

- (b) Write an applet application that display the string "hello" every time the mouse button is clicked by the user. 8
8. (a) Explain the Java thread model. 7
- (b) How multiple threads are created and handled by a Java application. Illustrate. 8

No. of Printed Pages : 04

Roll No.

F-212

B.C.A. EXAMINATION, May 2016

(Sixth Semester)

(Main)

BCA-304-B

JAVA PROGRAMMING

Time : 3 Hours]

[*Maximum Marks : 75*

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Each question carries equal marks.

Unit I

1. (a) Describe the use of Java compiler and Java interpreter. 5
- (b) List any *five* features of Java as a programming language. 5
- (c) How a constructor can be overload ? Illustrate with an example. 5
2. (a) What are Objects ? How are they created from a class ? Illustrate with example. 8
- (b) Define order of precedence and associativity. How they are used ? Which Java operator is right associative ? 7

Unit II

3. (a) List the main benefits of inheritance ? What does class inheritance mean ? 7
- (b) Illustrate the difference between static binding and dynamic binding with suitable example. 7

4. (a) How a package is created in Java ? Explain with suitable example. 10
- (b) Define polymorphism. Illustrate with example. 5

Unit III

5. (a) List the uses of an interface ? Also differentiate between a class and an interface. 8
- (b) Can an interface be final ? Can an interface have an inner class ? Elaborate. 7
6. (a) Define an abstract base class ? List its uses. 7
- (b) Define the following terms : 8
 - (i) Static method
 - (ii) Garbage Collection.

Unit IV

7. (a) Define a thread. Explain the complete life-cycle of a thread. 7

No. of Printed Pages : 03

Roll No.

F-213

B.C.A. EXAMINATION, May 2016

(Sixth Semester)

(Main)

BCA-306-B

SYSTEM ADMINISTRATION

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt any *Five* questions. All questions carry equal marks.

Unit I

1. Define an operating system. List and elaborate *five* different types of services offered by an operating system. **15**

(3-60) M-F-213

P.T.O.

2. Explain the structure of UNIX Kernel.
Compare the features of Unix and Windows.

15

Unit II

3. (a) Define command pipelining ? Give suitable example for the same. 5

- (b) Explain the purpose of the following commands : 10

Date, echo, printf, uname, who.

4. (a) Differentiate between the following uses of cat command : 6

(i) Cat a.text

(ii) cat > a.text.

- (b) Discuss *three* modes of operation of vi editor in detail. 9

Unit III

5. (a) How the super user login information is maintained ? Explain the process for shutting down the UNIX system. 8

M-F-213

2

- (b) Differentiate a root user from a normal end user highlighting the unique features of the root. 7

6. (a) Explain the process stepwise to install the printer in a UNIX based system. 7

- (b) Explain the device files in detail, highlighting the aspect of major and minor numbers. 8

Unit IV

7. (a) Define Shell Script. How does it differ from a program coded in a specific language. 5

- (b) Discuss various looping constructs available in shell with programming examples. 10

8. (a) Compare and contrast the features of telnet and ftp commands. 7

- (b) How a process can be killed ? Explain. What care should be exercised while killing a process ? 8

(3-60) M-F-213

3

370