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**Question Paper Code: 31243**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

Fourth Semester

Computer Science and Engineering

01UCS403 – JAVA PROGRAMMING

(Common to Information Technology)

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. What is meant by byte code?
2. Differentiate between break and continue statement.
3. What is the purpose of final keyword?
4. What is meant by reflection?
5. What are the two ways for creating a thread?
6. Define multithreaded programming.
7. What is AWT? List its controls.
8. What are events?
9. What is a stream and which class allows you to read objects directly from a stream?
10. What are the basic steps to create a JDBC application?

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Why do we need static members and how to access them? Explain it with clear example. (8)

- (ii) What is constructor in java? Why constructor does not have return type in java?  
Explain it with proper example. (8)

Or

- (b) How to declare and initialize a string in java and also explain the different string handling functions with suitable examples. (16)

12. (a) With suitable examples explain how packages can be created, imported and used. Also elaborate its scope. (16)

Or

- (b) Explain how the reflection library helps to write programs that manipulates java code dynamically. (16)

13. (a) Write a java program that synchronizes three different threads of the same program and displays the contents of the text supplied through these threads. (16)

Or

- (b) (i) Explain in detail about thread life cycle. (8)

- (ii) Write a java program for handling arithmetic exception. (8)

14. (a) (i) How will you display an image on the frame in a window using java. (8)

- (ii) Write a program to simulate card layout. (8)

Or

- (b) What is event handling in java? List out the available event classes and listener interfaces with suitable examples. (16)

15. (a) (i) Write short notes on Object Serialization and Deserialization. (8)

- (ii) What is meant by stream? What are the types of streams and classes? Explain in detail. (8)

Or

- (b) Discuss Java Database Connectivity. Explain JDBC connectivity with suitable examples. (16)