

Code: CS3T5

**II B.Tech - I Semester – Regular/Supplementary Examinations
November - 2018**

**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) Write about this keyword.
- b) What is the importance of methods like hashCode() and equals () ?
- c) List out the characteristics of the static method.
- d) What is the importance of synchronization in java?
- e) What is source and listener in java event handling?
- f) What is the use of ‘super’ keyword?
- g) How java supports multiple inheritance?
- h) What is a final class? Give an example.
- i) Write about thread life cycle methods.
- j) What is a Wrapper class? Give an example.
- k) List different key board Events.

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Explain the concept of passing reference of an object in detail with example. 6 M
- b) Give a brief note on Java Virtual Machine. 5 M
- c) Write an example program to show the calling sequence of constructors. 5 M
3. a) Explain dynamic binding in java with suitable example. 8 M
- b) Explain different types of inheritance in java. 8 M
4. a) What is package? How to create package? Give examples. 8 M
- b) What are the different Collection Interfaces? Discuss in detail. 8 M
5. a) What is an exception? How are exceptions handled in Java? Explain. 8 M
- b) What is a Thread? Write a program to implement multi thread programming in java. 8 M

6. a) Write a program to create a frame for a simple arithmetic calculator using swing components and layout managers. 8 M

b) Write about event listeners and discuss about different Event Classes. 8 M