

**18022**

**B.C.A. Examination, Dec.-2024**

**Java Programming and Dynamic  
Webpage Design  
(B.C.A.-502)**

**Time : Three Hours ] [Maximum Marks : 75**

**Note :** Attempt questions from **all** sections  
as per instructions.

**Section - A**

**Note :** Attempt **all** questions. Each question  
carries 3 marks. Very Short Answer is  
required not exceeding 75 words.

$$3 \times 5 = 15$$

1. Discuss data types in Java. 3
2. Explain TCP/IP server socket. 3

**P.T.O.**

3. What are packages. How do you call a package. 3
4. Explain the anchor and table tag in HTML. 3
5. Briefly explain the Internet concepts. 3

**Section-B**

**Note :** Attempt any **two** questions. Out of  
these following three questions. Each  
question carry 7.5 marks.  $7.5 \times 2 = 15$

6. Explain applet with its life cycle, write a program to demonstrate simple Java applet to display any image. Also compare applets over HTML. 7.5
7. Explain TCP/IP client socket. Also write the constructor and methods used to create client sockets? 7.5
8. Explain the concepts of Inheritance in Java. Also explain the types of Inheritance. 7.5

### **Section-C**

**Note :** Attempt any **three** questions out of these following five questions. Each question carries 15 marks.  $15 \times 3 = 45$

9. What is JDBC? Explain the drivers used in JDBC. Write a JDBC program for insert and display the record of employees using prepared statement. 15

10. What is packages? What are the benefits of package? Explain Java API package. List out any five methods of string class by giving an example. 15

11. Explain servlets with its life cycle. How its life cycle is different from the life cycle of JSP. Give an example. 15

**P.T.O.**

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12. Discuss JSP in details. What are JSP directives? Explain various types of directives with example. 15

13. What are the uses of layout managers? Give the name of classes that represents the layout managers. Explain any five layout managers. 15

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B.C.A.-V Sem.

(Printed Pages 4)

Roll No. \_\_\_\_\_

**18022**

## **B.C.A. Examination, Dec.-2023**

**Java Programming and Dynamic**

**Webpage Design**

**(BCA-502)**

*Time : Three Hours ]*

*/Maximum Marks : 75*

**Note :** Attempt questions from **all** sections as per instructions.

### **Section-A**

#### **(Very Short Answer Type Question)**

**Note :** Attempt **all** questions. Each question carries **3** marks. Very short answer is required not exceeding 75 words.

$$3 \times 5 = 15$$

**P.T.O.**

1. How is Object Created in Java?
2. Compare between JDK, JRE and JVM?
3. Difference between JDBC and ODBC?
4. Write difference JSP and Servlet?
5. Explain three keywords 'This', 'Final' 'Super', in Java.

### **Section-B**

#### **(Short Answer Type Question)**

**Note :** Attempt any **two** questions out of the following three questions. Each question carries 7.5 marks. Short answer is required not exceeding 200 words.

$$7.5 \times 2 = 15$$

6. Illustrate the features of Java Programming Language.
7. Define the advantages of Servlet over CGI? Explain with an example.

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8. What is Applet? Explain the describe life cycle of Applet.

### **Section-C**

#### **(Long Answer Type Questions)**

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

9. What is an exception? How is exception handled in JAVA. Difference between Throw and Throws. <https://www.ccsustudy.com>

10. (a) Explain the concept of inheritance with its types.

- (b) Discuss the key features supported by Object-Oriented programming language.

11. What are packages in Java? How a user-defined package is created in Java, explain with example.

12. Define thread. How to create a thread in Java? Write a program that execute two threads. One thread will print the even numbers and another thread will print odd numbers from 1 to 5.

13. Mention Various AWT Controls Explain over four of them.

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A  
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B.C.A.-V Sem.

**18022 (CV-III)**

**B.C.A. Examination, Dec.-2021**

**JAVA PROGRAMMING AND DYNAMIC  
WEBPAGE DESIGN  
(B.C.A.-502)**

*Time : 1½ Hours ]                    Maximum Marks : 75*

**Note :** Attempt questions from **all** sections as per instructions.

**Section-A**

**(Very Short Answer Questions)**

**Note :** Attempt any **two** questions. Each question carries **7.5** marks. Very short answer is required not exceeding **75** words.

$$2 \times 7.5 = 15$$

1. Explain the features of Java.
2. What is type casting? Give an example to explain it.

**P.T.O.**

3. Explain `destroy()` method, a stage in the life cycle of an applet.
4. What do you mean by a package in Java?
5. State the different access specifiers available in Java.

**Section-B**

**(Short Answer Questions)**

**Note :** Attempt any **one** question out of the following **three** questions. Short answer is required not exceeding **200** words. Each question carries **15** marks.

$$1 \times 15 = 15$$

6. Write a code in Java to generate single calculator using classes and accepting the two integers and operator with all methods to input, display, add, subtract, product, and division.

