

RK VIGYAN PG COLLEGE KALWAR JAIPUR, RAJ.
B.SC 1ST SEMESTER MATHEMATICS THEORY

S.N	PAPER (I, II,) NAME	UNIT	TOPIC	VIDEO LINK
1		UNIT-I	Set introduction	https://www.youtube.com/live/fiV0uWu1UxU?si=Hf9wgRwZ9F-E2bnF
2			Relation on set	https://www.youtube.com/live/xKMm6mzx3Tk?si=GryJQmWyfwEzOEqJ
3			Equivalence class & partial order relation	https://youtu.be/CmZzZsaof8g?si=MRQ2K_-c48RLyyJp
4			Chain and antichain	https://youtu.be/cZqJiZrOyb8?si=hTu4HaJQQefsyi8e
5			Lattice	https://youtu.be/i1i_tAk61R8?si=kEIJYY9wy4LB4IQ
6			Distributive lattice	https://youtu.be/S-CeW_w3mIQ?si=3u5ckt8ausODYTKu
7			Complemented lattice	https://youtu.be/iDJjxMW3oGI?si=z1FVNB-eHXYakmpl
8			Boolean algebra 01	https://youtu.be/HJ31R-ZWIMo?si=SizYox7kFxPbt-3W
9			Boolean algebra 02	https://youtu.be/rRRi_Yp_-8o?si=N-Pxo9ugGJ-A7yO4
10			Boolean algebra 03	https://youtu.be/eGC0iTBuQfM?si=3-M46o4qEB9k6g6O
11			CNF AND DNF	https://youtu.be/m0di3A0JN0w?si=1dFt8Hqzh4aZt6bm
12			Pigeon hole principal	https://www.youtube.com/live/F1qg2twbsQE?si=a0P2slEpT8ycA5qO
13			Principle of inclusion and exclusive – 1	https://youtu.be/u1UBv5q6G44?si=CPOvxyDdSQnDZ8U1
14			Principle of inclusion and exclusive - 2	https://youtu.be/LX0t6U81-MU?si=km2GiQ-ZQmvxvLDI
15			Propositional calculus	https://youtube.com/playlist?list=PLEjRWorvdxL6xpvIHb-cN8VrRi2B2bzj2&si=wmF1YNiqnLOfcbT0
16			Basic logical operations	https://youtu.be/dvOyzYIMu-8?si=0CPjTOx9Rz-s6zf0

17			Truth table	https://youtu.be/Q4pQA58ee14?si=g-klrolMUwb9Md
18			Tautologies and contradictions	https://youtu.be/H2PeXcqpxA0?si=5RWrdou2CLBCVMBh
19		UNIT-II	Discrete numeric function and generating function	https://youtu.be/nvH7kVlyEw4?si=N7luyamtlQbxsw0s
20			Linear recurrence relation and their solution	https://youtu.be/Pf-EpOPqTSw?si=6JDjpkHN96uWulCs
21			Solution of recurrence relation	https://youtu.be/0qytXOZsb9g?si=CjpyYhzc9kemnXjC
22			Generating function	https://youtu.be/Y7HldL_LmhA?si=VLQ2AvAvh1GTWtZM
23			Basic concept of graph theory	https://youtu.be/LAPqOQ0yMmk?si=Q5T0xLaM66g6xMJW
24			Type of graph 01	https://youtu.be/t6aB856Ylq4?si=PVKgC7tF5w1jRVtP
25			Type of graph 02	https://youtu.be/Txr-0Ay14sl?si=UwsuPB0trT2Ntkgl
26			Type of graph 03	https://youtu.be/nOga6kt9n3A?si=XZxgXUmAoN29Hlbg
27			Walk and path circuit	https://youtu.be/8_G7Hg7CoNs?si=lnwz9OxJ3dVp0dbr
28			Shortest path problem	https://youtu.be/4UMlxaAFGSA?si=p1t2CkwQ0tccjBv7
29		UNIT-III	Planar graph	https://youtu.be/Z4eT4W1FS6A?si=rLQtvKkZ3k4GIHoW
30			Operation on graph 01	https://youtu.be/snCBhlwBzcM?si=PXj63St5BTInaBrv
31			Operation on graph 02	https://youtu.be/o5U2CHsoSsq?si=EouNff3THLTay3EI
32			Product of two graph	https://youtu.be/61E9qAMign8?si=78Qwllah478o8aRH
33			Adjacency matrix	https://youtu.be/lkzWJBI5Vgs?si=5sqfDHfV5xWdvmCD
34			Incidence matrix	https://youtu.be/17erhldpZ8E?si=s8vxA7t9ToTTRJZT
35			Hamiltonian and Eulerian graphs	https://youtu.be/tuitCMLwPAE?si=Ng7NhOoEM1USMJpA

36			Tree	https://youtu.be/XH7Jub1PRuw?si=sqkCf7h_Xqn4_N7h
37			Spanning tree	https://youtu.be/zLanI-T3qAE?si=0Slo5PN15t6Alvus
38			Minimum spanning tree	https://youtu.be/ToACXUBwouc?si=DxxCLNEjtdI5InzM
39			Distance, centre of tree	https://youtu.be/MgUjkQkBRH0?si=DkBxspmv6JLx-uAK
40			Binay tree	https://youtu.be/0iGsOdnPNag?si=yff4E6pCpCmpKfJq
41			Rooted tree	https://youtu.be/QUzo6a_iE3s?si=dKXk_9EkKfnXGdNT
42		UNIT-IV	Linear programming problems	https://youtu.be/kQMdWM5dpSU?si=Jt-gJvsyCykxHwVw
43			Basic solution	https://youtu.be/4FOsZbGsev0?si=-unEdwFIGd32NRQW
44			Convex set	https://youtu.be/tOOgv5iBk3Q?si=cTvr8Esfm9F8gAA
45			Simplex method 01	https://youtu.be/gcC9nZ3gnzM?si=MXNzYiehJSFQIV3A
46			Simplex method 02	https://youtu.be/ytnwrs6pj-4?si=lc8AOuN3gf7gZmpX
47			Simplex method 03	https://youtu.be/wBMwK1eF4M8?si=ox67CvgN9uB8XiPA
48			Example of simplex method	https://youtu.be/M8POtpPtQZc?si=jOilasIXCe40w5wY
49			Duality	https://youtu.be/H0sBZdjuego?si=hh91JYzkfw8dFYH
50			Transportation problem 01	https://youtu.be/tvNNKorAWog?si=f4HDPBlbWR6HZKji
51			Transportation problem 02	https://youtu.be/kiDZjISSIFw?si=ux6RI67yrs0Jfuqx
52			Transportation problem 03	https://youtu.be/GE52LzWhzsM?si=ACCjXxn1ZGzu2YaB
53			Assignment problem	https://youtu.be/I3CNzKUFINY?si=qQtdKOniwWFg5Po9