   | 2 | (CO1) |
|         | (b) How to define class & object in java. | 2 | (CO2) |
|         | (c) Define Package.                       | 2 | (CO3) |
|         | (d) What is synchronization in threads.   | 2 | (CO4) |
|         | (e) Write the steps to create Appler.     | 2 | (CO5) |

**Section B**

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|---------|---|---|-------|
| Que. 2. | (a) Show the use of ternary operation in java program.  | 5 | (CO1) |
|         | (b) Explain features of JAVA  | 5 | (CO1) |
|         | (c) How to create 0 1-D & 2-D Arrays in java show with suitable example.  | 5 | (CO1) |
| Que. 3. | (a) Develop a java code for a class 'Student' having data members like roll-no , name & percentage accept & display information for two students using parameterized constructor. | 5 | (CO2) |
|         | (b) Enlist different uses of this keyword.  | 5 | (CO2) |
|         | (c) Show the uses of different access specifiers in different programming environments.   | 5 | (CO2) |

Que.4	(a) Explain polymorphism with an example program	5	(CO3)
	(b) Demonstrate multilevel inheritance program	5	(CO3)
	(c) Why java does not support multiple inheritance. Justify with sample code	5	(CO3)
Que. 5.	(a) Explain thread life cycle	5	(CO4)
	(b) Write a java program which will throw user defined exception 'Unauthorized User', when password mismatch	5	(CO4)
	(c) Show the use of Runnable interface with program.	5	(CO4)
Que. 6.	(a) Write any 5 events in JAVA	5	(CO5)
	(b) Write a java application program to create 'submit' & 'reset' buttons along with three radio buttons 'male', 'female', ' transgender'	5	(CO5)
	(c) Draw and explain Applet life cycle in Java	5	(CO5)

