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B. E. (Fifth Semester) Examination, Nov.-Dec. 2019

(New Scheme)

(CSE Engg. Branch)

PROGRAMMING in JAVA

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : Part (a) is compulsory of each unit, explain answer with suitable java code. Solve any *two* parts from parts (b), (c) and (d).

Unit-I

1. (a) What are the Object Oriented Programming Concepts in java?

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(b) What are the data types in Java and how to convert one data type to another? 7

(c) What is Constructor? Explain types of constructor and demonstrate calculate area using constructor. 7

(d) Explain static, final and this keyword with suitable example. 7

Unit-II

2. (a) What is use of super keyword in java? Give suitable example. 2

(b) Explain Inheritance in java with suitable example and how does inheritance perform with final keyword? 7

(b) Explain differentiate between method overloading and overriding with suitable example and explanation. 7

(d) What is error in programming? Explain exception handling and types in detail. 7

Unit-III

3. (a) What is synchronization in java? Give suitable example. 2

(b) Explain Multi-threading in Java also explain thread controller with suitable example. 7

(c) Write a program in java for producer-consumer problem using synchronization. 7

(d) What are the Input/Out classes and interfaces in Java? Explain in detail. 7

Unit-IV

4. (a) Explain the life-cycle of an Applet. Give suitable example. 2

(b) Explain Event delegation model in java with suitable example. 7

(c) What is JDBC? Explain the types of JDBC. 7

(d) Write a program to demonstrate the client-server chat program using TCP/IP socket programming. 7

Unit-V

5. (a) What is AWT. Give suitable example. 2

(b) What are the layout managers in java? Explain with suitable example. 7

(c) What is RMI? Explain with suitable RMI program in java. 7

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(d) Explain : 7

    (i)   Garbage collection in java   3½

    (ii) Object cloning in java   3½