

Analysis's

① → Equation

② → Probability

event

conditional

③ → logarithm and exponential

④ → matrices

Transpose

⑤ → Sets or arithmetic

8-9-10

20% math

→ 80%

Basic

80% math

→ 20%

$\log a + \log b$

2^n

[
→
←
→

$$2^n \cdot 2^m = 2^{n+m}$$

⑥ Numbers Theory. \Rightarrow

$$1 + \frac{1}{2} + \frac{1}{2^2} - \dots \infty$$

⑦ Boolean logic \Rightarrow Bit manipulators

⑧ Sequence and Series.

⑨ Basic Tree and graph

⑩ Permutation and
combination
(Combinatorics)

⑪ Recurrence Relation \Rightarrow Run

$$\left\{ \begin{array}{l} 1 + 2 + \dots + n \\ 1 + 2 + 2^2 + \dots + 2^n \\ \left(1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{n} \right) \end{array} \right.$$

Basic plots

Basic
co-ordinate

Basic geometry

\Rightarrow

Git repo

any thing

Course \rightarrow MIT

math for CS

Code Review

CLRS → GOV MIT (Enjoy Algorithm)

Algorithms by Robert Sedgewick } Princeton

Algorithmic Puzzles ⇒ Oxford

Algorithm Design manual

High Probs

Skiena



⇒ wrong & long

