

Dayanand Science College Latur

E- Content (Video Lectures)

Mathematics

Class: B. Sc. I Year (Sem-II)

Name of Paper: Integral Calculus

Sub: Mathematics

Paper No: III (MT103)

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

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

Director Mathematics Centre, Dayanand Science College, Latur

Lect.. No.	Name of Units / Articles	Video Lecture Link
I	Unit-I , II,III, IV	https://youtube.com/playlist?list=PL7TANb4Si71phE6w6rhzOrg43RC4asvrk
	Unit I	
1	Syllabus and Pattern	https://youtu.be/iup-G0XeKPI
2	Methods of Integration	https://youtu.be/UdEMKzHqbCU
3	Integration by Substitution	https://youtu.be/5-vrB9Ifzg8
4	Integration by Partial Fractions	https://youtu.be/AhyJvnqRdo8
5	Examples on Integration by Partial Fractions	https://youtu.be/fkOfKLDPbQ0
6	Examples on Integration by Partial Fractions	https://youtu.be/Zk5kMOIZEhc
7	Integration of L/Q ⁿ form	https://youtu.be/6IHLKd235rI
8	Reduction formula	https://youtu.be/4_QrCLpOVLm
9	Examples on Reduction Formula	https://youtu.be/_Nmoq025_9U
10	Integration of algebraic rational functions by substitution	https://youtu.be/u1_P2iQF8yA
11	Integration of $\frac{1}{\sqrt{ax^2+bx+c}}$	https://youtu.be/zRUYatt0cMg
12	Integration of $\sqrt{ax^2 + bx + c}$	https://youtu.be/SMNTKTV89UM
13	Integration of $\frac{px+q}{\sqrt{ax^2+bx+c}}$	https://youtu.be/6k5jj8IHDco
14	Integration of $(px + q)\sqrt{ax^2 + bx + c}$	https://youtu.be/S7WdVm28iJ4
15	Integration of $(C_0 x^n + C_1 x^{n-1} + \dots + C_n)\sqrt{ax^2 + bx + c}$	https://youtu.be/P3y03TU9pzk
16	Integration of $\frac{1}{(Ax+B)\sqrt{Cx+D}}$	https://youtu.be/IuAIY9JuN9k
17	Integration of $\frac{1}{(ax^2+bx+c)\sqrt{px+q}}$	https://youtu.be/pg8eJwcaMul
18	Integration by Rationalization	https://youtu.be/ZwMUYnWR1TU
19	Integration of $x^m(a + bx^n)^p$	https://youtu.be/JEupXj3u2Fc
20	Examples on Integration of $x^m(a + bx^n)^p$	https://youtu.be/zMIwDiEOiIc
21	Reduction Formulae for Integration of $x^m(a + bx^n)^p$	https://youtu.be/n3U8JJcjo-c
22	Reduction Formulae for Integration of $x^m(a + bx^n)^p$	https://youtu.be/PKhW2rKwBL0
23	Reduction Formulae for	https://youtu.be/u41L2MgWJtY

	Integration of $x^m(a + bx^n)^p$	
24	Reduction Formulae for Integration of $x^m(a + bx^n)^p$	https://youtu.be/VLRABcGU2LQ
25	Reduction formula for $\int \sin^n x dx$ and $\int \cos^n x dx$	https://youtu.be/juzUnVDqtzI https://youtu.be/juzUnVDqtzI
25	Reduction formula for $\int \sin^n x dx$ and $\int \cos^n x dx$	https://youtu.be/3KFOIDoAlow
26	Reduction formula for $\int \sin^m x \cos^n x dx$	https://youtu.be/RtMMEeAenYo
27	Integration of $\int \sin^m x \cos^n x dx$	https://youtu.be/avOctUIAz08
28	Examples on Integration of $\int \sin^m x \cos^n x dx$	https://youtu.be/FtpQZO3GLTU
29	Reduction formula for $\int \tan^n x dx$ and $\int \cot^n x dx$	https://youtu.be/WJPE-eM0bQc
30	Reduction formula for $\int \sec^n x dx$ and $\int \operatorname{cosec}^n x dx$	https://youtu.be/yk3mhGRlthc
31	Reduction formula for $\int e^{ax} \sin^n bx dx$ and $\int e^{ax} \cos^n bx dx$	https://youtu.be/LKU0QyahoAI
32	Definite Integral	https://youtu.be/tDHwqWgFOrk
33	Properties of Definite Integral	https://youtu.be/7dXTNapebac
34	Examples on Definite Integral	https://youtu.be/zroxIjAIwyc
35	Examples on Definite Integral	https://youtu.be/Xqu37-Uh1Bo
36	Definite Integral: An Important Result	https://youtu.be/5Vb1FBHbDFc
37	Definite Integral Limit of Sum	https://youtu.be/PN27vAB_fU4
38	Definite Integral Limit of Sum	https://youtu.be/A3pG-_D0_nY
39	Integral as Limit sum	https://youtu.be/q9_Awv8-lgI
40	Gamma Function	https://youtu.be/E8F118LrHMs
41	Properties of Gamma Function	https://youtu.be/ac8NWUsZtQk
42	Product of Two Integral	https://youtu.be/ipBz3m6e9s4
43	Beta Function	https://youtu.be/RfQnoyJoFpo
44	Relation Between Beta	https://youtu.be/VNVWw5mTuno
45	Integration of Sine	https://youtu.be/CIh30jVdOmQ
46	Examples on Gamma	https://youtu.be/YeQasyf0iBU
47	Double Integral	https://youtu.be/0ygTk06Hnh4
48	Examples of Double Integral	https://youtu.be/jv387CwIB_Y
49	Examples of Double Integral	https://youtu.be/ya8DjPpmfPI
50	Area and Volume	https://youtu.be/rAkNzTskrJY
51	Polar coordinates	https://youtu.be/Y1T2HT2pUgE
52	Polar coordinates	https://youtu.be/npOQAmD-7c0
	Completed	https://www.youtube.com/c/Sidhes-hwarBellale/live
	For perfection in Mathematics: Basics	
1	Differentiation and Integration	https://www.youtube.com/playlist?list=PL7TANb4Sj71rJEW9jCLJmiG0Q_t-QUhbF
	Differentiation	https://www.youtube.com/playlist?list=PLzatFovyqhyQAUdrevP8MWguA1GTLt-t

	Application of Derivatives	https://www.youtube.com/playlist?list=PL7TANb4Sj71rJFH1jxKIotp34P9s_ofT1N
2	Indefinite Integration	https://www.youtube.com/playlist?list=PL7TANb4Sj71rJEW9jCLJmiG0Q_t-QUhbF
6	LIVE LECTURES	https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg/live
	For Updates and Quality Video Links Register/ Visit	https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg