

“प्रश्न-पत्र पर क्रमांक (रोल नम्बर) के अतिरिक्त कुछ भी न लिखें, अन्यथा इसे अनुचित साधनों का प्रयोग माना जायेगा तथा नियमों के अनुसार कार्यवाही की जायेगी।”

*“Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules.”*

Roll No. 15 B.C.A.30545

**B.C.A. (III)**  
**1731**

**Java Prog.**

**B.C.A. (Part-III) Examination 2017**

**Paper- I**

**BCA 301- Java Programming**

Time - Three Hours

Maximum Marks - 80

नोट :- (1) प्रश्न संख्या एक अनिवार्य है। शेष प्रश्नों में से किन्ही चार को हल कीजिए।

Note:- (1) Question No. 1 is Compulsory. Attempt any four question from the remaining questions.

नोट :- (2) सभी प्रश्नों के अंक समान है।

(2) All questions carry equal marks.

1-

- (a) What is JVM?
- (b) What is Package?
- (c) What is abstract class?
- (d) Explain Finally block?
- (e) Define type casting.
- (f) How does a vector differ from an array?
- (g) What is an object?
- (h) What is Multithreading?

2-(a) Describe Java Environment in detail. 8

(b) What is operator? Explain logical and bitwise operators. 8

3-(a) Differentiate between the following:- 8

- (i) Break and continue statement.
- (ii) While and do.... while loop.

(b) Write a program to input any two integer number and swap them without using third variable. 8

4-(a) What is Thread? Explain life cycle of a Thread? 8

(b) What is Constructor overloading? Explain with suitable example. 8

5- What is inheritance? Explain various types of inheritance with suitable example. 16

6- Differentiate between the following with example. 2 x 8 = 16

- (i) Class and interface.
- (ii) Method overloading and method overriding.

7-(a) What is an applet? Discuss the steps involved in developing and running local applet. 8

(b) What is an exception? Explain how exception handling mechanism can be used for debugging a program. 8

8- Write short notes on the following:- 4 x 4 = 16

- (i) Static members.
- (ii) Wrapper classes.
- (iii) Synchronization.
- (iv) Scope of variables.



*"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."*

Roll No. 16 B.C.A. 20288

**B.C.A. (III)**  
**1731**

**Java Prog.**

**B.C.A. (Part-III) EXAMINATION, 2018**  
**PAPER-I**  
**BCA: 301- JAVA PROGRAMMING**

**Time Allowed - Three Hours**  
**Maximum Marks - 80**

नोट :- (1) प्रश्न संख्या 1 अनिवार्य है। शेष प्रश्नों में से किन्हीं चार को हल कीजिये।

(2) सभी प्रश्नों के अंक समान हैं।

Note :- (1) Question No. 1 is compulsory. Attempt any FOUR questions from the remaining questions.

(2) All questions carry equal marks.

1. Define following :-

- (a) Package in Java
- (b) JDK
- (c) Final Keyword
- (d) Access Specifier

- (e) Applets
  - (f) Super Keyword
  - (g) class & object
  - (h) Exception handling
2. What is inheritance ? Explain it's types with suitable example.
3. (a) What is string class ? Explain string functions with example.
- (b) Write a program in Java to find factorial of a given number.
4. Differentiate between the following :-
- (a) Class & Interface
  - (b) Method Overloading & Overriding.
5. (a) What is a Package ? Write the steps involved in Creating user define Package.
- (b) Describe features of Java.
6. (a) What is a Thread ? Explain life cycle of thread ?
- (b) Explain Vectors in Java
7. (a) What is Applet ? Explain the steps involved in Creating an Applet.
- (b) What is Thread Synchronization ? Explain.
8. Write short note on following :-
- (a) Super keyword
  - (b) Abstract class
  - (c) Bit wise operators
  - (d) Static member

“प्रश्न-पत्र पर क्रमांक (रोल नम्बर) के अतिरिक्त कुछ भी न लिखें, अन्यथा इसे अनुचित साधनों का प्रयोग माना जायेगा तथा नियमों के अनुसार कार्यवाही की जायेगी।”

*“Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules.”*

Roll No. 17.BCA.00286.

