ST.ANNE'S



COLLEGE OF ENGINEERING AND TECHNOLOGY

ANGUCHETTYPALAYAM, PANRUTI – 607106.

QUESTION BANK

JULY 2022 - NOV 2022 / ODD SEMESTER

BRANCH: EEE **YR/SEM:** III/V **BATCH**: 2020 - 2024

SUB CODE/NAME: CS8391-OBJECT ORIENTEDPROGRAMMING

UNIT-1

- 1. Mention some of the separators used in java programming?
- 2. How dynamic initialization of variables is achieved in java?
- 3. What is the output of the main method in the given code?
- 4. What is java virtual machine?
- 5. What are the features of java?
- 6. Define object and classes ?(nov/dec2018)
- 7. Why are classes important in OO technology?
- 8. Difference between objects and classes?(apr/may2013),(nov/dec2018)
- 9. Difference between static and non static variables?
- 10. Define encapsulation?(nov/dec2015)
- 11. What is an abstract class?
- 12. Define class with example?
- 13. Difference between structure and class?
- 14. What is the default access to a member in a class?
- 15. What is meant by private accesss specifier?
- 16. What do you mean by instance variable?

- 17. Define constructor?
- 18. What is static in java?
- 19. Define API package?
- 20. Define the term CLASS PATH?(apr/may2017)
- 21. What are the components in file structure?
- 22. Define polymorphism?(apr/may2018)
- 23. What is an abstract type?(apr/may2018)

PART-B

Object Oriented Programming - Abstraction - objects and classes -

Encapsulation- Inheritance – Polymorphism:

1. Explain the features of oops concept with example? (nov/dec2018)

OOP in Java:

2.Explain the oop in java with example program?(13)(apr/may2017)

Characteristics of Java

3. Decsribe the Characteristics of Java?(13) (nov/dec2018)

The Java Environment

4.Explain the java environment with suitable example?(13)

Java Source File -Structure - Compilation

5.Explain the Java Source File Structure and Compilation with example program(13)

Fundamental Programming Structures in Java

6.Explain the Fundamental Programming Structures in Java with example program?(07)

Classes In Java

7.Explain the classes in Java with example program?(07)

Constructors, Methods

8.. Explain the constructors and methods with example program? (13)

Access Specifiers

9.Explain the different types of access specifiers with example program ?(7)

Static Members

10.Describe the static members functions with example program?(13)(nov/dec2016)

Comments:

11..Explain the java comments types with example?

Data Types:

12.Explain the different types of data types with example?(13)(nov/dec2015)

Variables

1.Explain the variables with example program?(7)

Operators:

1.Explain the types of operator with example program?(13)

Control Flow

1.Explain the types of control flow with example program?(13)

Arrays:

1.Explain the arrays concept with example program?(13)

Packages:

1.Describe the packages in java with example program?(13)

JavaDoc comments

1.Explain the javadoc comments.(7)

PART-C

- 1. Explain the oops concept with example?(15)
- **2.** Explain the Fundamental Programming Structures in Java ?(15)
- **3.** Explain the types of operator with example program?(15)
- 4.Explain the characteristic of oop with example? (nov/dec2018) ?(apr/may2018)(15)
- 5. Compare c++ and java? ?(apr/may2018)

UNIT-2

- 1. What is inheritance mention its uses?
- 2. Write the syntax of interfaces?

PART-B
21. What is class hierarchy with example? (nov/dec2018)
20.Define array list?
19.Define local classes?
18. What is member classes?
17.Define static member classes?(nov/dec2017)
16. What are the types of inner classes?
15. What is multiple inheritances?
14. What is extending interface?
13. What are the properties of nested interfaces?
12. What is the purpose of nested interfaces?
11Why the variables in interfaces static and final?(apr/may2017)
10. Define anonymous class?
9. What is inner class?
8. How does the inner class differ from the declaration of an anonymous inner class?
7. What is an anonymous inner class?
6. What is object cloning? (nov/dec2018)
5. What is cloning?
4. What is copying?
declaration?
3. What modifier may be used with an interfaces

Inheritance

1. 1.What is inheritance? Explain types of inheritance with example program? (nov/dec2018) ?(apr/may2018)(13)

2. Explain multiple inheritances with example program?(apr/may2015)(13)
Super classes
3. Explain the super classes in inheritances with example program?(13)
sub classes
4. Explain the sub classes in inheritances with example program?(10)
Protected members
5. Explain the protected members in inheritances with example program?(10)
Constructors in sub classes
6. Explain the constructor in super classes in inheritances with example program?(10)
The Object class
7. Explain the object classes with example program?(7)
Abstract classes and methods
8. Explain the abstract classes and methods in heritances with example program?(nov/dec2017)(13)
Final methods and classes
9. Explain the final keywords and its types with example program?
Defining an interface
10. Define an interfaces with example?(5)
Implementing interface
11.Explain the various way of interface implementation?(13) (nov/dec2018)

