

PART 1

LOGIC == 3 days

P&C == 3

Probability == 3

graph theory == 3

PART 2

TOC==10 days

(I) DFA, NFA, E-NFA, mealey-moore and their conversion, conversion NFA to DFA, minimization of DFA == 3

(II) CFG , PDA, CNF, GNF == 2 days

(III) TM, properties of TM, power of all machines, chomsky, halting problem == 2

(IV) countability, closure properties, Decidability, rice theorem == 3

PART3

D/S == 7.5

(I) array, pointers = 2.5

(II) tree, bst, avl = 3

(III) stack, Queue, link list == 2

Algorithm == 14

(I) complexities, master theorem == 2

(II) sorting = 2

(III) Divide and conquer = 2

(IV) heap == 1.5

(V) Greedy == 2

(VI) Dynamic Prog. == 1.5

(VII) Graph, Hashing == 3

PART 4

OS==8.5

(I) scheduling == 1.5

(II) synchronization == 2.5

(III) deadlock == 0.5

(IV) memory management == 2

(V) File management, fork, threads = 2

N/W == 14

(I) IP addressing ,dealy (tt,tp, etc) == 2

(II) Overview of OSI=1

(III) flow control (stop/wait, GBN, SR) = 1

(IV) Data link layer (CSMA/CD, CSMA/CA, framing, LAN, ethernet, CRC....) = 3 (token ring is not needed)

(V) Rest of others (flow control, access control, error control {hamming distance code}) == 2

(VI) Network layer IPV4 header, fragmentation, protocols at NL, routing == 2

(VII) Transport layer (TCP,UDP,congestion control) == 2

(VIII) hardware devices, Application layer == 1.5

(IX) IPV6 , security == 1.5

PART 5

DBMS == 12

(I) basics, ER == 1.5

(II) Normalization == 2.5

(III) SQL == 1.5

(IV) Relational Algebra , TRC == 2 (Dont read DRC)

(V) serialization == 2.5

(VI) B-tree == 2

COA == 8

(I) basic == 1

(II) Address modes == 1

(III) pipelinning == 2

(IV) Caching == 2

(v) I/O == 1.5

(VI) hard disk == 0.5

PART 6

compiler == 5.5

(I) Lexical, Parsing == 3

(II) semantic == 1.5

(III) Run Environment == 1 (Don't read code optimization)

DE == 8

(I) Number system == 1.5

(II) Adder == 1.5

(IV) Combinational circuit = 2

(IV) sequential circuit == 3.5

(V) IEEE floating point, Booth's algo = 1

PART 7

Linear Algebra == 4

Calculus == 2