**18022 (CV-III)/2**

- What is Exception? Give different types of exception that could occur during runtime. Why to handle exception?
- What are the life-cycle methods for a JSP? What are the differences between the JSP custom tags and Java beans?

### **Section-C**

#### **(Detailed Answer Questions)**

**Note :** Attempt any **two** questions out of the following **five** questions. Answer is required in detail. Each question carries **22.5** marks.

$$2 \times 22.5 = 45$$

- What are Servlets? What are the advantages of Servlets over CGI? Explain working of service ( ) method of a servlet with examples.
- Write a method in Java that takes two integer arguments and returns power of it. Suppose X and Y passing as an argument then it returns X to power Y offer calculation.

- What is thread priority? Write are the default values? Write a program to define two threads. One thread will print 1 to 10 no. whereas other will print 10 to 1 nos.
- What is JDBC? List out JDBC components and types of drivers. Write difference between Java applet program and Java application program.
- What is package? What are the benefits of package? Explain Java API packages. List out any five methods of string class by giving an example.

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D (Printed Pages 4)  
 (20221) Roll No. ....  
 BCA-V Sem.

**18022**  
**B.C.A. Examination, Dec.-2020**  
**Java Programming and Dynamic**  
**Webpage Design**  
**(BCA-502)**

**Time : Three Hours ] [Maximum Marks : 75**

**Note :** Attempt questions from **all** sections  
 as per instructions.

**Section-A**

**(Very Short Answer Questions)**

**Note :** Attempt **all** questions. **All** questions  
 carry equal marks.  $3 \times 5 = 15$

- What is difference between a function and a method?
- Write an applet to draw square inside a rectangle.

**P.T.O.**

- Explain why Java is considered as the best language for Internet Applications.
- Discuss various primitive data types supported by Java.
- What do you mean by class and objects?  
 Explain with suitable example.

**Section-B**

**(Short Answer Questions)**

**Note :** Attempt any **two** questions out of the following three questions.  $7\frac{1}{2} \times 2 = 15$

- Define Cookies. Explain the role of HTTP give the supportive example also.
- What are the package in Java? Illustrate the appropriate example.
- Explain the following:
  - Multi threading
  - Encapsulation

**4**

**3 $\frac{1}{2}$**

**18022/2**

## Section-C

### (Detailed Answer Questions)

**Note :** Attempt any **three** questions out of the following five questions.  $15 \times 3 = 45$

9. (a) What is an exception? What are the methods of handling exception in Java. 7

(b) What is difference between Application and Applet? Explain how will you write a simple applet to display Hello word message. 8

10. What do you mean by Cascading Style Sheet (CSS)? What are the advantage of CSS? How many ways are there to specify style information in a document?

11. What is Servlet? Explain life cycle of servlet. Give the supportive example also.

12. (a) Explain Applet life cycle. Write all method used to create an applet. 7  
(b) Explain Socket. How many types of Socket can be created in Java. Give an example also. 8

13. (a) What is Inheritance in Java? Explain all its type. 7

(b) What is JSP? Explain all the main component of JSP and advantage of JSP. 8

**A**

**(21119)**

**B.C.A.-V Sem.**

**Printed Pages : 3**

**Roll No. ....**

**18022**

**B.C.A. Examination, November-2019**

**JAVA PROGRAMMING AND DYNAMIC  
WEBPAGE DESIGN**

**(BCA-502)**

**Time : Three Hours]**

**[Maximum Marks : 75**

**Note : Attempt questions from all sections as per  
instructions.**

**Section-A**

**(Very Short Answer Questions)**

**Note : Attempt all the five questions. Each question  
carries 3 marks. Very short answer is required  
not exceeding 75 words.**  $5 \times 3 = 15$

1. Java is Platform Independent. Explain.
2. What is Inheritance ? Give the type of inheritance.
3. Explain Servlet.
4. Why JDBC is used for database connectivity ?
5. What is Layout Manager ?

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**[P.T.O.]**

**( 2 )**

**Section-B**

**(Short Answer Questions)**

**Note : Attempt any two questions out of the following  
three questions. Short answer is required not  
exceeding 200 words.**  $2 \times 7\frac{1}{2} = 15$

6. Explain the following :
 

(a) Package	4
(b) Exception handling	3 $\frac{1}{2}       $
7. What is Java Script ? Differentiate between Java and  
Java Script. Give the Supportive example also.
8. What is Thread ? What are the advantage of  
multithreading ? Write a program in Java for creating  
two threads.

**Section-C**

**(Detailed Answer Questions)**

**Note : Attempt any three questions out of the  
following five questions. Answer is required in  
detail.**  $15 \times 3 = 45$

9. What do you understand by Layout Manager ? Give  
all type of layout available in Java with the help of  
example.

**18022**

**10.** What is JSP ? Explain the advantage of JSP and main component of JSP also. How JSP is different from Servlet. Give an example also.

