Reg. No. ☐☐☐☐☐☐☐☐☐☐☐☐

## Question Paper Code : 71388

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2015.

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 × 2 = 20 marks)

1. Define the characteristics of objects.

2. What is constructor?

3. What is Abstract class?

4. Define inner classes. Why would you want to do that?

5. List out some system colors available in Java and their purpose.

6. Define Border layout.

7. Define generic class.

8. What is Virtual Machine in generic programming?

9. List out some limitations of intrinsic locks and conditions.

10. Define Barrier and Exchangers.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Define Class.                                                    (2)

    (ii) Write short notes on Access specifiers.                            (3)

    (iii) Strings in JAVA.                                                  (3)

    (iv) Explain the term static fields and methods and explain its types
         with examples.                                                    (8)

Or

(b) (i) Define array. What is array sorting and explain with an example.

(ii) State and explain documentation comments in Java. (8)

12. (a) (i) What is class hierarchy? Explain its types with suitable example. (8)

(ii) Explain in detail about the term reflection. (8)

Or

(b) (i) Explain in detail about the term interface and list out its properties. (8)

(ii) What is final keyword? Explain with an example. (8)

13. (a) (i) Explain about the concepts of creating and positioning of frame. (8)

(ii) Define Event handling. Write a program to handle a button event. (8)

Or

(b) (i) What is layout management? Write the different types of layout with suitable examples. (8)

(ii) What is swing component? Write a java program by using major of the swing component with output. (8)

14. (a) (i) Explain in detail about generic classes and methods. (8)

(ii) Write about inheritance rules for generic types with example. (8)

Or

(b) (i) Define Exception and explain its different types with example. (8)

(ii) Explain briefly about Assertion and Logging. (8)

15. (a) (i) What is thread? Explain the life cycle of threads. (8)

(ii) Explain the properties of thread in detail. (8)

Or

(b) (i) How to interrupt the thread? (4)

(ii) Write short notes about Synchronization. (4)

(iii) Explain about (8)

(1) Executors

(2) Thread pools

(3) Semaphores

(4) Countdown hatches

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