DCCA202

Reg. No. | | | | | | | | |

II Semester B.C.A. Degree Examination, Septemeber - 2023

COMPUTER SCIENCE

Object Oriented Programming Using Java

(NEP Scheme)

Time : 2½ Hours **Maximum Marks :60**

***Instructions to Candidates*:**

Answer all the sections.

SECTION - A

Answer any **Four** questions. Each question carries 2 marks. **(4×2=8)**

1. What is bytecode?
2. What are the different access modifiers in Java?
3. Differentiate between 'String' Class and 'String buffer' class.
4. Expand
   a) JDK
   b) JRE
5. Define Package. Mention its use.
6. What is Exception in Java?

SECTION - B

Answer any Four questions. Each question carries 5 marks. **(4×5=20)**

7. Explain the features of Java.
8. Explain conditional operator and logical operators in Java.
9. Define Inheritance. Explain the types of Inheritance supported by Java.
10. Write a program to demonstrate a division by zero Exception.

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11. Explain the life cycle of an Applet with a neat diagram.
12. Write a program that demonstrate any two keyboard events.

SECTION - C

Answer any Four questions. Each question carries Eight marks. (4×8=32)

13. a) What is an interface? Explain with an example how a class implements an interface. (6)
    b) What is constructor? Explain. (2)
14. a) Write a short note on JVM. (4)
    b) Explain different data types of a Java Programming. (4)
15. a) Explain life cycle of a Thread. (4)
    b) Write a program to create an Applet and draw grid lines. (4)
16. a) Write a short note on Java Packages. (5)
    b) Explain Wrapper classes. (3)
17. a) Explain abstract class in Java. (6)
    b) What are the different ways of creating files. (2)
18. a) Write any four methods of Socket class. (4)
    b) Mention the uses of Java Beans. (4)

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II Semester B.C.A. (NEP) Degree Examination, October - 2022
COMPUTER SCIENCE
Object Oriented Programming Using Java

Time : 2½ Hours **Maximum Marks : 60**

Instructions to Candidates:

Answer all the sections.

SECTION - A

Answer any **Four** questions. Each question carries 2 marks. **(4×2=8)**

1. Java is platform independent language Justify.
2. What is the use of 'super' and 'this' keywords?
3. What is finalization in java?
4. What are exceptions? Which keywords are used for exception handling?
5. What is an event? State any four event classes.
6. What are Javabeans? State any two conventions that should be followed when they are implemented?

SECTION - B

Answer any **Four** questions. Each question carries **5** marks. **(4×5=20)**

7. Explain the different visibility modifiers in Java.
8. What is a package? How are packages created and accessed in java?
9. Discuss Generics and illustrate with program.
10. Write a program that catches negative exception (user defined exception). This is caused when a negative number is entered by a user.
11. Write a program that demonstrates any two mouse events.
12. Explain the life cycle of a thread with a neat diagram.

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SECTION - C

Answer any **Four** questions. Each question carries **Eight** marks. (4×8=32)

13. a. What is constructor? Define 'student' class with a parameterized constructor used to initalize two instance variables - vvcms.no. and stud - name. (6)

    b. State and two differences between string and stringBuffer class. (2)

14. Explain the following Java concepts with example programs. (8)

    i. Dynamic Binding.

    ii. Abstract classes.

15. a. What are interfaces? Illustrate how interfaces can be used for implementing multiple inheritance. (5)

    b. Differentiate between method overloading and method overriding. (3)

16. a. Explain the lifecycle of an applet. (4)

    b. Write a program that creates two threads one thread displays numbers from 1 to 10 and the other thread displays numbers from 10 to 1. (4)

17. a. Write java code to create any four GUI components. (4)

    b. Discuss any four stream classes in Java. (4)

18. Write short notes on (8)

    a. Java collections.

    b. Socket programming.