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## Question Paper Code: 91352

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

## Fifth Semester

## Computer Science and Engineering

## CS 2305/CS 55/10144 CS 506 — PROGRAMMING PARADIGMS/PROGRAMMING PARADIGMS WITH JAVA

(Regulation 2008/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

 $PART A - (10 \times 2 = 20 \text{ marks})$ 

- 1. List the access specifiers used in JAVA.
- 2. What is meant by JAVA package?
- 3. Define reflection.
- 4. What is meant by abstract class?
- 5. What is event programming?
- 6. What is meant by adaptor class?
- 7. Mention the some of the serious exceptions occurred in generic programming.
- 8. Define the term: Assertions.
- 9. Write the properties of a Thread.
- 10. What is Multi-Threaded programming?

PART B —  $(5 \times 16 = 80 \text{ marks})$ 

11. (a) What is meant by Constructors? Describe the types of constructors supported by JAVA with example.

Or

(b) Write a note on Destructors. Develop a simple JAVA program to sort the given numbers in increasing order.

12. (a) What do you mean by polymorphism? Discuss the types of polymorphism with suitable examples.

Or

- (b) Explain the concept of object cloning and inner classes with example.
- 13. (a) Elaborately discuss the components of graphics programming. Illustrate the basic of event handling.

Or

- (b) Describe the types of layout management and swing components briefly.
- 14. (a) State the motivations of generic programming. Explain the generic classes and methods with example.

Or

- (b) Explain in detail about generic inheritance and generic interface. Discuss exploring the impact of inheritance in generic classes with example.
- 15. (a) Define thread. Explain the states of thread briefly. State the reasons for synchronization in thread. Write a simple concurrent programming to create, sleep and delete the threads.

Or

(b) Discuss thread-safe collections briefly. Write a simple multi-threaded program for reader and writer problem.