Student Seminars

Teachers of "Mathematics" Department have Conducted a good number of student Seminars in various topics such as Differential and Integral Calculus. To enhance the participatory learning to increase the Subject Knowledge and Skill.

STUDENT-SEMINAR-1

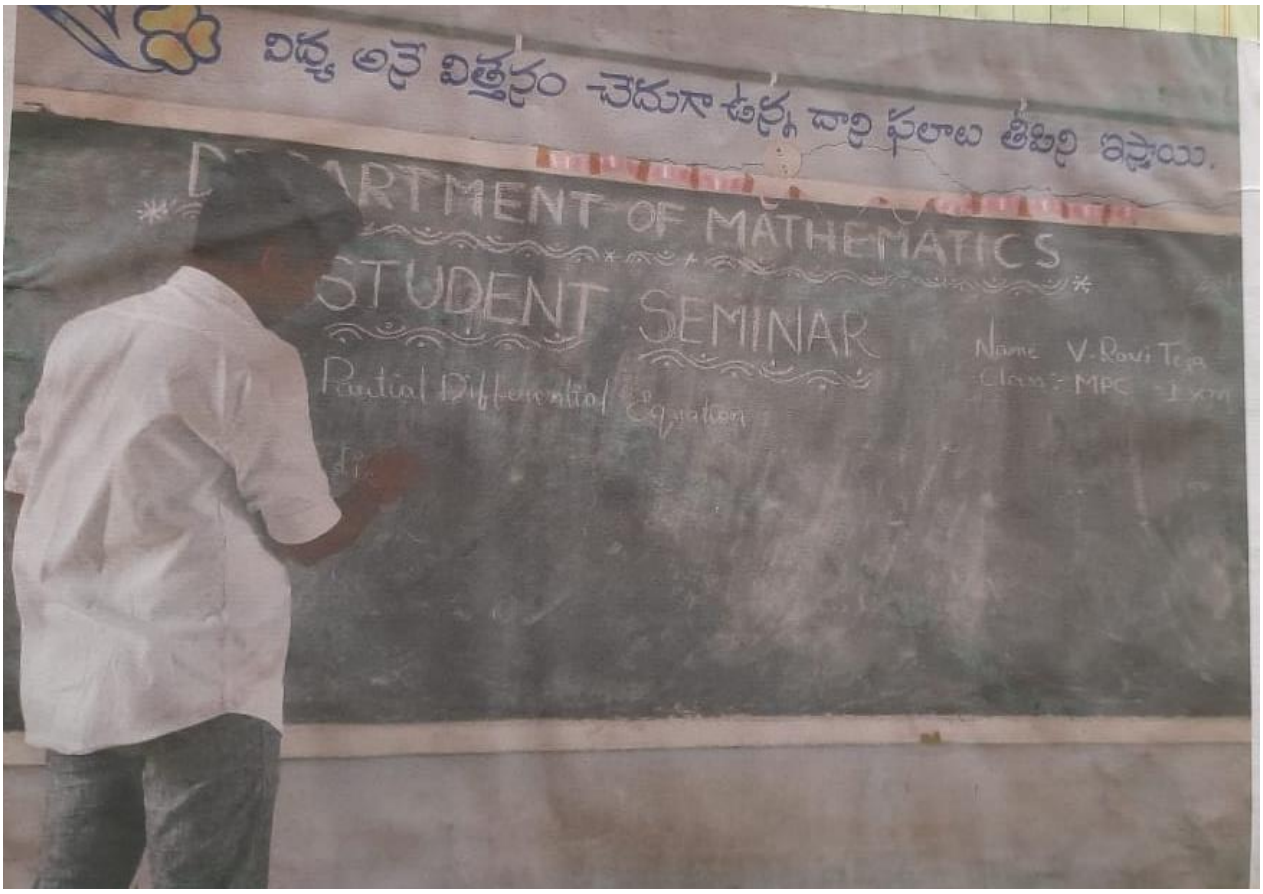
Student Name : V. Ravi Teja
Group : MPC
Year : I
Semester : I
Delivered Topic : Partial Differentiation and Deffination

Topic synopsis : Partial Differentiation and Deffination :-

Partial differentiation is a method of determining the partial dervitives of a function of more than one independent variable.

