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Roll No. :

333555(33)

B. E. (Fifth Semester) Examination,

April-May 2021

(New Scheme)

(IT Branch)

PROGRAMMING in JAVA

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Attempt all questions. Part (a) is compulsory.

Attempt any two parts out of remaining part

(b), (c) & (d).

Unit-I

1. (a) What is JVM? 2
- (b) Explain various control statements with example.
Compare the following in terms of their function : 7

[2]

- (i) While and do-while
- (ii) Break and Continue
- (c) Write a java program to find the number of sum of all integers greater than 100 and less than 200 that are divisible by 7. 7
- (d) Write a program to display star in triangular form : 7

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Unit-II

- 2. (a) What is Shallow and Deep cloning? 2
- (b) Write a program that creates an abstract class called dimension. Create 2 another sub classes rectangle and triangle. Include appropriate method for both the subclasses and then calculate and display the area of rectangle and triangle. 7

[3]

- (c) Explain the concept of static variable with example. 7
- (d) What is Inheritance? Why is multiple inheritance not available in java? 7

Unit-III

- 3. (a) What is thread? Also write the steps to create thread? 2
- (b) Write a program to create a user defined exception which will throw on exception when entered number is greater than 20. 7
- (c) Explain the difference between string and string buffer class and also explain some of the method defined in string class. 7
- (d) Write a program for removing all occurrences of a particular character from a string. 7

Unit-IV

- 4. (a) When extending the thread class to provide a thread behaviour which method should be overridden? 2
- (b) Write a program which shows how to read data from the keyboard and write if to my file txt. 7

[4]

- (c) Explain producer consumer problem. Write a suitable program in java to solve producer consumer problem. 7
- (d) What do you mean by the term thread priority? Write a suitable program to implement MIN, NORM and MAX priority in java. 7

Unit-V

5. (a) What is delegation event method? 2
- (b) Write a program to handle a mouse event by extending AWT components. 7
- (c) What is JDBC? What are the steps in the JDBC connection in java? 7
- (d) Write a GUI program by using swing component for adding two number. 7