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Roll No. ....

BCA - V Sem.

18022

B. C. A. Examination, Dec. 2016

Java Programming and Dynamic Webpage Design

(BCA-502)

(New Course)

Time : Three Hours]

[Maximum Marks : 75

Note: Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Answer all the five questions. Each question carries 3 marks. Very short answer is required. 3x5=15

1. Write a program in JAVA to convert a string totally into upper case. 3

2. What is byte-code in JAVA? Explain. 3
3. Design a webpage in HTML that contains special symbols. 3
4. What do you mean by connection pooling? Explain. 3
5. JAVA is not pure object-oriented programming language? Justify your answer. 3

Section-B

(Short Answer Questions)

Answer any two questions out of the following three questions. Each question carries 7½ marks. Short answer is required. 7½x2=15

6. Define JAVA servlets. How database connectivity is done in JAVA servlets? Explain. 7½
7. What do you mean by frame and frameset tag in HTML? Explain it with a suitable program. 7½
8. Write a program to count the number of objects created in a program. 7½

**Section-C**

**(Detailed Answer Questions)**

Answer any *three* questions out of the following five questions. Each question carries 15 marks. Answer is required in detail.  $15 \times 3 = 45$

9. (a) What is an applet? Explain the life cycle of an applet? 5
- (b) Write an applet program in JAVA to create an event listener. 5
- (c) Explain the concept of handling image in Java GUI application with example. 5
10. Write short notes on the following :
- (a) Exception Handling in JAVA 8
- (b) Table Tag in HTML. 7
11. (a) Describe the delegation event model of event handling in JAVA. How is it a better approach than the other approaches? 7
- (b) What do you mean by a thread and multithreading? Explain the various methods to create a thread in JAVA. 8

12. (a) What do you mean by Constructor? Differentiate between default constructor and parameterized constructor with example. 7
- (b) What do you mean by datagram socket in JAVA? How to create a TCP and UDP connections using socket programming in JAVA? Explain. 8
13. (a) How many types of forms are available in HTML? Design an order-entry form that contains all the form controls and elements. 8
- (b) Define the concept of JAVA server page. How the dynamic content is generated in JSP? Explain. 7