

Dayanand Science College Latur

E-Content (Video Lectures)

Mathematics

Class: M. Sc. II Year (Sem-III)

Name of Paper: Analytical Number Theory

Sub: Mathematics

Paper No: XV

SRTMUN, SPPU, MU, KUD, AMU, BAMU, NMU, SGBAU etc. Universities

Curriculums

Links of Video Lectures for UG, PG: Dr. Sidheshwar Bellale

Director, Mathematics Research Centre, DSC Latur

Sr. No.	Name of Units / Articles	Video Lecture Link
	Unit-I	
I	Unit-I All	https://www.youtube.com/playlist?list=PL7TANb4Sj71rfdhlE95X4LODiEUsex3W
1	Analytical Number Theory CO's and PO's	https://youtu.be/fHlq-Y8Ym9U
2	Theory of Congruence	https://youtu.be/JizPK7dJziI
3	Complete Set of Modulo Residues	https://youtu.be/D8Fgnp-_EOo
4	Basic Properties of Congruence	https://youtu.be/_iBxkYCZAMo
5	Proof: Properties of Congruence	https://youtu.be/Xil0J9BN0fo
6	Example Properties of Congruence	https://youtu.be/_vHHo8gh0Bg
7	Properties of Congruence	https://youtu.be/q6v3ddoQnj8
8	Binary and Decimal Representation of Integers	https://youtu.be/fwTrjbQezkc
9	Examples: Binary and Decimal Representation	https://youtu.be/Su9yroUKQcA
10	Linear Congruence	https://youtu.be/FqBVU2pWjLU
11	Theorems on Linear Congruence	https://youtu.be/WBtkdthWoZQ
12	Examples on Linear Congruences	https://youtu.be/zk5wDb_ZXTo
13	Chinese Remainder Theorem	https://youtu.be/h-n7RGJa500
14	Examples on Chinese Remainder Theorem	https://youtu.be/XxyY5_WFU_o
15	Examples on Chinese Remainder Theorem	https://youtu.be/nQ2msguDgps
16	Linear Congruences of two Variables	https://youtu.be/MK_FadxzfK8
17	Examples Linear Congruences of two Variables	https://youtu.be/pJj7QQy0NQw
18	Fermats Little Theorem	https://youtu.be/isU7wvh6pbU
19	Pseudo Primes	https://youtu.be/wzdS-xlm1Z4
20	Wilson's Theorem	https://youtu.be/DEws53tcvB4
	Unit-II All	https://www.youtube.com/playlist?list=PL7TANb4Sj71rfdhlE95X4LODiEUsex3W
21	Quadratic Congruences	https://youtu.be/_pgE7K90TCY
22	Order of an Integer Modulo n	https://youtu.be/7naYhz162rg
23	Examples on the Order of an Integer Modulo n	https://youtu.be/eeIKcNQ6bqo
24	Primitive Roots for Primes	https://youtu.be/dWXptaxv39s

25	Examples on Primitive Roots	https://youtu.be/HKrSge_DegA
26		
27	The Theory of Indices	https://youtu.be/azroNADTq5M
28	Quadratic Reciprocity Law	https://youtu.be/OASL9ggosPc
	Unit-III & IV	
	Unit-III & IV All	https://www.youtube.com/playlist?list=PL7TANb4Sj71rfdhIE95X4LODiEQUseX3W
29	Euler's Criterion	https://youtu.be/twVIlMnusGo
30	The Legendre Symbol	https://youtu.be/kJ0DdazeUKU
31	Examples on Legendre Symbol	https://youtu.be/vgSblZ4c34k
32	Gauss Lemma on Legendre	https://youtu.be/ibR8PiTR4_A
33	Examples on Gauss Lemma for Legendre	https://youtu.be/sJxExpqEV1o
34	Quadratic Reciprocity Law	https://youtu.be/rvs5DoYYZwk
35	Examples on Quadratic Reciprocity Law	https://youtu.be/V9trKEUEA2Y
36	Examples on Quadratic Reciprocity Law	https://youtu.be/V9trKEUEA2Y
37	Quadratic Congruences with Composite Moduli	https://youtu.be/iA5PefZS_bA
38	Pythagorean Triple	https://youtu.be/mRyskkIRkuI
39	Examples on Pythagorean Triple	https://youtu.be/rU7R380QxnM
40	The Mobius Function $\mu(n)$	https://youtu.be/SJOU2Me2D8s
41	The Euler Totient Function $\varphi(n)$	https://youtu.be/xEni_tv7oM
42	Relation μ and φ	https://youtu.be/c8Ii1LwVNx0
43	Mangoldt Function	https://youtu.be/U_gC0C9uXu4
44	Multiplicative Functions	https://youtu.be/DnpsTpc0JE4
45		
	Continue...	
	Basics for Perfection in Mathematics	
1	Real Analysis-I	https://www.youtube.com/playlist?list=PL7TANb4Sj71omv0tRaWWrMxG1B1XgzjF7
2	Real Analysis-II	https://www.youtube.com/playlist?list=PL7TANb4Sj71qVY4Tb7oZZwanyzqb3ctJI
3	Mechanics	https://www.youtube.com/playlist?list=PL7TANb4Sj71pLT9rJJN1XIDpqv9Lythw2
4	For All Lectures Visit	https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg
5	Basics for Real Analysis	https://www.youtube.com/playlist?list=PL7TANb4Sj71okEsD3aX8ABnhxX5XfwXcU
6	LIVE LECTURES 8:00pm-9pm (Mon to Friday)	https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg/live
7	For Updated Quality Video Links Register/ Visit	https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg