School of Computer Science

UNIT WISE QUESTION BANK

S.No		Questions	BT	CO	PO
UNIT–I OBJECT-ORIENTED THINKING & JAVA BASICS					
Part – A (Short Answer Questions)					
1		What is abstract class? Give example	L1	CO1	PO1
2		Explain the use of 'for' statement in Java with an example.	L1	CO1	PO1
3		Differentiate between class and object.	L1	CO1	PO1
4		What is meant by ad-hoc polymorphism?	L1	CO1	PO2
5		Differentiate between print() and println() methods in Java.	L1	CO1	PO1
6		What is inheritance? Give example.	L1	CO1	PO3
7		What are the commands used for compilation and execution of java programs?	L1	CO1	PO1
8		What is java bytecode? What is JVM?	L1	CO1	PO5
9		What are JRE and JDK?	L1	CO1	PO5
10		How to write comments in JAVA?	L1	CO1	PO2
Part – B (Long Answer Questions)					
11	a)	Explain the method overriding and method overloading with an example.	L2	CO1	PO2
	b)	Describe different levels of access protection available in Java.	L2	CO1	PO3
12	a)	Explain about the primitive data types available in Java and explain	L2	CO1	PO1
	b)	What is polymorphism? Explain different types of polymorphisms with examples.	L2	CO1	PO2
13	a)	What is the purpose of constructor in Java programming?	L2	CO1	PO1
	b)	Distinguish between method overloading and method overriding.	L2	CO1	PO2
14	a)	What is meant by byte code? Briefly explain how Java is platform independent.	L2	CO1	PO5
	b)	Explain the significance of public, protected and private access specifiers in inheritance.	L2	CO1	PO3
15	a)	What is an array? How do you declare the array in java? Give examples.	L2	CO1	PO1
	b)	Discuss about precedence of operators and associativity	L2	CO1	PO1
16	a)	Explain briefly class, public, static, void, main, string[] and system.out.println() keywords.	L3	CO1	PO1
	b)	Write a java method to find minimum value in given two values.	L3	CO1	PO1

UNIT–II INHERITANCE,PACKAGES & INTERFACES					
S.No		**Questions**	**BT**	**CO**	**PO**
Part – A (Short Answer Questions)					
1		Define a Package? What is its use in java? Explain.	L1	CO2	PO2
2		List out the benefits of Stream oriented I/O.	L1	CO2	PO2
3		Contrast between abstract class and interface.	L1	CO2	PO2
4		What are the methods available in the character streams?	L1	CO2	PO2
5		What is the significance of the CLASSPATH environment variable in creating/using a package?	L1	CO2	PO1
6		What is the use of auto boxing in java? Explain.	L1	CO2	PO1
7		What does Java API package contain?	L1	CO2	PO2
8		How to read the console input.	L1	CO2	PO1
9		How to import the packages in JAVA.	L1	CO2	PO1
10		What is auto boxing?	L1	CO2	PO1
Part – B (Long Answer Questions)					
11	a)	What is an interface? What are the similarities between interfaces and classes?	L2	CO2	PO2
	b)	How can you extend one interface by the other interface? Discuss.	L2	CO2	PO2
12	a)	Discuss about CLASSPATH environment variables.	L2	CO2	PO1
	b)	Write a program to demonstrate hierarchical and multiple inheritance using interfaces.	L2	CO2	PO2
13	a)	Explain the process of defining and creating a package with suitable examples.	L2	CO2	PO1
	b)	Give an example where interface can be used to support multiple inheritance.	L2	CO2	PO1
14	a)	Describe the process of importing and accessing a package with suitable examples.	L2	CO2	PO3
	b)	Define inheritance. What are the benefits of inheritance? What costs are associated with inheritance?	L3	CO2	PO3
15	a)	What are the methods available in the Character Streams? Discuss	L2	CO2	PO1
	b)	Distinguish between Byte Stream Classes and Character Stream Classes.	L2	CO2	PO1
16	a)	How can we add a class to a package? Write about relative and absolute paths.	L2	CO2	PO2
	b)	Explain about the Console class and Serialization.	L4	CO2	PO2
UNIT–III **EXCEPTION HANDLING AND MULTITHREADING**					
S.No		**Questions**	**BT**	**CO**	**PO**
Part – A (Short Answer Questions)					
1		How do we start and stop a thread?	L1	CO3	PO4
2		Write the complete life cycle of a thread.	L1	CO3	PO4
3		What is the benefit of Generics in Collections Framework?	L1	CO3	PO5
4		Differentiate between Enumeration and Iterator interface.	L1	CO3	PO5
5		Define exception.	L2	CO3	PO3