**11.** Explain the following :

- (a) Applet viewer
- (b) CSS
- (c) RMI
- (d) Super and final
- (e) AWT

**12.** (a) Explain servlet life cycle. 7

(b) Explain drives used in connectivity in Java. 8

**13.** Create a file to contain information about student performance on a module. Each student has a name, Roll No., subject marks and result.

or

What is Inheritance in Java ? Explain its types, if we need to extend more than one class, how it works ? Give the example also.

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BCA- V Sem.

Roll No. ....

**18022**

**B. C. A. Examination, Dec. 2018**

**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.

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**Section-A**

**(Very Short Answer Questions)**

Answer all the *five* questions. Each question carries 3 marks. Very short answer is required.  $3 \times 5 = 15$

1. Java is platform independent. Justify. 3

2. What is final variable ? Give example also. 3
3. Explain the main component of JSP. 3
4. What are the different types of drivers used in Java database connectivity ? 3
5. What is Applet viewer ? Explain. 3

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**Section-B**

**(Short Answer Questions)**

Answer any *two* questions out of the following three questions. Each question carries  $7\frac{1}{2}$  marks. Short answer is required.  $7\frac{1}{2} \times 2 = 15$

6. Explain the following :
  - (a) Super and Final  $3\frac{1}{2}$
  - (b) Exception. 4
7. Define Cascading style sheet. Explain it with a supportive example.  $7\frac{1}{2}$

<https://www.ccsustudy.com>

8. What are packages ? How packages are created in Java ? Explain and give example also. 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. What is inheritance in Java ? Explain its types. If we need to extend more than one class, how it work ? Give the code also. 15

10. What is JSP ? Explain the advantage of JSP and main component also. How is it differ from Servlet ? Give an example to support your answer. 15

11. (a) Explain Applet life cycle. Write the all methods used to create applet with example. 8  
 (b) Explain socket. How many types of socket can be created in Java ? Give example also. 7

12. (a) Define Multithreading. Explain the way to create the thread with suitable example. 8  
 (b) Explain Servlet life cycle. 7

13. (a) Explain exception handling in Java. What is the method of handling exception in Java ? 7  
 (b) What is AWT ? Explain about the various AWT controls available in Java with an example also. 8

**N** **(Printed Pages 4)**

**(201217)** **Roll No. ....**

**BCA - V Sem.**

**18022**

**B.C.A. Examination, Dec.- 2017**

**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)**

**Note :** Attempt all **five** questions. Each question carries 3 marks. Very short answer is required.

$$3 \times 5 = 15$$

**1.** Why java is called machine independent language? **3**

**P.T.O.**

2. How will you create hyperlinks in web document? Write the code also. **3**

3. Define the following with sample code-  
(i) Encapsulation **3**

(ii) Abstraction. **3**

4. Define Servlet life cycle. **3**

5. Write down the various components of JSP. **3**

**Section-B**

**(Short Answer Questions)**

**Note :** Answer any **two** questions out of the following three questions. Each question carries  $7\frac{1}{2}$  marks. Short answer is required.

$$7\frac{1}{2} \times 2 = 15$$

6. What are cascading style sheets and how they are coded? Explain them with an example. <https://www.ccsustudy.com> **7½**

7. Define Socket () & Server Socket () class in java networking. Write down their methods with an example. **7½**

8. Differentiate between the following:  
(i) Constructor and finalizer  $3 \times 2\frac{1}{2} = 7\frac{1}{2}$   
(ii) Method overloading and method overriding  
(iii) Super and final keyword

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### Section-C

#### (Long Answer Questions)

**Note :** 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) Java supports single inheritance. If there is a need to extend more than one class, how can this be achieved? Explain with sample code. 7
- (b) Define multithreading in java. What are the two ways to create a thread in java? Write down the code also. 8
10. (a) What is a string buffer? How does it differ from a string? Give three ways to create a string object. 8
- (b) What is the life cycle of an Applet? Illustrate common methods to create the applet. 7

11. (a) What is JDBC? Write different types of Java driver available for database connectivity? What are the steps of database connectivity in Java? 8
- (b) How will you define Socket? How many different types of socket you can create in java? Define also the methods & class of these different sockets. 7
12. (a) Define the following tags in HTML 8
- (i) <META>
  - (ii) <form>
  - (iii) <FRAMESET>
- Also design a simple form that will accept user entry and display it.
- (b) What is an exception? What are the methods of handling exception in java? 7
13. (a) What is Servlet? Explain the life cycle of Servlet. Write a login page using servlet. 8
- (b) What is JSP? Write the difference between JSP & Servlet. Also some advantages of JSP. 7

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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.  $3 \times 5 = 15$

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  $7\frac{1}{2}$  marks. Short answer is required.  $7\frac{1}{2} \times 2 = 15$

6. Define JAVA servlets. How database connectivity is done in JAVA servlets? Explain.  $7\frac{1}{2}$
7. What do you mean by frame and frameset tag in HTML? Explain it with a suitable program.  $7\frac{1}{2}$
8. Write a program to count the number of objects created in a program.  $7\frac{1}{2}$

### **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