Differences between classes and interfaces and extending interfaces 12. Differences between classes and interfaces and extending interfaces (10) **Object cloning 13.**What is object cloning? why its needed? Explain how objects are cloned?(10) 14..Explain the following with example the clonable interfaces and the the property interfaces?(10) **Inner classes 1.**Explain the static inner classes with example program?(7) 2.Difference between object and the inner classes?(7) **Array Lists 1.**Write a java program to demonstrates the array list?(10) **Strings** 1. Write a java program which stores the list of strings in an array list and then display the content of the list?(13) **PART-C 1.**Explain the overview of inheritance in java?(15) 2. Explain the overview of interfaces in java?(15) 3. Explain the purpose of finalize method in java with example? (nov/dec2018)(15) 4. How the method defined in java with example? (nov/dec2018)(15)

- 5. How to implement an interfaces with example? ?(apr/may2018)(15)
- 6.Explain the types of constructor with example with example(nov/dec2017)(15)

UNIT-3

- 1. Define exception? (ap/may2018) (apr/may2015)
- 2. What are the types of exception? (apr/may2018)
- 3. What is an exception? give example?
- 4. What will happened if an exception is not caught?
- 5. Give any methods available in stack trace elements?
- 6. What are stack trace elements?
- 7. What is the benefits of exception handling?
- 8. What is difference between error and exception in java?
- 9. What is compile time and run time exception? (nov/dec2018)
- 10. What is the uses of try ,catch keywords?
- 11. Difference between throw and throws?
- 12. What is array index out of bounds exception?
- 13. What is the need of multiple catch?
- 14. What is checked exception?
- 15. What is unchecked exception?
- 16. What is input and output stream? ?(nov/dec2016)
- 17. What is bytestream?
- 18. What is character stream?
- 19. List the bytestream classes?
- 20. What is relative file name?
- 21. What is the use of seek method?

- 22. Give an example on stream?
- 23. What are the components in file structure?

PART-B

Exceptions

- 1.Explain the concepts of exception with example program? (apr/may2015)(13)
- 2.Explain the exception handling feature of java in detail?(13)

Exception hierarchy

3.Explain the exception hierarchy in java with example program?(13)

Throwing and catching exceptions

4.Explain the throwing and catching the exception in java ?(13)

built-in exceptions

5.Explain the built in exception types with example program? Apr/may(2015)(13)

creating own exceptions

6.Explain the user defined exception handling in java with example program?(13)

Stack Trace Elements

- 6.Explain the various methods of stack trace elements with example?(13)
- 7. Write short notes on stack trace elements?(10)

Input / Output Basics – Streams

8.Explain the I/O streams with suitable example? (nov/dec2018)(13)

Byte streams and Character streams

9.Explain the difference between byte and character stream?(13)

Reading and Writing Console

10.Explain the reading and writing console with example program?(13)

Reading and Writing Files

11.Explain the reading and writing files with example program?(13)

PART-C

- **1.**Explain the types of exception with example program? (nov/dec2018)(15)
- 2.Explain the exception handling mechanism with example? ?(apr/may2018)(15)
- 3.Explain the control statement in java?(apr/may 2018)(15)

UNIT-4

- 1. What do you mean by thread in java? (Dec-11,May-12,Dec-13).
- 2. Give the difference between process and thread? (Dec-11).
- 3. What are the different stages in thread? (Dec-10).
- 4. What do you mean by synchronization? (Dec-12,May-12).
- 5. What are the three stages by which the thread can enter in waiting stages? (Dec10)
- 6. What is multithreading? (Dec-11,12 &May-12). (nov/dec2018)
- 7. Mention two mechanism for protecting a code block from concurrent access?
- 8. What is meant by notify methods in multithreading?.(Dec -12)
- 9. What are the two ways of creating a threads? (MAY-12)
- 10. What is the need for threads? (May-13)
- 11. Why do we need run() and start () method both? (May-13)
- 12. Name any four thread constructor? (May-13)
- 13. When thread is initiated and created , when is its initial stage?
- 14. Why generic programming is required?
- 15. List out the motivation in generic programming?
- 16. Can generic be used with inheritance in several ways?what are they?
- 17. List out any two advantage of type parameters?

- 18. State any two challenges of generic programming in virtual machines?
- 19. Describe generic classes?
- 20. Describe generic methods?

