17217(N)

B. Tech 5th Semester Examination

Core Java (CBS)

CS-502

Time : 3 Hours   www.epaper.tk   Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all selecting one question from each of the section A, B, C and D of the question paper and all the subparts of the section E (compulsory).

SECTION - A

1. (a) What is an array? Write a program to print array elements in reverse order. (6)

   (b) Explain the concept of jump statements with program in Java. (6)

2. (a) Explain arithmetic, relational and logical operators. (6)

   (b) Discuss features of Java. (3)

   (c) Explain println(),print(),printf() methods with example. (3)

SECTION - B

3. (a) Shape class contains length, height and area functions. Display contains show function. Rectangle class calculates area and prints area by using show function. Relate shape, display with rectangle class. Write a Java code to implement above. (6)

   (b) What are access specifiers? Discuss them in the context of Java. (6)

4. Write short notes on the following:

   (i) Differentiate overloading and overriding. (6)

   (ii) Importance of finally block. (6)

SECTION - C

5. (a) Write a program to display a text message "welcome" when user press button by mouse. (6)

    (b) Explain GUI components with example. (6)

6. (a) Write a note on adapter class. (6)

    (b) Write a Java program to demonstrate J Label, and J Button class. (6)

SECTION - D

7. Write short notes on the following

    (a) Graphics programming.

    (b) Frame.

    (c) API packages. (12)

8. (a) Develop a program that is likely to throw multiple exceptions that are handled using catch and finally blocks. (6)

    (b) Write a note on:

    (i) J Slider.

    (ii) Access Protection. (6)

SECTION - E (Compulsory)

9. (i) What is meant by Listener in JAVA event handling? Give examples.

    (ii) What is adaptor class? Where do we use it?

    (iii) The Java.io.File class can be used to read contents of a file. State true or false and justify.

    (iv) What is the role of bitwise operators?

    (v) Write down the major pillars of OOP in brief.

    (vi) What are naming conventions of packages? (2×6=12)