**B.C.A. (III)**

**1731**

**Java Prog.**

**B.C.A. (Part-III) Examination 2019**

**Paper- I**

**BCA-301: JAVA PROGRAMMING**

**Time Allowed - Three Hours**

**Maximum Marks - 80**

**नोट :-** (1) प्रश्न संख्या 1 अनिवार्य है। शेष प्रश्नों में से किन्हीं चार को हल कीजिये।

(2) सभी प्रश्नों के अंक समान हैं।

**Note:-** (1) Question No. 1 is compulsory. Attempt any **FOUR** questions from the remaining questions.

(2) All questions carry equal marks.



(8x2=16)

- 1- Briefly answer the following.
  - a) What is an abstract class?
  - b) What is Java virtual Machine?
  - c) What is the Use of packages in Java?
  - d) Define Garbage Collection?
  - e) What is dynamic method dispatch?
  - f) Why Java is called Platform independent?
  - g) What is the use of "this" keyword?
  - h) Difference between application and applet?
- 2- Explain Multithreading. How Java implement its thread Model?
- 3- What is exception handling? How multiple exception are caught in a single program? WAP to demonstrate the use of custom exception.
- 4- Write a Program to show the calling sequence of constructors.
- 5- What do you mean by static class and static method? Can we make an instance of an abstract class? Justify your answer with an example?

- 6-
  - a) Explain various access specifiers Supported by Java with an example?
  - b) Explain concept of OOPS?
- 7-
  - a) Explain creating Package and Accessing a package with example.
  - b) Describe the different stages in the life cycle of an applet.
- 8- Write a program to implement the Fibonacci series using for loop control structure.

"प्रश्न-पत्र पर क्रमांक (रोल नम्बर) के अतिरिक्त कुछ भी न लिखे, अन्यथा इसे अनुचित साधनों का प्रयोग माना जायेगा तथा नियमों के अनुसार कार्यवाही की जायेगी।"

*"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."*

Roll No. 18BCA00753

B.C.A. (III)

1731

Java. Prog.

B.C.A. (PART - III) EXAMINATION - 2020

Paper-I

BCA-301 : JAVA PROGRAMMING

Time - Three Hours

Maximum Marks - 80

Note:- (1) Question No. 1 is compulsory. Attempt any FOUR questions from the remaining questions .

(2) All questions carry equal marks .

नोट:- (1) प्रश्न संख्या 1 अनिवार्य है। शेष प्रश्नों में से किन्हीं चार को हल कीजिये।

(2) सभी प्रश्नों के अंक समान हैं।

1. Briefly answer the following : 8X2=16
- (a) What is JDK ?
  - (b) What is JVM ?
  - (c) Define Package .
  - (d) What is multithreading ?
  - (e) What is use of "SUPER" ?
  - (f) What is applet ?
  - (g) What is interface ?
  - (h) Define abstract class .
2. (a) Explain features of JAVA. 8
- (b) Explain constructor & it's types. 8
3. (a) Explain difference between abstract class & interface with example. 8
- (b) Explain the use of "Final" keyword in JAVA. 8
4. Write a program in JAVA to design a class employee with 5 data of employee record & find out employee details having highest salary by a method. 16
5. (a) Write a program in JAVA to reverse a string given by user without use of library functions. 8
- (b) Write a program in JAVA to implement multiple inheritance. 8
6. (a) What do you mean by applet in JAVA ? Explain life cycle of applet. 8
- (b) Write a program to show calling sequence of constructors. 8



7. What is string ? Explain string functions available in JAVA with example. 16
8. Write short note of following : 4X4=16
- (a) Garbage collection
  - (b) Access specifier
  - (c) "this" keyword
  - (d) Exception handling

*" Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."*

Roll No. **19BCAO**.....

