

Roll No.

BCA-502(N)

B. C. A. (Fifth Semester)

EXAMINATION, Dec., 2014

(New Course)

Paper Second

**JAVA PROGRAMMING AND DYNAMIC
WEBPAGE DESIGN**

Time : Three Hours.]

[Maximum Marks : 75

Note : Section A is compulsory. Attempt any *seven* questions from Section B and *one* question from Section C.

Section—A

1. Answer the following : 10
 - (i) What are Interfaces ? How are they useful ?
 - (ii) What is the difference between 'Break' and 'Continue' statement ?
 - (iii) What do you understand by JVM ? Is JVM platform independent ?
 - (iv) What is the difference between process and thread ?
 - (v) What is the major difference between Java Servlet and JSP ?

2. Fill in the blanks with correct word : 4
 - (i) are small applications meant to run on client machine to perform some computational tasks.

- (ii) are small text files saved by server on a client machine to store user preferences.
- (iii) members are also called class members as they belong to whole class rather than specific object.
- (iv) uses user defined Tags that can interact with databases on web.
3. What is 'thread' in Java ? Write a program in Java showing the action from there threads using a suitable example. 4

Section—B

6 each

4. Explain, why Java is a preferred language for Internet programming.
5. Write an Applet in Java which draws a human face with few orals and arcs.
6. Differentiate between method overloading and method overriding with the help of example.
7. What are the advantages of exception handling in Java ? Write a program in Java to handle arithmetic error 'Divide by Zero' using exception handling.
8. Write a program using AWT to create three buttons; red green and blue. The background color is initially set white. Depending on the button pressed, the background color should change accordingly.
9. How would you establish a connection with database in Java ?
10. Write a HTML page for user registration, User should fill his name, data of birth, e-Mail ID, a login ID and password to get registered.
11. What are JAR files ? Where are they used ?
12. Write a short note on Layout Manager.

13. What do you understand by Session Tracking ? Explain using an example servlet program.

Section—C

14. Write short notes on the following :

- (i) TCP/IP based server socket
- (ii) JSP predefined objects
- (iii) Servlet Life cycle
- (iv) Java Stream Classes
- (v) Packages in Java

15. Write servlets that accepts user preferences (colors, hobby etc.) from user and saves it on user machine. Write another servlet that reads the above information from the user machine. 15