

2011000104030001

Second Year B.C.A (Sem – IV)

Examination March-2023

Java Programming Language

Seat No:

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[Time: Three Hours]

[Max. Marks: 70]

Instructions: (1) All questions are compulsory.
(2) Figures to the right indicate full marks.

Student's Signature

Q.1 Select an appropriate option.

[10]

- What is the numerical range of a char?
A) -128 to 127 C) 0 to 32767
B) (215) to (215) – 1 D) 0 to 65535
- The command javac.
A) Converts a java program into binary code
B) Converts a java program into bytecode
C) Converts a java program into machine language
D) None of the above
- What's the difference between an Applet and an application?
A) An application is only available on Windows
B) Applets can paint words, applications cannot.
C) Applets are run over the web.
D) None of the above
- Which operator is used by Java run time implementations to free the memory of an object when it is no longer needed?
A) Delete B) free C) new D) None of above
- The class at the top of exception class hierarchy is.....
A) ArithmeticException C) Object
B) Throwable D) Exception
- What is the default value of priority variable MIN_PRIORITY AND_MAX_PRIORITY?
A) 0 & 256 B) 0 & 1 C) 1 & 10 D) 1 & 256
- Which of these class is used to create an object whose character sequence is mutable?
A) String() C) String() & StringBuffer()
B) StringBuffer() D) None of the mentioned

8. First Node of linked list is called as,
A) Location B) Head C) Value D) Tail
9. In _____ Last item contains link of the first element as next and the first element has a link to the last element as previous.
A) Simple Linked List C) Circular Linked List
B) Doubly Linked List D) All of above.
10. Which of these data types is used to store command line arguments?
A) Array B) Stack C) String D) Integer

Q.2 Answer the following in detail. (Any 3)

[18]

1. Compare features of java with any other object oriented programming language.
2. Explain control statements in java.
3. What is interface? Explain with example. How to achieve multiple inheritance in java?
4. What is Link list? Explain Circular link list in java with example.

Q.3 Answer the following in detail. (Any 3)

[18]

1. What is applet? How to pass parameter in applet? Explain any two methods from graphics class in applet with proper syntax and example.
2. What are threads in java? List two ways to use thread in a class and explain any one of them with example.
3. Write a program to accept string from command line & print total no. of vowels and consonant.
4. Explain method overloading and overriding with example.

Q.4 Answer the following in detail. (Any 3)

[12]

1. List methods of String class. Explain any two methods from String class.
2. Explain Exception handling in java with example.
3. Differentiate between final, finalize and finally.
4. Explain Run-time polymorphism with example.

Q.5 Answer the following in detail. (Any 3)

[12]

1. What is package? How can we create sub package and import into another class?
2. Bitwise operator.
3. Super and this keyword.
4. Constructor overloading in java.