

Dr.V.S.KRISHNA GOVT.DEGREE COLLEGE (AUTONOMOUS)
VISAKHAPATNAM
Course 4E: Object Oriented Programming with Java
II Year B.Com Computer Applications
SYLLABUS FOR THE ACADEMIC YEAR 2020-21
SEMESTER – IV

Credit: 04
P.P.W: 06h

Max Marks: 100
External Marks: 75
Internal Marks: 25

SYLLABUS:

Unit I:

Introduction to OOPs: Problems in Procedure Oriented Approach, Features of Object Oriented Programming Introduction to Java: Features of Java, The Java Virtual Machine (JVM), Parts of Java program, Naming Conventions in Java, Data Types in Java, Operators in Java, Reading Input using scanner Class, Displaying Output using System.out.println(), Command Line Arguments.

Unit II:

Control Statements in Java: if... else, do... while Loop, while Loop, For loop, Switch Statement, break Statement, continue Statement

Arrays: Types of Arrays, array name, length,

Strings: Creating Strings, String Class Methods, String Comparison, Immutability of Strings.

Unit III:

Classes and Objects: Object Creation, Initializing the Instance Variables, Access Specifiers, Constructors Inheritance: Inheritance, Types of Inheritance Polymorphism: Method overloading, Operator overloading Abstract Classes: Abstract Method and Abstract Class

Unit IV:

Packages: Package, Different Types of Packages, Creating Package and Accessing a Package Streams: Stream classes, Creating a File using File Output Stream, Reading Data from a File using File Input Stream, Creating a File using File Writer, Reading a File using File Reader

Unit V:

Exception Handling: Errors in Java Program, Exceptions, throws Clause, throw Clause, Types of Exceptions Threads: Single Tasking, Multi-Tasking, Uses of Threads, Creating a Thread and Running it, Terminating the Thread, Thread Class Methods.

References:

1. The Complete Reference JAVA Seventh Edition Herbert Schildt. Tata McGraw Hill Edition.
2. Core Java: An Integrated Approach, Dr. R. Nageswara Rao & Kogent Learning Solutions Inc.
3. E. Balaguruswamy, Programming with JAVA, A primer, 3e, TATA McGrawHill Company

Dr.V.S.KRISHNA GOVT.DEGREE COLLEGE (AUTONOMOUS)
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BLUE PRINT FOR QUESTION PAPER SETTER
Course 4E: Object Oriented Programming with Java
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Internal Marks for 25 Marks

Consisting of 2 unit tests carrying 20 marks each and 2 Assignments carrying 5 marks each or as per the instructions to be given by the CCE, AP in this regard.

Semester 75 Marks

Semester end Exam for 75 Marks consisting of 2 sections namely A, B.

Section A (5 X 10M = 50Marks)

5 Essay type questions (of either or choice) with 10 Marks each, totalling to 50 Marks

Section B (5 X 5M = 25Marks)

Consisting of any 5 questions out of 8, with 5 Marks each, totalling to 25 Marks

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S.No.of Modules	Short Questions (5M)	Long Questions (10M)	Total No. of Questions
Unit-I	2	2	4
Unit-II	2	2	4
Unit-III	2	2	4
Unit-IV	1	2	3
Unit-V	1	2	3
Total Marks (with internal choice)	25	50	75

Dr.V.S.KRISHNA GOVT. DEGREE COLLEGE (A), VISAKHAPATNAM

Model Question Paper – 2020-21

Course 4E: Object Oriented Programming with Java

II Year B.Com Computer Applications

SEMESTER – IV

Time: 3Hrs

Max. Marks: 75M

Section –A

Answer ALL questions

5 X 10M=50M

1. a) Explain about basic concepts of OOP?
(Or)
b) Explain the various types of Operators used in Java?
2. a) Explain about various types of if Statements with Examples?
(Or)
b) What is an Array? Explain Different types of Arrays in Java
3. a) What is inheritance? Explain different types of Inheritance supported by Java
(Or)
b) Explain about Abstract classes and abstract methods with examples?
4. a) Briefly explain about different types of Packages?
(Or)
b) Explain about File Write and File Reader classes with examples?
5. a) Explain about Exception Handling Mechanism?
(Or)
b) How many ways can a Thread be created in Java? Explain and give examples.

Section –B

Answer any FIVE questions

5 X 5M=25M

6. Write a short notes o JVM?
7. Explain about Constants in Java?
8. Write short notes on Switch statement with example?
9. Briefly explain about String comparison?
10. Explain about Class and Object?
11. What is Constructor? Explain different types of Constructors.
12. What is Package? Explain.
13. Write short notes on Multithreaded Programming?

Question Bank– 2020-21
Semester – IV
Object Oriented Programming with Java
2nd year B.COM (Computers Applications)

Unit –I

10 Marks questions

1. Explain about basic concepts of OOP?
2. What is the difference between procedure oriented programming and object oriented programming?
3. What are the features of Java? Explain
4. Explain the various types of Operators used in Java?

5 Marks questions

1. Write a short notes o JVM?
2. Explain various data types are available in java?
3. Explain about Constants in Java?
4. Write short notes on variables in java?

Unit-II

10 Marks questions

- 1.Explain about various types of if Statements with Examples?
- 2.Explain about various types of looping statements in Java program?
- 3.What is an Array? Explain Different types of Arrays in Java?
- 4.What is a string? How to creating strings in java?

5 Marks questions

1. Write short notes on switch statement with example?
2. Write about array name length?
3. Write a program to check the given number is Prime or not?
4. Write about immutability of strings?
5. Briefly explain about String comparison?

Unit-III

10 Marks questions

1. What is Class and Object and how classes and Objects can be defined in Java?
2. What is inheritance? Explain different types of Inheritance supported by Java ?
3. What is Polymorphism? Explain difference between Method Overloading and Method Overriding?
4. Explain about Abstract classes and abstract methods with examples?

5 Marks questions

1. Explain about Class and Object?
2. Write about Access specifies in Java?
3. What is Constructor? Explain different types of Constructors.
4. What is the difference between Interface and Abstract class?

Unit-IV

10 Marks questions

1. Briefly explain about different types of packages?
2. Explain about Specifies (Or) visibilities access in Java?
3. Briefly explain about Stream classes?
4. Explain about File Write and File Reader classes with examples?

5 Marks questions

1. What is Package? Explain.
2. What is a Stream? Explain.
3. What is a file? Why do we require files to store data?

Unit-V

10 Marks questions

1. What is an Error ? Explain about types of Error.
2. Explain about Exception Handling Mechanism?
3. How many ways can a Thread be created in Java? Explain and give examples.
4. Explain about different methods to perform Thread tasks and control thread behaviors?

5 Marks questions

1. What is an Exception?
2. What is Thread? Explain
3. Write short notes on Multithreaded Programming?