

MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu.

Department of Artificial Intelligence and Data Science Question Bank - Academic Year (2021-22)

Course Code & Course Name : 19ADC06 & Object Oriented Programming

Year/Sem/Sec : II / III

UNIT-I INTRODUCTION TO OOP AND JAVA FUNDAMENTALS PART-A

- 1. List out the applications of OOPS.
- 2. Express what is meant by object oriented programming.
- 3. What are the features of Object Oriented Programming?
- 4. Define Polymorphism.
- 5. What are data members and member functions?
- 6. Define static members.
- 7. State Data types.
- 8. Describe various operators in Java.
- 9. How a class is declared?
- 10. What is Packages?

- 1. Explain in detail about the basic principles/concepts of OOPs.
- 2. Illustrate i) Constructors ii) Static Members
- 3. a) What is access specifies? How are the used to protect data in Java.
 - b) Briefly explain about Fundamental Programming Structures in java.
- 4. What is Access Specifiers? Explain its benefits and applications.
- 5. Discuss about control structure in Java and write a program to Calculate Electricity bill Based on the norm available today in TN govt.

UNIT - II INHERITANCE AND INTERFACES

PART-A

- 1. Define Inheritance.
- 2. State Base Class and Derived Class.
- 3. Define Abstract class.
- 4. What is Object Cloning? Write its syntax.
- 5. What is Overriding Member Functions or Function Overriding?
- 6. State Inner Class.
- 7. What is the use of final methods and class.
- 8. What is Extended Interface?
- 9. Define string.
- 10. Write the Syntax for Array list.

- 1. What is inheritance? Analyze types on inheritance in Java with suitable examples.
- 2. a) Write a program in Java using constructor in sub class.
 - b) Explain Protected Members with suitable program.
- 3. Explain Object Cloning with example program.
- 4. Write the program to display name, roll no, marks, average and total. Using inheritance.
- 5. a) Explain in detail about Interface.
 - b) Briefly explain about Final Methods with suitable program.

UNIT - III EXCEPTION HANDLING AND I/O

PART-A

- 1. Define Exceptions.
- 2. State Reading and Writing Files.
- 3. List out the Built -in Exception in Java.
- 4. What is Stack Trace Element? Write its syntax.
- 5. What is Stream?
- 6. State Byte Stream.
- 7. What is Character Stream?
- 8. Define Exception Hierarchy.
- 9. How to Create Own Exceptions?
- 10. What is Reading and Writing Console?

- 1. What is Exceptions? Explain with suitable program.
- 2. Write a program in Java using Built-in Exception concept.
- 3. Explain Creating Own Exceptions with suitable program.
- 4. Write the program to display Reading and Writing Console.
- 5. a) Explain in detail about Input and Output Basics in Java.
 - b) Briefly explain about Throwing and Catching with suitable program.

UNIT - IV MULTITHREADING AND GENERIC PROGRAMMING

PART-A

- 1. Define Multithreading.
- 2. State threads Life Cycle.
- 3. What are the steps involved in implementing a generic program?
- 4. Define Thread.
- 5. Write short notes on Inter thread communication.
- 6. Define generic Methods NAD Generic class.
- 7. What is meant by thread groups?
- 8. Mention the purpose of Deamon threads.
- 9. How does java make an executable file?
- 10. Define Bounded type.

- 1. a) Summarize about multithreading.
 - b) Briefly explain about Thread Life cycle.
- 2. Explain what is meant by Inter thread communication. Illustrate with example.
- 3. Discuss about the basic concepts of Generic methods and Generic Programming. Write Program for it.
- 4. Examine with a demo program for Deamon threads.
- 5. Discuss the following i) Generic Class ii) Bounded types

UNIT - V EVENT DRIVEN PROGRAMMING

PART-A

- 1. Define event Handler.
- 2. Define Frame and Components.
- 3. Point out the use of Graphics programming.
- 4. Write a short note on mouse events.
- 5. Define AWT.
- 6. Java does not support multiple inheritances. Why?
- 7. What is meant by Layout management?
- 8. State text Fields
- 9. Summarize the advantages of Swing Components.
- 10. Define Check box.

PART-B

- 1. Identify a program to illustrate Graphics programming.
- 2. Describe in detail about Event Handling with example.
- 3. a) Illustrate the concepts of AWT Event Hierarchy?
 - b) Define Swing and how the interface can be declared and implemented in Java with your own example.
- 4. Discuss in detail about Swing Components in java with example programs.
- 5. Discuss the following i) Text Fields ii) Text Areas iii) Radio Buttons iv)Scrollbars
 - v) Dialog box

Course Faculty HOD