USN | | | | | | | | | |

15CS45

Fourth Semester B.E. Degree Examination, Dec.2019/Jan.2020
Object Oriented Concepts

Time: 3 hrs.   Max. Marks: 80

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

Module-1

1 a. Define Structure. With suitable example.   **(05 Marks)**
   b. State and compare Object – Oriented program using with procedure oriented programming.
                                                                               (04 Marks)
   c. Define Inline function. Explain with an example program. What are the conditions where inline functions cannot be expanded?   **(07 Marks)**

OR

2 a. Differentiate between class and structure. With an example, explain the syntax for defining a class and structure.   **(08 Marks)**
   b. Define friend junction and rules to be used while using it. Explain with a C++ program to add two complex numbers.   **(08 Marks)**

Module-2

3 a. List and explain the Java buzzwords.   **(08 Marks)**
   b. Differentiate the usage of access specifies in java and their scope.   **(04 Marks)**
   c. Explain type conversion, with an example.   **(04 Marks)**

OR

4 a. Explain the concepts of arrays in Java with examples. Also write a program that creates and initializes a four integer elements array. Find the sum and average of its values.   **(08 Marks)**
   b. Explain the syntax of for – each loop. Write a Java program to search a key element by using for – each loop.   **(08 Marks)**

Module-3

5 a. Can you overload constructor and destructor? Justify with suitable program.   **(06 Marks)**
   b. Briefly explain the role of interfaces while implementing multiple inheritances in Java.
                                                                               (06 Marks)
   c. Write a Syntax of try and catch block to handle multiple exceptions. Explain.   **(04 Marks)**

OR

6 a. What is Super? Explain the use of super with suitable example.   **(06 Marks)**
   b. Distinguish between method overloading and overriding in Java with suitable example for overriding method.   **(06 Marks)**
   c. Define Package. What are the steps involved in creating user defined package with an example.   **(04 Marks)**

Module-4

7 a. Describe the thread priority. How to assign and get the thread priority?   **(06 Marks)**
   b. What is Synchronization? Explain the role of synchronization with producer consumer problem.   **(10 Marks)**

OR

8   a.   With the syntax explain the use of is Alive ( ) and join ( ) methods.   (06 Marks)
    b.   Discuss delegation event model with components based on its model.   (06 Marks)
    c.   Explain any two event listener interface with its functions or methods.   (04 Marks)

Module-5

9   a.   Define an Applet. What are the two types of an applet? Explain architecture.   (08 Marks)
    b.   What is Swing? Explain important feature of swing.   (04 Marks)
    c.   What are advantages and disadvantages of applets?   (04 Marks)

OR

10   a.   Explain the following with an example for each :
         i)   Jtext field   ii)   Jtable   iii)   JcomboBox.   (12 Marks)
     b.   Explain components and containers in the swing.   (04 Marks)

* * * * *