**B.C.A. (III)**

**1731**

**Java Prog.**

**B.C.A. Part-III  
EXAMINATION - 2021**

**Paper - I**

**BCA 301 - Java Programming**

**Time Allowed : Three Hours**

**Maximum Marks : 80**

**Note :** 1. Question No. 1 is Compulsory. Attempt any four from the remaining questions.

2. All questions carry equal marks.

1. Define following: 8×2=16
- (a) Tokens
  - (b) Statements
  - (c) Type casting
  - (d) ? operator



- (e) Expression and its evaluation
  - (f) Class
  - (g) Array
  - (h) Applet tag.
2. (a) What is a Thread? Also explain life cycle of thread.  
(b) What is Thread Synchronization? Explain. 8×2=16
3. Differentiate between the following: 8×2=16  
(a) Local Applet v/s Remote Applet  
(b) C++ v/s JAVA
4. (a) Explain various types of inheritance with suitable examples?  
(b) Write a program in JAVA to implement multi-level inheritance. 8×2=16
5. What is an Interface? Also explain the following terms: 16  
(a) Extending Interface  
(b) Implementing Interface  
(c) Accessing Interface variable  
(d) Define Interface.

6. (a) Write a program in JAVA to generate a fibonacci series upto n number given by the user. 8
- (b) Write a program in JAVA to print a No into Reverse using class. 8
7. (a) What is an Array? Explain one dimensional and two dimensional array in Java with the help of suitable examples. 8
- (b) What is package? Also explain the following:
- (i) Adding a class to a package with the help of suitable examples.
- (ii) System package. 8
8. Write short notes on following :-  $4 \times 4 = 16$
- (a) Vector
- (b) Static members
- (c) Nesting of method
- (d) Hiding classes.



20BCA50135

*"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."*

Roll No. ....

B.C.A. (III)

1731

Java Prog.

**B.C.A. Part-III EXAMINATION - 2022**

**Paper - I**

**BCA 301 - Java Programming**

Time Allowed : **Three Hours**

Maximum Marks : **80**

**Note :** 1. Question No. 1 is Compulsory. Attempt any four from the remaining questions.

2. All questions carry equal marks.

1. (i) What is JVM? 2×8=16
- (ii) Define the term variable?
- (iii) What is an abstract class?
- (iv) What do you mean by Statement?

1731 / 1200 / 3

(1)

P.T.O.

- (v) What is an Object?
- (vi) What is an Applet Tag?
- (vii) How to create an object in a Java?
- (viii) What is Loop?
2. (a) Describe the structure of a java program with the help of suitable example.  $8 \times 2 = 16$
- (b) Describe Java Environment in detail.  $8 \times 2 = 16$
3. (a) Write a java program to calculate a factorial of a given Number by the user.
- (b) What is an Operator? Explain Increment and Decrement operator and Bitwise operator with the help of examples.  $8 \times 2 = 16$
4. (a) What is Constructor overloading? Explain with suitable example.
- (b) What is Method? Explain the term method overloading with the help of suitable java program.  $8 \times 2 = 16$
5. Differentiate between the following:  $8 \times 2 = 16$
- (a) Overloading v/s Overriding
- (b) Class v/s Interface.

6. (a) Explain the life cycle of applet with the help of examples.
- (b) Write a java program to perform an addition of two 2D matrix and Result will be store in another 2D matrix.  $8 \times 2 = 16$
7. (a) What is an exception? Explain the following term.
- (i) Thread exception
- (ii) ERROR
- (b) Write a java program to implement a single-level inheritance.  $8 \times 2 = 16$
8. Write short notes on the following:  $4 \times 4 = 16$
- (i) Symbolic Constant
- (ii) Wrapper class
- (iii) Visibility/control
- (iv) Getting input from the user.