Roll No.

Total No. of Pages: 02

Total No. of Questions: 09

B.Tech.(IT) (2011 Onwards E-III) (Sem.-7,8)
ADVANCED JAVA

Subject Code: BTIT-906 M.Code: 71990

Time: 3 Hrs. Max. Marks: 60

#### **INSTRUCTIONS TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

### **SECTION-A**

# 1. Write briefly:

- a) What is difference between user thread and daemon thread?
- b) What is concurrency in Java programming?
- c) Define locks in Java.
- d) What is the need of serialization in Java?
- e) Write a short note on use of API in streaming.
- f) Write a short note on java security.
- g) Give the syntax of any database connectivity driver.
- h) Define prepared statements in Java.
- i) Why Java Beans are called "beans"?
- j) Give the fundamentals of importance of generic in Java.

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# **SECTION-B**

- 2. Explain the use of semaphores in Java threading applications.
- 3. How do thread communicate with each other in Java? Illustrate with diagram.
- 4. Show the Input Stream hierarchy in Java with block diagram.
- 5. Discuss transaction management. What is the role of commit().
- 6. Why do we need Java Beans? What are its types?

# **SECTION-C**

- 7. Explain the thread life cycle in JAVA? What are advantages of multithreading?
- 8. What is Java Database Connectivity (JDBC)? Show with examples using Driver Manager, Connection and Result Set.
- 9. How do we use annotation in JAVA? Discuss built in java annotation by taking an example.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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