JAVA PROGRAMMING

(Common to CSE, IT)

Time: 3 Hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A (25 Marks)

1.a) What are the features of Java language? [2]
b) Explain the types of operators used in Java. [3]
c) What is static inner class? [2]
d) Explain implicit and explicit import statement. [3]
e) Explain the differences between process and thread. [2]
f) Explain how a multiple catch statement works. [3]
g) Explain the use of string tokenizer with an example. [2]
h) Explain any three methods defined by iterator. [3]
i) Explain the use of layout managers. [2]
j) Explain the life cycle of an applet. [3]

PART - B (50 Marks)

2.a) Describe the different types of data types used in Java.
b) Write a program to convert the temperature in Fahrenheit to centigrade. [5+5]

OR

3.a) Compare and contrast between the overloading and overriding methods with an example.
b) Write a java program to display the following output. [5+5]

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

4.a) Explain the importance of anonymous inner class with an example.
b) Write a program to find the sum of the given number. [5+5]

OR

5.a) What is java package? What is CLASSPATH? Explain how to create and access a java package with an example.
b) Create an interface with at least one method and implement that interface by within a method which returns a reference to your interface. [5+5]

6.a) Write a program for user defined exception that checks the internal and external marks if the internal marks are greater than 40 it raise the exception "internal marks are exceed", if the external marks are greater than 60 exception is raised and display the message the "external marks are exceed".

b) Explain the synchronization methods with an example. [5+5]

OR

7.a) Write a program to implement a producer and consumer problem by using multithreading.

b) Explain the java built in exceptions. [5+5]

8.a) Write a program to compute an average of the values in a file.

b) Explain the methods defined by Math. [5+5]

OR

9.a) Explain the different types of drivers used in JDBC.

b) Write a program to store the names of bank depositors and their current balances by using hash table. [5+5]

10.a) Write a java program to design a scientific calculator using AWT.

b) What are the different types of Event listeners supported by java? [5+5]

OR

11.a) Write a program using an applet which will print "key pressed" on the status Window when you press the key, "key released" on status window when you release the key and when you type the characters it should print "hello" at co-ordinates (50,50) on Applet.

b) Explain the various components in Swing. [5+5]

--ooOoo--

JAVA PROGRAMMING
(Common to CSE, IT)

Time: 3 Hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A

(25 Marks)

1.a)	What is the significance of Java's byte code?	[2]
b)	List the applications of object oriented programming.	[3]
c)	Differentiate class, abstract class and interface.	[2]
d)	How to create and use a package in Java program?	[3]
e)	How does Java support inter thread communication?	[2]
f)	List any four unchecked exception.	[3]
g)	What is the use of Iterator class?	[2]
h)	Compare byte streams with character streams.	[3]
i)	Give the subclasses of JButton class.	[2]
j)	Differentiate between grid layout and border layout managers.	[3]

PART- B

(50 Marks)

2.a) What are the drawbacks of procedural languages? Explain the need of object oriented programming with suitable program.
b) Discuss the lexical issues of Java. [5+5]

OR

3.a) What are the primitive data types in Java? Write about type conversions.
b) What is a constructor? What is its requirement in programming? Explain with program. [5+5]

4.a) With suitable code segments illustrate various uses of 'final' keyword.
b) Discuss about anonymous inner classes. [5+5]

OR

5. What are the benefits of inheritance? Explain the various forms of inheritance with suitable code segments. [10]

6.a) With a program illustrate user defined exception handling
b) How to handle multiple catch blocks for a nested try block? Explain with an example. [5+5]

OR

7.a) Describe how to create a thread with an example.
b) Write a program to explain thread priorities usage. [5+5]

8. What support is provided by File class for file management? Illustrate with suitable scenarios. [10]

OR

9.a) Describe different types of JDBC drivers.

b) Explain the random access file operations with a suitable program. [5+5]

10.a) What is the role of event listeners in event handling? List the Java event listeners

b) Write an applet to display the mouse cursor position in that applet window.[5+5]

OR

11.a) Discuss various AWT containers with examples.

b) Explain about the adapter class with an example. [5+5]

--ooOoo--

JAVA PROGRAMMING
(Common to CSE, IT)

Time: 3 Hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A

(25 Marks)

1.a)	Define polymorphism.	[2]
b)	Why is Java known as platform independent?	[3]
c)	Differentiate between abstract class and interface.	[2]
d)	How to create and access a package?	[3]
e)	List the thread states.	[2]
f)	What keywords are essential in handling user-defined exception?	[3]
g)	What is the use of String Tokenizer class?	[2]
h)	Write about the random access file operations.	[3]
i)	What are the merits of swing components over AWT?	[2]
j)	What is an adapter class? What is its significance? List the adapter classes.	[3]

PART-B

(50 Marks)

2. What are the drawbacks of procedural languages? Explain the need of object oriented programming with suitable program. [10]

OR

3.a) Does Java support multi way selection statement? Justify your answer.
b) Describe type promotion rules of Java. [5+5]

4.a) Explain multilevel inheritance with the help of abstract class in your program.
b) Can inheritance be applied between interfaces? Justify your answer. [5+5]

OR

5.a) What is meant by dynamic method dispatch? Explain with a program.
b) Illustrate the use of static nested classes. [5+5]

6. What is an exception? How are exceptions handled in Java programming? Explain with suitable program. [10]

OR

7. Describe the need of thread synchronization. How is it achieved in Java programming? Explain with a suitable program. [10]

8.a) Differentiate between ArrayList and Vector.

b) List the methods of Stack class. [5+5]

OR

9. Write a JDBC program to search for an attribute in a table and display the entire tuple to the user. For example, display all the details of the student given his/her roll number. [10]

10.a) Is Applet more secure than application program? Justify your answer.

b) Design a user interface to collect data from the student for admission application using swing components. [5+5]

OR

11. Write a program to demonstrate various keyboard events with suitable functionality. [10]

---ooOoo---