V Semester B.A./B.Sc. Examination, Nov./Dec. 2014
(F + R) (Semester Scheme)
COMPUTER SCIENCE – VI
Java Programming and Unix/Linux Operating System

Time : 3 Hours

Max. Marks : 70(F)/60(R)

Instructions : 1) **Repeaters** have to answer Section **A, B** and **C** only, which carries **60** marks (prior to **2013-14**).
2) **Freshers** have to answer Section **A, B, C** and **D**, which carries **70** marks (**2013-14** and **onwards**)
3) **70** marks for **Fresh** students of 2013-14 and **onwards**.
4) **60** marks for the **Repeater** students prior to 2013-14.

SECTION – A

I. Answer **any 10** questions. (1×10=10)

1) Why Java is known as dynamic language ?

2) What is the use of abstract class in Java ?

3) What is a package ?

4) Differentiate between throw and throws.

5) What is single inheritance ?

6) Mention any two methods defined by File Input Stream.

7) What is multitasking ?

8) What are the different types of files in UNIX ?

9) What is the use of grep command ?

10) Mention any two commands for backup files in UNIX.

11) List any two advantages of shell scripts.

12) What is open source code ?

P.T.O.

SECTION – B

II. Answer **any 5** questions.

13) Explain nested if statement in Java with example.

14) Write short notes on command line arguments.

15) Explain Date Class with example.

16) Write short notes on exception handling.

17) Explain different ways of setting file permission in UNIX.

18) Write short notes on piped process.

19) Write a shell program to find the sum of digits of a given number.

SECTION – C

III. Answer **any 5** questions.

20) a) Explain switch statement in Java with example.
    b) Write short notes on ternary operations.

21) Explain different types of constructors with example.

22) a) Explain creating and importing user defined package with example.
    b) Write short notes on Class Path.

23) What is multi threading ? Explain creating and extending thread with example.

24) Discuss in detail about UNIX file system.

25) a) Explain any four system calls.
    b) Write short notes on security issues in UNIX.

26) a) Briefly explain UNIX directory structure.
    b) Write short notes on Secondary Storage Management.

27) a) Explain Until loop with example.
    b) Explain any three system communication commands.

SECTION – D

(2013-14 and Onwards students **only**)

IV. Answer **any 1** question.

28) a) Briefly explain interfaces with example.
    b) Write a Java program to create object of a stack and use all the methods.

29) a) Explain any five file related commands with syntax and example.
    b) Write a shell program to check whether a given string is palindrome or not.