



**B.Tech V Semester Supplementary Examinations, June 2024**

**OOPs Through JAVA  
(ECE)**

**Maximum Marks: 70**

**Date: 30.07.2024 Duration: 3 hours**

- Note:**
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

**Part-A**

All the following questions carry equal marks		(10X2M=20 Marks)	CO	Bloom Tx
1	What is an Object? How to allocate memory for objects?		1	L1
2	What is abstract class?		1	L1
3	Write about packages in java?		2	L1
4	Explain about nested interfaces?		2	L1
5	In how many ways a thread can be created. Explain?		3	L1
6	Differentiate between a thread and a process		3	L1
7	Which methods of deque enable it to be used as a stack?		4	L1
8	Explain the use of layout managers.		4	L1
9	Give the AWT hierarchy.		5	L1
10	What is an Event?		5	L1

**Part-B**

Answer All the following questions.		(5X10M=50Marks)		
11	a) "Java is called Machine Independent language" - Justify this statement with proper explanation. [5M] b) Write short note on the following Object-Oriented Concepts [5M] i) Encapsulation ii) Polymorphism		1	L2
OR				
12	a) What is Inheritance? Explain different types of inheritance supported by java with example? [5M] b) Write a Java program to check whether a given number is palindrome or not? [5M]		1	L2
13	Discuss about the FileInputStream and FileOutputStream in java with examples. [10M]		2	L2
OR				
14	a) Write an example program to show the calling sequence of constructors. [5M]		2	L2

	b) How to create packages and use them in java? [5M]		
15	a) Write a program with nested try statements for handling exception. [5M] b) How to create a user defined exception. [5M]	3	L2
	OR		
16	Write a program to create three threads in your program and context switch among the threads using sleep functions. [10M]	3	L2
17	a) What are similarities and difference between ArrayList and Vector? Explain. [5M] b) What is different between Iterator and ListIterator? Explain different ways to iterate over a list. [5M]	4	L2
	OR		
18	a) What are the best practices related to Java Collections Framework? Discuss [5M] b) What is Comparable and Comparator interface? Differentiate between them. [5M]	4	L2
19	a) What is Anonymous inner class? Explain with example. [5M] b) What are the advantages and disadvantages of Inner classes? [5M]	5	L2
	OR		
20	a) What are the different types of Event listeners supported by java. [5M] b) How to access the inner class from code within the outer class? [5M]	5	L2