CBCS SCHEME

USN | | | | | | | | | | **17CS42**

Fourth Semester B.E. Degree Examination, Dec.2019?-rin.2020
Object Oriented Concepts

Time: 3 hrs.   Max. Marks: **100**

Note: *Answer FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a. Explain how C++ allows member functions in structures. Give example. **(06 Marks)**
    b. What is data abstraction? How is it implemented in C++? **(06 Marks)**
    c. What is function overloading? Write a C++ program to define three overloaded functions area ( ) to find area of circle, triangle and rectangle. **(08 Marks)**

OR

2   a. How we can make some specific member functions of one class friendly to another class? **(06 Marks)**
    b. What is constructor? List the different types of constructors and explain default constructor with example. **(08 Marks)**
    c. What is static member of a class? Write a C++ program to count the number of objects created. **(06 Marks)**

Module-2

3 a. List and explain the java buzzwords. **(08 Marks)**
    b. Explain the concepts of arrays in java with examples. **(07 Marks)**
    c. Explain type conversion in java with an example. **(05 Marks)**

OR

4   a. Write a java program to initialize and display different types of integer and floating point variables. **(05 Marks)**
    b. List and explain different jump statements used in java with examples. **(07 Marks)**
    c. List and explain different iteration statements used in java with examples. **(08 Marks)**

Module-3

5   a. Write a program in java to implement a stack operations that can hold 10 integers. **(07 Marks)**
    b. Compare and contrast method overloading and method overriding with examples. **(08 Marks)**
    c. Describe the significance of super in java. Give example. **(05 Marks)**

OR

6   a. Define package. What are the steps involved in creating user defined package with an example. **(08 Marks)**
    b. What is an exception? How java supports exception handling mechanism. Give example. **(07 Marks)**
    c. Explain how variables in interfaces are used. Give example. **(05 Marks)**

Module-4

7 a. What is thread? Explain two ways of creation of threads. **(07 Marks)**
    b. Describe thread priority. How to assign and get the thread priority. **(07 Marks)**
    c. Explain the following with syntax and example,
        (i) wait ( )   (ii) notify ( )   (iii) notifyAll ( ). **(06 Marks)**

OR

8   a. What is meant by deadlock? How to avoid deadlock? Give example.   **(10 Marks)**
    b. Briefly explain the role of inner class and anonymous inner class in java.   **(05 Marks)**
    c. What is an event class? List and explain different event classes available in java. **(05 Marks)**

Module-5

9   a. Explain the five methods of Applet.   **(05 Marks)**
    b. Explain the HTML Applet tag with syntax and example.   **(07 Marks)**
    c. Write a swing program for displaying any one of the options : C, C++, Java, PHP through the selection of combo box by clicking the show button.   **(08 Marks)**

OR

10 a. Explain with syntax:
       (i) JLabel   (ii) JTextField   (iii) JButton   (iv) JCheckBox (v) JComboBox.
                                                                                            (10 Marks)
    b. Write a program to create a table with column headings such as Fname, Lname, Address, Age and insert at least 5 records in the table and display.   **(10 Marks)**

* * * * *

concge