DO NOT WRITE ANYTHING ON QUESTION PAPER EXCEPT YOUR NAME, DEPARTMENT AND ENROLMENT No.

POSSESSION OF MOBILE, SMART WATCH ETC. IN EXAMINATION IS A UFM PRACTICE

Name of Student --- Enrolment No. -------------------

Department / School ------------------------------

BENNETT UNIVERSITY, GREATER NOIDA

Supplementary Examination, January 2020

COURSE CODE: ECSE102L   MAX. DURATION: **TWO HOURS**

COURSE NAME: Object Oriented Programming using Java

COURSE CREDIT: 5   MAX. MARKS: **100**

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1. Answer any three questions   **3 x 20 = 60 Marks**

1.1 In a student grading system, ranges of total marks for the grades are {A: 100 to 90, B: 80 to 89, C: 60 to 79, D: 40 to 59, F: less than 40}. Write two programs in java for the grading process based on 1) if-else and 2) switch case statements. Finally mention the use cases of these two different conditioning statements.

1.2 Write a java code to demonstrate functionality of Constructor and Destructor. Mention the purpose and differences of these functions.

1.3 A programmer wants to run a loop for numbers between 1 to 100. In each iteration, he wants to print square of the loop value. Write codes in Java for this task using 3 different looping techniques: for loop, while loop and do-while loop. Discuss how do-while loop is different than others.

1.4 There are different types of musical instruments (wind, string, electronic, etc.) played in different ways. Explain how polymorphism can be achieved for this task using a sample code in Java.

2. Answer the question in detail   **1 x 40 = 40 Marks**

2.1 Describe the advantages of Exception handling. Explain the situations where these exceptions might arise in a Java code: ArrayIndexOutOfBoundsException, FileNotFoundException, IOException.