The partial dervitives are the generalized of ordinary dervitives.

Guided By : P. Gangaiah, Asst. prof in Mathematics.


విద్య అనే విత్తనం చెదుగా ఉన్నా దాని ఫలాలు తీపిని ఇస్తాయి.
DEPARTMENT OF MATHEMATICS
STUDENT SEMINAR
Partial Differential Equations


DEPARTMENT OF MATHEMATICS
STUDENT SEMINAR

STUDENT-SEMINAR-27

Student Name : S. Shireesha
Group : MPC
year : I
Semester : I
Delivered Topic : Partial Differentiation and Functions of Several variables

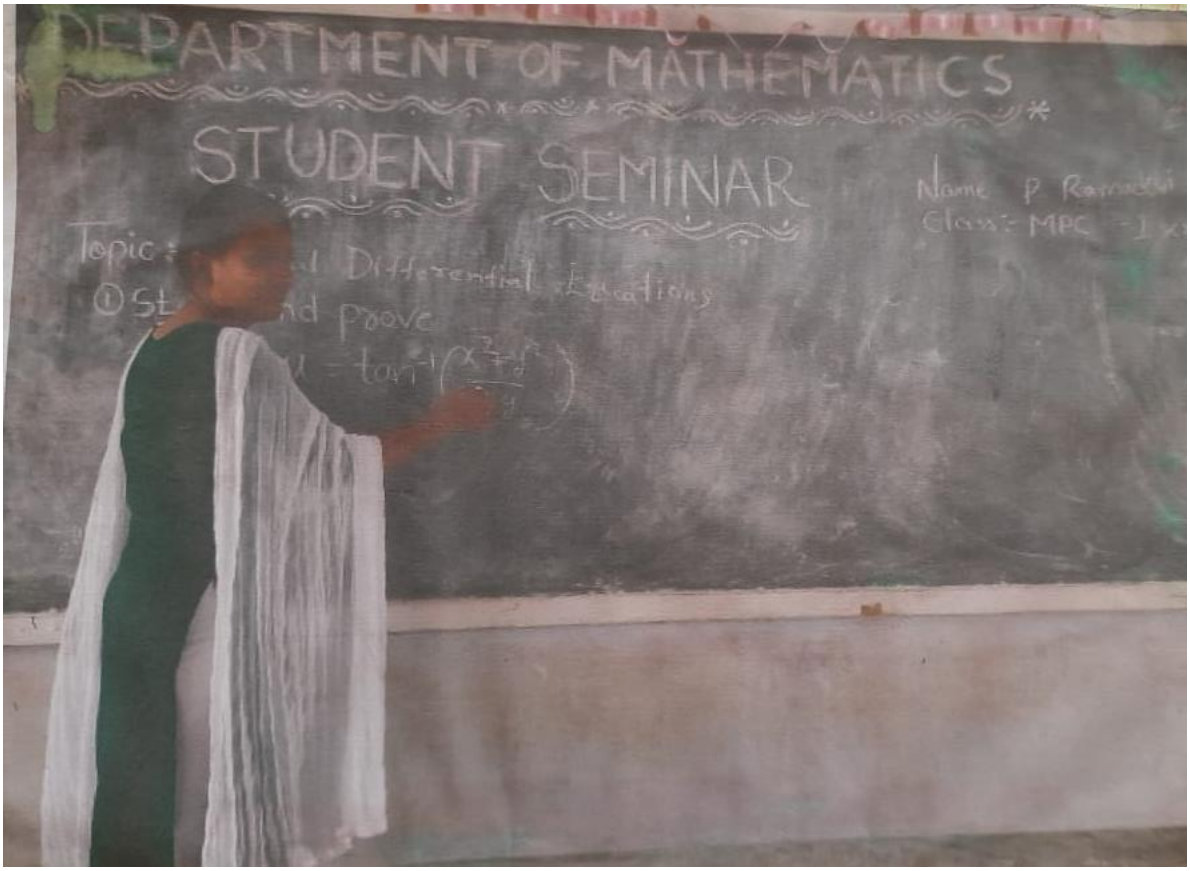
Topic Synopsis : Partial Differentiation and Functions of Several variables

