Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 21310

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Fifth Semester

Computer Science and Engineering

CS 2305 / CS 55 / 10144 CS 506 – PROGRAMMING PARADIGMS

(Regulation 2008 / 2010)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   What are the key characteristics of objects?

2.   Define finalize method.

3.   What is the use of final keyword?

4.   How to object clone?

5.   Define frame.

6.   What is adapter class?

7.   What is the need for generic programming?

8.   What is the use of logging?

9.   What is the need for threads?

10. Name any four thread constructor.

PART B — (5 × 16 = 80 marks)

11. (a) (i)   How is OOP different from procedural programming languages? (8)

          (ii) What is package? How to add a class into a package? Give example.
                                                                              (8)

Or

     (b) (i)   Write down the techniques to design good classes.   (8)

          (ii) Explain about Java building string functions with an example.   (8)

12. (a) (i) Define Inner classes. How to access object state using inner classes? Give an example. (8)

(ii) What is abstract class? Write a program for abstract class example. (8)

Or

(b) (i) What is inheritance? Write a program for inheriting a class. (8)

(ii) What is reflection? Write the steps involved to analyze Objects at run time using reflection. (8)

13. (a) (i) Explain about the model view controller design pattern. (8)

(ii) What is the function of layout manager? Describe in detail about the different layout in Java GUI. (8)

Or

(b) (i) What is swing? Write a program for a simple calculator using swing. (8)

(ii) How an application to respond to events in Java? Write the steps and the example. (8)

14. (a) (i) Explain about generic code and the virtual machine. (8)

(ii) What is exception? How to throw an exception? Give an example. (8)

Or

(b) (i) Explain about the reflection and generics. Give a example. (8)

(ii) What is finally class? How to catching exceptions? Write an example. (8)

15. (a) (i) How to extends the thread class? Give an example. (8)

(ii) Explain about the thread synchronization with an example. (8)

Or

(b) (i) How to Implement runnable interface for creating and starting threads? (8)

(ii) Define threads. Describe in detail about thread life cycle. (8)

2 21310