

# Dayanand Science College Latur

## E-Contents (Video Lectures)

### Mathematics

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

Name of Paper: Partial Differential Equation

Sub: Mathematics

Paper No: IX

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

Lect. No.	Name of Units / Articles	Video Lecture Link
	<b>Unit-I</b>	
<b>I</b>	<b>Unit-I,II,III,IV- All</b>	<a href="https://www.youtube.com/watch?v=u0I1fcMrF_Q&amp;list=PL7TANb4Sj71qs0pLM8ZrJpdzNVFS9azVc">https://www.youtube.com/watch?v=u0I1fcMrF_Q&amp;list=PL7TANb4Sj71qs0pLM8ZrJpdzNVFS9azVc</a>
1	Syllabus and Pattern	<a href="https://youtu.be/u0I1fcMrF_Q">https://youtu.be/u0I1fcMrF_Q</a>
2	Introduction to PDE	<a href="https://youtu.be/uiwV0CbeBIU">https://youtu.be/uiwV0CbeBIU</a>
3	Introduction to PDE	<a href="https://youtu.be/VGUwY8bfdjc">https://youtu.be/VGUwY8bfdjc</a>
4	Types linear PDE	<a href="https://youtu.be/Ha4fkDx2fRM">https://youtu.be/Ha4fkDx2fRM</a>
5	Linear PDE	<a href="https://youtu.be/DaEAiz1NB3c">https://youtu.be/DaEAiz1NB3c</a>
6	Formation of PDE	<a href="https://youtu.be/FQNizPWdAWQ">https://youtu.be/FQNizPWdAWQ</a>
7	Curves and surfaces	<a href="https://youtu.be/tHMaHZde2g8">https://youtu.be/tHMaHZde2g8</a>
8	Genesis of first order PDE	<a href="https://youtu.be/dYroD83V254">https://youtu.be/dYroD83V254</a>
9	Eulars Equation	<a href="https://youtu.be/_2mjMRCYFVU">https://youtu.be/_2mjMRCYFVU</a>
10	Formation of PDE	<a href="https://youtu.be/Z3zl8LyOr44">https://youtu.be/Z3zl8LyOr44</a>
11	Two Parameters Surface	<a href="https://youtu.be/tJP7UkCe_i4">https://youtu.be/tJP7UkCe_i4</a>
12	Examples on Two Parameter Surface	<a href="https://youtu.be/LFzDUeoOa7w">https://youtu.be/LFzDUeoOa7w</a>
13	Classification of integrals	<a href="https://youtu.be/jfvjGxXEmFs">https://youtu.be/jfvjGxXEmFs</a>
14	Lemmas on Classification of integrals	<a href="https://youtu.be/zrqs0D2bRCQ">https://youtu.be/zrqs0D2bRCQ</a>
15	Linear equations of first order	<a href="https://youtu.be/LjHOk1dmP3g">https://youtu.be/LjHOk1dmP3g</a>
16	Pfaffian Differential Equation	<a href="https://youtu.be/i_Wx5e3OV3M">https://youtu.be/i_Wx5e3OV3M</a>
17	Examples on Total Differential Equations	<a href="https://youtu.be/oH-5LzNPMEs">https://youtu.be/oH-5LzNPMEs</a>
18	Examples on Total Differential Equations	<a href="https://youtu.be/A3pG-_D0_nY">https://youtu.be/A3pG-_D0_nY</a>
19	Compatible system for first order PDE	<a href="https://youtu.be/ctJ97Jgr8hQ">https://youtu.be/ctJ97Jgr8hQ</a>
20	Compatible System	<a href="https://youtu.be/550jvKJbKUk">https://youtu.be/550jvKJbKUk</a>
21	Charpits Method	<a href="https://youtu.be/UKNdIL-okhc">https://youtu.be/UKNdIL-okhc</a>
22	Examples on Charpits Method	<a href="https://youtu.be/2pe6nqIHZ2U">https://youtu.be/2pe6nqIHZ2U</a>
23	Some standard Types	<a href="https://youtu.be/fjI2RpAfYN8">https://youtu.be/fjI2RpAfYN8</a>
24	Some standard Types	<a href="https://youtu.be/_h7BQFK71g8">https://youtu.be/_h7BQFK71g8</a>
25	Clairaut Equation	<a href="https://youtu.be/FDpM88nEq4g">https://youtu.be/FDpM88nEq4g</a>
26		
27	Solution of PDE by Jacobi's Method	<a href="https://youtu.be/nG_g1Ka2GM8">https://youtu.be/nG_g1Ka2GM8</a>
28	Integral Surface of Nonlinear PDE Through Curve	<a href="https://youtu.be/Kd-mzWEp34s">https://youtu.be/Kd-mzWEp34s</a>

29	Integral Surface of Nonlinear PDE Through Curve	<a href="https://youtu.be/Frel2IEkrKI">https://youtu.be/Frel2IEkrKI</a>
30	Integral Surface of Nonlinear PDE Through Curve	<a href="https://youtu.be/BMpqR5rM6uo">https://youtu.be/BMpqR5rM6uo</a>
	<b>Basics for Perfection in Mathematics</b>	
1	Basic of Differential Equation	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71rA-8sVw-YA_Y9CLQkGvMpg">https://www.youtube.com/playlist?list=PL7TANb4Sj71rA-8sVw-YA_Y9CLQkGvMpg</a>
2	Basic of Integration	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71rJEW9jCLJmiG0Q_t-QUhbf">https://www.youtube.com/playlist?list=PL7TANb4Sj71rJEW9jCLJmiG0Q_t-QUhbf</a>
3		
4	For All Lectures Visit	
5	Basics for Real Analysis	<a href="https://www.youtube.com/playlist?list=PL7TANb4Sj71okEsD3aX8ABnhxX5XfwXcU">https://www.youtube.com/playlist?list=PL7TANb4Sj71okEsD3aX8ABnhxX5XfwXcU</a>
6	LIVE LECTURES	<a href="https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg/live">https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg/live</a>
7	For Updated Quality Video Links Register/ Visit	<a href="https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg">https://www.youtube.com/channel/UC25Hwz1jT_gwAJU4YEiO6Rg</a>