Code: CS3T5

II B.Tech - I Semester – Regular/Supplementary Examinations November - 2019

OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours   Max. Marks: 70
PART – A

Answer *all* the questions.   All questions carry equal marks
                                                    11x 2 = 22 M

1.
  a) What is the difference between object-oriented programming language and object-based programming language?
  b) What is the difference between constructors and other methods?
  c) What are super and sub classes?
  d) Write the difference between interfaces and abstract classes.
  e) What do you mean by static import?
  f) What is Autoboxing?
  g) List any three common run time errors.
  h) Define thread priorities.
  i) What are the limitations of AWT?
  j) Write the use of layout manager and list different types of layout managers available in java.
  k) Define JLabel and JMenu.

PART – B
Answer any ***THREE*** questions. All questions carry equal marks.

$$3 \times 16 = 48 \text{ M}$$

2. a) Explain the various modes of usage of "this" keyword with a sample Java program.   5 M

   b) Write a java program to find matrix multiplication.   6 M

   c) Write the usage of StringTokenizer class with example program.   5 M

3. a) What is inheritance? How will you call parameterized constructor and over ridded method from the parent class in sub class.   8 M

   b) Develop a Library interface which has drawBook(), returnBook() (with fine), checkStatus() and reserveBook() methods. All the methods tagged with public. Implement the interface with appropriate code.   8 M

4. a) What is a package? How to create package? Explain with suitable example.   8 M

   b) Explain hashCode() and equals() in Java with example program.   8 M

5. a) Explain the exception handling mechanism with an example.   8 M

   b) With illustrations, explain thread states and interrupting threads.   8 M

6. a) Write a stand-alone AWT based application which creates a frame window that responds to mouse clicks and key strokes.   8 M

   b) Write a JAVA program to simulate the grid layout with calculator.   8 M