

# Dayanand Science College, Latur

## E-Contents (Video Lectures)

### Mathematics

Class: B. Sc. III Year (Sem-V)

Name of Paper: Mechanics I

Sub: Mathematics

Paper No: XIV(B) (MT314)

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

Curriculum

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

Director, Mathematics Research Centre, DSC Latur

Lect. No.	Name of Units / Articles	Video Lecture Link
<b>I</b>	<b>Unit-I</b>	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71pLT9rJJN1XIDpqv9Lythw2">https://www.youtube.com/playlist?list=PL7TANb4Sj71pLT9rJJN1XIDpqv9Lythw2</a>
1	Definitions, law of parallelogram, resultant vector,	<a href="https://youtu.be/sdJ2i4ys-7I">https://youtu.be/sdJ2i4ys-7I</a>
2	Magnitude and Direction of Resultant	<a href="https://youtu.be/4JHSDXt6Xqg">https://youtu.be/4JHSDXt6Xqg</a>
3	Theorem on Magnitude and Direction of Resultant	<a href="https://youtu.be/84GGK_Ax5jA">https://youtu.be/84GGK_Ax5jA</a>
4	Examples on Resultant of Two Forces	<a href="https://youtu.be/4oMGkNKFuFs">https://youtu.be/4oMGkNKFuFs</a>
5	Magnitude and Direction of Resultant	<a href="https://youtu.be/u0CLRrMbcHc">https://youtu.be/u0CLRrMbcHc</a>
6	Problems on Resultant of two forces	<a href="https://youtu.be/CxOU1aEtny8">https://youtu.be/CxOU1aEtny8</a>
7	Components of Resolved forces	<a href="https://youtu.be/lpQ_hS7Y_po">https://youtu.be/lpQ_hS7Y_po</a>
8	Algebraic Sum of Resolved Parts	<a href="https://youtu.be/UKppWcvWttM">https://youtu.be/UKppWcvWttM</a>
9	Magnitude and Direction of Resultant of n Forces	<a href="https://youtu.be/y7SIEw-vlw0">https://youtu.be/y7SIEw-vlw0</a>
10	Examples Resolved parts	<a href="https://youtu.be/_Arpli4pA-s">https://youtu.be/_Arpli4pA-s</a>
11	Examples on Resolved Parts	<a href="https://youtu.be/3MNKr208Ofg">https://youtu.be/3MNKr208Ofg</a>
12	Examples on Resolved Parts	<a href="https://youtu.be/3Jirj-nQU5c">https://youtu.be/3Jirj-nQU5c</a>
13	Examples on Resolved Parts	<a href="https://youtu.be/86I76IqigGk">https://youtu.be/86I76IqigGk</a>
14	Resultant of Parallel Forces	<a href="https://youtu.be/tXGfOJAQJXo">https://youtu.be/tXGfOJAQJXo</a>
14 B	Resultant of Parallel Forces	<a href="https://youtu.be/1Mpca3vVQpI">https://youtu.be/1Mpca3vVQpI</a>
15	Algebraic Sum of Resolved Part	<a href="https://youtu.be/V_0Gvv2Tndk">https://youtu.be/V_0Gvv2Tndk</a>
16	Examples on Resultant of Parallel Forces	<a href="https://youtu.be/w2EfOWNsZFQ">https://youtu.be/w2EfOWNsZFQ</a>
<b>II</b>	<b>Unit II</b>	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71oloNC-jrURnjWp1Z6nix6i">https://www.youtube.com/playlist?list=PL7TANb4Sj71oloNC-jrURnjWp1Z6nix6i</a>
01	Triangle Law of Forces	<a href="https://youtu.be/4xY-jqMQmsQ">https://youtu.be/4xY-jqMQmsQ</a>
02	Converse of Triangle Law of Forces	<a href="https://youtu.be/Xax0MALbpdo">https://youtu.be/Xax0MALbpdo</a>
03	Polygon of a Forces	<a href="https://youtu.be/cNmgdyPFfNw">https://youtu.be/cNmgdyPFfNw</a>
04	Lami's Theorem	<a href="https://youtu.be/_vljRRO6NIE">https://youtu.be/_vljRRO6NIE</a>
05	Condition of Equilibrium	<a href="https://youtu.be/H52YKzDJC78">https://youtu.be/H52YKzDJC78</a>

