Pre-Placement Test 1: *Cumulative*
Link: https://www.hackerrank.com/b-tech-placement-test

Pre-Placement Test 2: *Number Theory*
Link: https://www.hackerrank.com/btech-pre-placement-test-2
Tutorial: https://www.hackerearth.com/practice/notes/number-theory-1/

Pre-Placement Test 3: *Bit Masking and Recursion*
Link: https://www.hackerrank.com/pre-placement-test-3
Tutorials :
1)
https://www.hackerearth.com/practice/basic-programming/bit-manipulation/basics-of-bit-manipulation/tutorial/
2)
https://www.hackerearth.com/practice/basic-programming/recursion/recursion-and-backtracking/tutorial/

Pre-Placement Test 4: Binary Search and Dynamic Programming
Link: https://www.hackerrank.com/ug-preplacement-test-4
Tutorials:

1. DP1 :
   https://medium.freecodecamp.org/demystifying-dynamic-programming-3efafb8d4296
2. Binary Search :
   https://www.hackerearth.com/practice/algorithms/searching/binary-search/tutorial/
3. DP2 :
   https://www.hackerearth.com/practice/algorithms/dynamic-programming/introduction-to-dynamic-programming-1/tutorial/

Pre-Placement Test 5: Graph Theory Part 1 (Basic Graph Algorithms like DFS, BFS)
Link: https://www.hackerrank.com/pre-placement-test-5-ug
Tutorial: https://www.hackerearth.com/practice/notes/graph-theory-part-i/

Pre-Placement Test 6: Graph Theory Part 2
Link: https://www.hackerrank.com/ug-ppt-6
Tutorials:

1. https://www.hackerearth.com/practice/algorithms/graphs/minimum-spanning-tree/tutorial/
2. https://www.hackerearth.com/practice/algorithms/graphs/shortest-path-algorithms/tutorial/

There will be questions where the understanding of previous topics would be implemented in the context of graphs. For example: A mixture of Number Theory + Graphs. Two questions will be purely logical. One question will be based on implementation.

Pre-Placement Test 7: All topics
Link: https://www.hackerrank.com/spc-ppt-7-ug

Pre-Internship Test:
Link: https://www.hackerrank.com/pre-internship-test

Data Structures:

- Array
- Linked List (Important)
- Stack
- Queue
- Binary Tree
- Binary Search Tree
- Heap
- Tree (Important)
- Segment Tree (rarely asked)
- Hashing and Hash Maps

Algorithms:

- Basic Sorting algorithms with their running time complexity and comparisons.
- Basic Dynamic Programming and Greedy problems (Easy level).
- Backtracking
- Bit Algorithms
- Divide and Conquer
- Graph Algorithms: BFS, DFS, Topological sorting, Shortest Path Algorithms
- String Problems
- Prime Number - Sieves

And Concepts of Object-Oriented Programming.

Aptitude Preparation:
http://www.indiabix.com/aptitude/questions-and-answers/

http://www.allindiaexams.in/aptitude-questions-and-answers

http://tamilcube.com/career/aptitude-test/numerical-reasoning/

http://exam2win.com/aptitude-test/questions-and-answers/

http://placement.freshersworld.com/aptitude-questions-and-answers

http://www.careerbless.com/aptitude/qa/home.php

http://www.tnpscquestionpapers.com/2014/11/aptitude-questions-answers-test-pdf.html

https://www.jbigdeal.in/general-aptitude-test-questions-answers/

http://aptitude.students3k.com/download-quantitative-aptitude-questions-and-answers-pdf-for-exams-and-interview/

http://www.gyanjosh.com/paper/quantitative-aptitude

http://www.pskills.org/aptitude.jsp (Online tests)

http://www.lofoya.com/Aptitude-Questions-and-Answers/

Links to download Books for Aptitude:

http://www.freejobaware.com/r-s-aggarwal-quantitative-aptitude-free-pdf-e-book-download.html

http://www.bank4study.com/2015/05/quantitative-aptitude-complete-e-book.html