6		Differentiate between a thread and a process.	L1	CO3	PO4
7		What is the difference between error and an exception?	L1	CO3	PO3
8		What is synchronization and why is it important?	L1	CO3	PO2
9		How do we set priorities for threads?	L1	CO3	PO4
10		What are the run time errors and logical errors in Java?	L1	CO3	PO3
Part – B (Long Answer Questions)					
11	a)	What are advantages of using Exception handling mechanism in a program?	L3	CO3	PO3
	b)	Write a java program that demonstrates how certain exception types are not allowed to be thrown.	L2	CO3	PO3
12	a)	What are the different ways that are possible to create multiple threaded programs in java? Discuss the differences between them.	L2	CO3	PO4
	b)	Describe inter-thread communication with a program for producer-consumer communication?	L3	CO3	PO4
13	a)	Write a program with nested try statements for handling exception.	L2	CO3	PO3
	b)	How to create a user defined exception?	L3	CO3	PO3
14	a)	Write a java program that illustrates the application of multiple catch statements.	L2	CO3	PO3
	b)	What is an Exception? How is an Exception handled in JAVA?	L3	CO3	PO3
15	a)	Differentiate between multiprocessing and multithreading.	L2	CO3	PO4
	b)	Write a program that creates two threads. Fist thread prints the numbers from 1 to 100 and the other thread prints the numbers from 100 to 1.	L3	CO3	PO4
16	a)	What is exception handling? Explain an example of exception handling in the case of division by zero.	L2	CO3	PO3
	b)	Write about some Java's built in exceptions.	L2	CO3	PO3
UNIT–IV **EVENT HANDLING**					
S.No		**Questions**	**BT**	**CO**	**PO**
Part – A (Short Answer Questions)					
1		What is an event? Give examples of various event sources.	L1	CO4	PO3
2		What are event classes?	L1	CO4	PO3
3		List event listeners in java.	L1	CO4	PO3
4		Write a short note on adapter classes?	L1	CO4	PO3
5		What is Delegation event model?	L1	CO4	PO3
6		Discuss about AWT hierarchy.	L1	CO4	PO3
7		What are the various user interface components?	L1	CO4	PO3
8		Write a program to create a choice	L1	CO4	PO3
9		List the layout managers in java.	L1	CO4	PO3
10		Discuss in brief about grid layout.	L1	CO4	PO3
Part – B (Long Answer Questions)					
11	a)	Demonstrates the different types of Event Listeners supported by java.	L2	CO4	PO3
	b)	Write a Java program to demonstrate the handling keyboard events.	L3	CO4	PO3

12	a)	Explain in detail event handling in java.	L2	CO4	PO3
	b)	Design a Java program to demonstrate the handling Mouse events.	L3	CO4	PO3
13	a)	What is a Layout manager? Explain different types of Layout managers in java.	L3	CO4	PO3
	b)	Design a java program to demonstrate border Layout in Java.	Ll3	CO4	PO3
14	a)	Briefly explain about the following: a)card layout b) Jscrollpane	L2	CO4	PO3
	b)	What is an adapter class? Demonstrate its role in event handling.	L3	CO4	PO3
15	a)	Explain AWT label and button controls in java.	L2	CO4	PO3
	b)	Design a java program to demonstrate Gridbag Layout in Java.	L2	CO4	PO3
16	a)	Explain checkbox and checkbox groups in detail.	L2	CO4	PO3
	b)	Design a java program to demonstrat event handling by implementing ActionListener	L2	CO4	PO3
		UNIT–V **APPLETS AND SWING**			
S.No		**Questions**	**BT**	**CO**	**PO**
		Part – A (Short Answer Questions)			
1		What is an Applet? List the types of applets in java.	L1	CO5	PO3
2		Why do applet classes need to be declared as public?	L1	CO5	PO3
3		What are the various classes used in creating a swing menu?	L2	CO5	PO3
4		What are the differences between JTogglebuttion and Radio buttion?	L2	CO5	PO3
5		What is Swing in Java? How it differs from Applet.	L2	CO5	PO3
6		How do applets differ from application program?	L1	CO5	PO3
7		Give the hierarchy for swing components	L1	CO5	PO3
8		Why swing components are preferred over AWT components?	L1	CO5	PO3
9		Explain any two swing controls.	L2	CO5	PO3
10		Discuss the limitations of AWT.	L1	CO5	PO3
		Part – B (Long Answer Questions)			
11	a)	Explain the swing architecture with the help of a neat diagram.	L2	CO5	PO3
	b)	Discuss about the JButton, JCheck Box and JTabbedPane?	L2	CO5	PO3
12	a)	Create a user interface to collect data from customer for opening an account in a bank. Use all possible swing components and layout manager for your interface design.	L2	CO5	PO3
	b)	Write an applet code to demonstrate parameter passing to applet.	L3	CO5	PO3
13	a)	Explain the life cycle of an applet .	L2	CO5	PO3
	b)	Write the step wise procedure to create and run an applet.	L3	CO5	PO3
14	a)	What is the difference between init( ) and start ( ) methods in an Applet? When will each be executed?	L3	CO5	PO3
	b)	Design 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 character it should print “hello” at co-ordinates (50,50) on Applet.	L2	CO5	PO3

15	a)	What are the various components of Swing? Explain.	L2	CO5	PO3
	b)	Design a user interface to collect data from the student for admission application using swing components.	L3	CO5	PO3
16	a)	What is an applet? Explain the life cycle of Applet with a neat sketch.	L3	CO5	PO3
	b)	Write the applets to draw the Cube and Cylinder shapes.	L2	CO5	PO3

* **Blooms Taxonomy Level (BT)** (L1 – Remembering; L2 – Understanding; L3 – Applying;L4 – Analyzing; L5 – Evaluating; L6 – Creating)