

H

Roll No. ....

## TBC-303/TBI-305

B. C. A./B. SC. (IT)

(THIRD SEMESTER)

MID SEMESTER EXAMINATION, 2022

JAVA PROGRAMMING

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each question carries 10 marks.

1. (a) Define class and its types in Java. Write a programme in Java to show the implementation of method overriding.

(CO1)

OR

(b) Explain JVM architecture and its components.

(CO1)

2. (a) Define string in java. Write a programme to show Mutable and Immutable string in Java.

(CO1)

P. T. O.

(2) TBC-303/TBI-305

OR

- (b) Define Command Line arguments in Java. Write a programme in java to accept two numbers and calculate (add, sum, multiply and divide). (CO1)
3. (a) Define Arrays in Java and its classification. Write a programme to show the Exception `ArrayIndexOutOfBoundsException`. (CO1)

OR

- (b) Define Wrapper class in Java. Explain all wrapper classes in Java. (CO1)
4. (a) Define Exception Explain the use of try and multiple catch in Java. Illustrate the difference between throw and throws in Java. (CO2)

OR

- (b) Define Packages. Name any *five* inbuilt packages in Java. Design a package called Shape and it contains Rectangle, square and Circle class. Write a programme to illustrate this. (CO2)

(3)

5. (a) State the difference between import and static import. Explain by using an example. (CO2)

OR

- (b) Define Abstract class in Java. Illustrate how it is different from Interface. (CO2)

TBC-303/TBI-305

1,010