

# SARASWATI MAHILA MAHAVIDYALAYA, PALWAL

## LESSON PLAN

Class: BA/B.Sc (N.M + C.S)

Semester: 3rd

Paper: Maths, P-2  
Partial Differential Equation

Session: 2020-21

Lectures	Topic
	<u>UNIT-1</u> :
	Ch-① : Formation of Partial Differential Eq <sup>n</sup> , order degree, Linear & Non-Linear PDE
16	Ch-② : First order Linear Partial Differential Equation, Complete sol <sup>n</sup> , Singular Solu <sup>n</sup> Linear Eq <sup>n</sup> General Solu <sup>n</sup> , Solu <sup>n</sup> of Lagrange's
	Ch-③ : First order Non-Linear PDE, Charpit Method, Compatible Systems, Jacobi's Method
2	Class Test & Discussion of Problems
	<u>Unit-2</u> :
	④ Linear Partial Diff. Eq <sup>n</sup> of second and higher orders
18	⑤ PDE's with variable coefficients Reducible to Equations with Constant coefficients
1	Assignment & Discussion of Doubts

Lectures	Topic
	<u>Unit-3</u>
	<u>Ch-6</u> : Classification and Canonical forms of Second Order Linear PDE's
18	<u>Ch-7</u> : Monge's Method for PDE's of Second Order
2	class Test & Discussion of Problems
	<u>Unit-4</u>
	<u>Ch-8</u> : Characteristics of Second Order PDE's and Cauchy's Problem
22	<u>Ch-9</u> : Method of separation of Variables: Wave, Heat and Laplace Equations
1	Assignment
10	Revision

Amita Agrawal