1. What is Exception Handling in Java?

Exception handling is a mechanism to handle the runtime errors,so that we can maintain the normal flow of application.

2. How to handle Exception using try and catch in Java?

Try is used to specify a block where we should place an exception code. It means we can't use try block alone.

write the code in try block and any exception that code throws are caught by catch blocks.

The try block must be followed by either catch or finally.

Ex:

```
int c;
try
{
        C = 20/0;
}
catch (ArithmeticException e)
{
       System.out.println(e); // java.lang.ArithmeticException: / by zero
}
```

3. How to handle Multiple Exceptions in Java?

One or more catch blocks can follow a try block. Each catch block must have a separate exception handler.We can handle multiple exceptions in java.

Ex :

```
int val = 30;
int div = 0;
int age = 13;
try {

       int a[] = new int[5];
       System.out.println(a[10]);
       int res = val / div;
 }
```

```
	catch (ArrayIndexOutOfBoundsException e) {
		System.out.println(e);  //  java.lang.ArrayIndexOutOfBoundsException:
Index 10 out of bounds for length 5
		}

	catch (ArithmeticException e) {
		System.out.println(e);  // java.lang.ArithmeticException: / by zero
		}
```

4. What is the usage of finally keywords in Java?

"Finally" keyword is one of the parts of exception handling, whenever an exception happens or not it will be executed.The clean-up phase of the try block is completed by the finally block.

5. What are the types of Exceptions in Java?

There are two types of Exceptions.

- Checked Exception
- Unchecked Exception

6. What is the difference between Checked and Unchecked Exceptions in Java?

Checked : These are the exceptions that are checked at compile time. If some code within a method throws a checked exception, then the method must either handle the exception or it must specify the exception using the *throws* keyword.

Unchecked : Java does not verify unchecked exceptions at compile-time.we don't have to declare unchecked exceptions in a method with the throws keyword.

7. What is the difference between throw and throws keyword in Java?

The throws keyword is used to declare which exceptions can be thrown from a method, while the throw keyword is used to explicitly throw an exception within a method or block of code.

```
public class ExceptionHandle {

	public static void main(String[] args) throws Exception {

		int val = 30;
		int div = 0;
		int age = 13;
		try {
			if(age >18)
				{
				throw new Exception("Not Eligible");
				}
			if(age<18)
				{
				System.out.println("U r eligible");
				}
			}

		catch(Exception e)
			{
			System.out.println("");
			System.out.println(e+"\n\t---*---");
			System.out.println("Null Pointer Exception\n\t---*---");
			}
	}
}
```

8. Which one is the super class for all the Exceptions in Java?

Throwable is a superclass for all the exceptions in java.

9. What is the difference between Exception and Error in Java?

Errors occurred at both compile time and run time, which can terminate the compilation or execution.

Exceptions occur only at run time, just that checked exceptions can be detected at compile time. Errors are also unchecked like Runtime Exceptions.

10. How to create our own / custom Exceptions in Java?

User-Defined Exception/custom exception is creating your own exception class and throwing that exception using the 'throw' keyword.