For Language Basics : Index (1, 2, 3, 4, 5, 6, 7) | 10-15 Days

TOPIC	No. of Days	Minimum Qs	Video Index in C++ Placement Course
Time & Space Complexity	1	15	7.1
Arrays (with Searching) Sorting	8	40	8.1 to 8.6 9.1 to 9.2 10.1
String (Basics)	1	4	13.1 to 13.2
Recursion & Backtracking	2	10	16.1 to 16.4 18.1 to 18.3
Sorting (Quick & Merge)	1	4-6	19.1 to 19.2 20.1 (count sort)*
Linked List	2	10	22.1 to 22.11
Stacks & Queues	2	8	23.1 to 23.9 24.1 to 24.5
Binary Trees Binary Search Trees	6	30	27.1 to 27.16 28.1 to 28.11
Heaps & Priority Queue	2	10	31.1 to 31.6
Hashing	2	10	32.1 to 32.8
Greedy Algorithm	2	10	33.1 to 33.7
DP Algorithm	5	25	35.1 to 35.20
Graphs	5	25	34.1 to 34.19
String (Advanced)	1	4	39.1 to 39.4
Tries*	1	4	36.1 to 36.4
Segment Trees*	2	5-7	40.1 to 40.7
Fenwick Trees*	1	3	41.1 to 41.3

***Do these topics at the end, as you must complete the important ones first.**
****Additional Topics : Bit Manipulation, 2-Pointer Approach**

C++ Placement Course : https://www.youtube.com/playlist?list=PLfqMhTWNBTe0b2nM6JHVCnAkhQRGiZMSJ
Practice Questions for Time & Space Complexity : Cracking The Coding Interview by G. L. McDowell

Theory Topics

1. **OOPS (21.1 to 21.4 of C++ Placement Course)**
   - Objects & Classes
   - Abstraction
   - Inheritance
   - Polymorphism
   - Encapsulation

2. **Database Management Systems (DBMS)**
   - SQL
   - ACID Properties (Atomicity, Consistency, Isolation, Durability)
   - Use of B & B+ Trees
   - Concurrency Control

3. **Operating Systems**
   - What is an OS?
   - CPU Scheduling algos
   - Compiler, Interpreter, Loader, Linker
   - Paging, Segmentation
   - Process Synchronization
   - Threads
   - Deadlocks

4. **Computer Networks**
   - OSI Model (Layers in Detail)
   - TCP/IP Model
   - Devices (Router, Switch, Hub, Repeater, Bridge, Gateways)
   - TCP vs UDP
   - Network Topologies