PART-B

Differences Between Multi-Threading And Multitasking

- 1. Differences Between Multi-Threading And Multitasking.(13)
- 2. Write short notes in multithreading programming?(apr/may2015)(nov/dec2017)(13)

Thread Life Cycle.

- 3. Define threads .Describe in detail about the thread life cycle?. (Dec-11) (13)
- 4. Write about various thread states in java? (May-13) (nov/dec2018)(13)

Creating Threads

- **5.** Explain how threads are created in java? (Dec-11) (10)
- 6.. How to extends the thread class? Give an example? (May-13)(10)
- 7.. How to implement runnable interface for creating and starting? (May-13)(13)
- 8. What is meant by concurrent programming? Define thread . Discuss the two way of implementing thread Using example? (Dec-13)(13)

Synchronizing Threads

9...What is thread synchronization? Discuss with an example? (Dec-14)(13)

Inter-Thread Communication

- **10.** Explain the producer consumer pattern with example program ? (May-13)(13)
- 11.Explain the inter-thread communication and suspending, resuming and stopping threads? (nov/dec2018)(13)

Daemon Threads

12.Explain the daemon threads with example program?(10)

Inread Groups.
13.Explain the thread group with example program?(10)
Generic Programming
14. Write short notes on generic programming? (DEC-13)(13)
Generic Classes
15.Explain the generic classes with example program? (May-12)(08)
Generic Methods
16. Explain in detail about the generic methods with example? (May-12)(10)
Bounded Types
17.Explain the use of bounded types in generic with illustrative programs?(10)
Restrictions And Limitations.
18. Write short notes on Restrictions And Limitations in generic programming?(13)
PART-C
1. Explain The Overview Of Thread Concepts In Java?(15)
2. Explain The Overview Of Generic Programming Concepts In Java?(15)
3.Explain the different states of a thread in java? (nov/dec2018)(15)
UNIT-5
DADÆ A
PART-A
1.How are frames created in java?
2. What is meant by frame window?
3.What is AWT and its feaures? (nov/dec2018)

4. How do you manage the color and front of graphics in applet? 5. How does radio button in java differ from check box? 6. What are the advantages of event delegation model? 7. When do the following events occurs?i)adjustmentevent ii)itemevent? 8. Which java.util classes and interfaces support event handling? 9. What are the components in file structure? 10. What is the top of the AWT event hierarchy? 11. What method is used to distinguish between single ,double and triple mouse clicks? 12. What is meant by window adapter classes? (nov/dec2018) 13. Give the value for the following predefined actions(i) SMALL-ICON? 14. Give the value for the following predefined actions(i) MNEMONIC-KEY? 15. What is the relationship between an event listener interfaces and an event adapter classes? 16. Name the listener methods that must be implemented for the keylistener interfaces? 17. What is meant by event driven programming? 18.List out the swing components? 19. Why are swing components called light weight components? 20. What is the function of set layout and flow layout? 21. What is the need of generic code? (nov/dec2018)

PART-B

GRAPHICS PROGRAMMING

- **1.**Explain the graphics programming concepts?
- 2.Explain the various graphics programming components?

FRAME – COMPONENTS

3.Explain the frame and its components with example?(13)

WORKING WITH 2D SHAPES

4.Explain in detail about how to work with 2D shapes in java?(10)

USING COLOR, FONTS, AND

IMAGES

- **5**.Explain the methods available in the graphics for color?(10)
- 6..Explain the usage of special fonts for texts in graphics programming?(7)
- 7..Explain how to display an image in applet?(10)

BASICS OF EVENT HANDLING, EVENT HANDLERS

8.What is event handling in java? List out the available event classes and listener interfaces with suitable?(13)

ADAPTER CLASSES

9.Explain the adapter classes with example?(13)(nov/dec 2018)

ACTIONS – MOUSE EVENTS

10.What is actions?Write an applet program to handle all mouse events?(13)

AWT EVENT HIERARCHY

11.Describe the AWT event hierarchy?(10)

INTRODUCTION TO SWING

12.Explain the swing concepts with example program?(10)

LAYOUT MANAGEMENT

1.Explain the various layout management with suitable example? (nov/dec2018)(13)

SWING COMPONENTS

1. Text Fields 2. Text Areas 3. Buttons 4. Check Boxes 5. Radio Buttons 6. Lists 7. Choices 8. Scrollbars 9. Windows 10. Menus 11. Dialog Boxes **PART-C 1.**Explain the various graphics components with example?(15) 2.Explain the various swing components with example?(15) 3.Explain the overview of event handling in java?(15) 4. Explain the various layout management in java GUI with suitable example? (nov/dec2018)(15) 5.Explain the basic of AWT event handling in detail? (nov/dec2018)(15)

1.Explain the various swing components namely