**OOPS**

* Class and Object (Ways of declaration and initialization)  \*\*\*
* Structure vs class  \*\*
* Static vs Instance members \*\*\*
* Access Specifiers : Private, Public,Protected \*\*\*
* Pillars of OOPS: Polymorphism, Encapsulation, Inheritance, Abstraction \*\*\*
* Runtime vs Compile-time polymorphism \*\*\*
* Constructor : default, parameterized, copy \*\*\*
* Keywords : this, super \*\*
* Initializer list vs constructor \*\*
* Destructor \*\*
* Operator Overloading \*\*
* Friend Function \*
* Friend Class \*
* Inheritance types : single, multiple, hierarchical, hybrid \*\*
* Method overriding, Method hiding, Method overloading \*\*\*
* Early/static binding vs late/dynamic binding \*\*
* Virtual & Pure virtual function \*\*
* Abstract class \*\*
* Const vs non-const members \*
* New vs malloc \*
* Shallow vs Deep copy \*
* Copy constructor vs Assignment operator \*
* Abstract class vs Interface \*
* C++ vs JAVA OOPS \*

**Advanced topics:**

* Singleton class
* Virtual pointer and tables
* Inline function
* Why not Macro
* Exceptional handling
* Copy Elision

**Resources :**

Saurabh Shukla, Gfg, Java Point

**Preparation Strategy**

-> real life example

-> coding practise (play around)

-> interview questions, mcq questions (concepts and output based)

-> discuss with peers

-> note making

-> diagrammatically understanding topic