

# Reading List 2020.10 Term

Discrete Mathematics and its Application Kenneth H. Rosen

(7<sup>th</sup> global edition → 7<sup>th</sup> edition) (Same Questions, different exercise numbers)(highlighted part is not in 7<sup>th</sup> edition)

Week	Topic	Chapters	Readings	Exercises
1	Sets	2.1	115-125	1-3, 5-9, 17-19, 21-24, 27 p.125-126
2		2.2	127-135	1, 4-5, 9, 12, 14-17, 26, 29, 31,-32, 40-41, 44-46, 52, 55, 57-58 p.138-139
3	Functions	2.3	138-145	1-4, 10-13, 16-20, 23, 28-29 p.152-154
4		2.3	145-152	9, 33-39, 48-54, 68-70, 74 p.153-155
5	Propositional Logic	1.1	1-12	1-3 p.12
6		1.1 1.3	---	11-17, 29, 31, 32 p.13-15 10, 11, 15, 19, 22, 23 p.35
7	Predicate Logic	1.4 1.5	36-52 57-64	1, 2, 4, 8 9, 11, 15, 17, 19, 25, 26, 28, 29, 31, 32 p.53-55 1, 3, 5, 7, 9 p.64-65
8		1.3 1.6	26-28 69-78	1, 5-7, 9 p.33-34 1, 3, 5-7, 13-17 p.78-79
9	Boolean Algebra	12.4 12.5 12.6	811-821	1-5, 20-25, 35-40 p.818-819
10		1.2	16-22	41, 43 p.24
11	Induction & Recursion	5.1 5.2	311-329 333-341	1, 2, 6, 7, 15, 16 p.329-330 25, 27, 29 p.343
12		5.3	344-357	1, 3, 5, 7, 9-13 p.357-358
13	Graphs	10.1 10.2 10.5	641-649 651-656, 661-665 693-703	1-3, 24-25, 27 p.649-650 1-4, 6-10, 12-14, 39, 41-44 p.665, 667 1, 3, 5, 7, 18-19, 23, 25-31, 36-37 p.703-705
14		10.2 10.3 10.4 10.6	656-661 668-675 678-689 709-716	21-26, 28 p.665-666 1, 3, 5, 7, 10-11, 13, 15-17, 19, 21-23, 25, 27-28, 34-35, 37, 57, 59-61, 63 p.675-678 1, 3, 5, 11, 26-27 p.689, 691 3, 5-6, 8, 17-18 p.716-717
15	Trees	11.1 11.4 11.5	745-747 785-795 797-802	1, 17 p.755-756 1, 3, 5-6, 8-9 p.795 1, 3, 5, 7, 9 p.802
16		11.1 11.2	747-755 757-760	3, 5, 7, 9, 11-12, 14, 18-19, 32, 34 p.755-756 1, 3, 5-6 p.769
17	Relations	9.1	573-581	1, 3, 5, 7-9, 11, 13, 15, 17-18, 20. 30-32 p.581-582
18		9.3 9.5 9.6	591-596 607-614 618-622	1, 3, 5, 7, 18, 23, 25, 27-32 p.596-597 1-5, 7, 11, 21-27, 30, 41 p.615-616 1, 7, 9, 11, 16-19 p.630
19	Combinatorics	6.1 6.2 6.3	385-395 --- 407-413	1, 3, 5, 7, 11, 14-15, 27, 29, 31, 33, 47-48 p.396-398 1-4, 7-8, 18-19, 23, 36 p.405-406 1-4, 7, 9, 11, 13, 15-16, 26-27, 30-31, 42, 45 p.413-415
20		6.4 6.5 6.6	415-421 423-431 434-438	1, 4-5, 9-11, 13, 21, 23 p.421-422 1, 3, 5, 7, 9, 11-12, 37-38, 41, 43-44, 58-59 p.432-434 1, 3, 5 p.438