06	Examples on Equilibrium of Forces	<a href="https://youtu.be/pms7fUCzjmY">https://youtu.be/pms7fUCzjmY</a>
07	Examples on Equilibrium of Forces	<a href="https://youtu.be/pms7fUCzjmY">https://youtu.be/pms7fUCzjmY</a>
08	Examples on Equilibrium of forces	<a href="https://youtu.be/slpGWUI8GxE">https://youtu.be/slpGWUI8GxE</a>
	<b>Unit-III &amp; IV</b>	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71qEOvyps0Ph-gaFdQJ-xSgW">https://www.youtube.com/playlist?list=PL7TANb4Sj71qEOvyps0Ph-gaFdQJ-xSgW</a>
01	Forces Acting on a Rigid Body	<a href="https://youtu.be/qsun3q6hk7s">https://youtu.be/qsun3q6hk7s</a>
02	The Sum of Vector Moments	<a href="https://youtu.be/wfa6PHzcAhY">https://youtu.be/wfa6PHzcAhY</a>
03	Examples on Forces Acting on Rigid Body	<a href="https://youtu.be/foZMYZ0MsYQ">https://youtu.be/foZMYZ0MsYQ</a>
04	Examples on Vector Moment	<a href="https://youtu.be/_PizVQo8qFM">https://youtu.be/_PizVQo8qFM</a>
05	Vector Moments of Parallel Forces	<a href="https://youtu.be/4WN2UySXajY">https://youtu.be/4WN2UySXajY</a>
06	Couples	<a href="https://youtu.be/iq3XO_0Zlvs">https://youtu.be/iq3XO_0Zlvs</a>
07	Moment of the Couple	<a href="https://youtu.be/fuJq3rT_-g">https://youtu.be/fuJq3rT_-g</a>
08	Two Couples acting on a Rigid body	<a href="https://youtu.be/rKf6h96e2YQ">https://youtu.be/rKf6h96e2YQ</a>
09	Vector Moment of the Resultant Couples	<a href="https://youtu.be/hQ-hg5bxNwA">https://youtu.be/hQ-hg5bxNwA</a>
10	Vector Moment of the Resultant Couples	<a href="https://youtu.be/PVyxAA3MZCc">https://youtu.be/PVyxAA3MZCc</a>
11	Cartesian Condition of Equilibrium of Forces	<a href="https://youtu.be/iYHf-j0h4ZY">https://youtu.be/iYHf-j0h4ZY</a>
	<b>Syllabus Completed</b>	
	<b>Basics for Perfection in Mathematics</b>	
1	Differentiation	<a href="https://www.youtube.com/playlist?list=PLzatFovyqhyQAUdrevP8MWguA1GTLt-t">https://www.youtube.com/playlist?list=PLzatFovyqhyQAUdrevP8MWguA1GTLt-t</a>
2	Application of Derivatives	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71rJFH1jxKIotp34P9sofT1N">https://www.youtube.com/playlist?list=PL7TANb4Sj71rJFH1jxKIotp34P9sofT1N</a>
3	Indefinite Integration	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71rJEW9jCLJmiG0Q_t-QUhbf">https://www.youtube.com/playlist?list=PL7TANb4Sj71rJEW9jCLJmiG0Q_t-QUhbf</a>
I	Basics of Mathematics	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71qVY4Tb7oZZwanyzqb3ctJl">https://www.youtube.com/playlist?list=PL7TANb4Sj71qVY4Tb7oZZwanyzqb3ctJl</a>
II	For All Lectures Visit	<a href="https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg">https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg</a>
III	LIVE LECTURES 04:00pm-05pm (Mon to Friday)	<a href="https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg/live">https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg/live</a>
	For Updated Quality Video Link Register/ Visit	<a href="https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg">https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg</a>