A function which contains more than one variable is called function of Several variables.
Function of Two variables :- A function which contains two variables is called function of two variables.
It is of the form $z=f(x,y)$. Ex:- $z=x^2+y^2$
Function of Three variables :- A function which contains three variables is called function of three variables.
It is of the form $z=f(x,y,z)$, Ex: $z=x^2+y^2+x^2$

Guided By : T. Gangaiah, Asst. prof in Mathematics

Students Attended : 12

1) S. Sravani - MPC
2) N. Manasa - MPC
3) V. Ravi Teja - MPC
4) S. Sheerisha - MPC
5) P. Ramadevi - MPC
6) A. Bhagya - MPC
7) J. Ramya - MPC
8) R. Ravalika - MPC
9) S. Aniruth - MPCS
10) K. Bhavani - MPCS
11) SK. Asma - MPCS
12) K. Sai Nikhitha - MPCS


DEPARTMENT OF MATHEMATICS
STUDENT SEMINAR
Name P Ramakki
Class: MPC
Topic:
Differential Equations
Prove

STUDENT SEMINAR-3

9

Student Name : P. Ramadevi

Group : MPC

Year : I

Semester : I

Delivered Topic : Partial Differentiation and Deffination

Topic synopsis : The process of determining the partial derivatives of a function of more than one independent variables is know as a partial differentiation. It is denoted by symbols like $\frac{\partial}{\partial x}, \frac{\partial}{\partial y}, \frac{\partial}{\partial z}$ --- etc

Guided By : T. Gangaiah, Asst. prof in Mathematics

Students Attended : 12

1) S. Sravani - MPC
2) N. Manasa - MPC
3) V. Ravi Teja - MPC
4) S. Sheerisha - MPC
5) P. Ramadevi - MPC
6) A. Bhagya - MPC
7) J. Ramya - MPC
8) R. Ravalika - MPC
9) S. Anirudh - MPCs
10) K. Bhavani - MPCs
11) SK. Asma - MPCs
12) K. Sai Nikhitha - MPCs

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Sign of the principal

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Bellampally-504 251
Dist:Mancherial (T.S.)


DEPARTMENT OF MATHEMATICS
DENT SEMINAR
Name - S. Srivenu
Class - MPCS - I
al Differential Equations

STODENT SEMINAR - 5

Student Name : S. Anirudh
Group : MPCs
Year : I
Semester: I

Delivered Topic : Partial Differentiation (2)
Deffination of Homogenious function

Topic Synopsis : Homogenious Function:-
If in a function $u = f(x,y)$,
$f(kx, ky) = k^n f(x,y)$ then the function is said to be a homogenious function of degree 'n' in x and y

Ex:- $u = \frac{x^3+y^3}{x+y}$, $(x,y) \neq (0,0)$

$$u = \frac{x^3\left[1+(y/x)^3\right]}{x^3\left[1+(y/x)\right]}$$

$$u = \frac{x^2\left[1+(y/x)^3\right]}{1+(y/x)}$$

$\therefore$ degree $(n) = 2$,

Then u is homogenious function of degree 2

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Students Attended :- 12

1) S. Sravani : MPC
2) N. Manasa : MPC
3) V. Ravi Teja : MPC
4) S. Sheerisha : MPC
5) P Ramadevi : MPC
6) A. Bhagya : MPC
7) J. Ramya : MPC
8) P. Ravalika : MPC
9) S. Anirudh : MPCs
10) K. Bhavani : MPCs
11) SK. Asma : MPCs
12) K. Sai Nikhitha : MPCs

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STUDENT SEMINOR-6

Date:- 10/02/21

Name of the Student :- V. Raviteja
Hall Ticket Number :- 054-20-4022
Group :- MPC
Name of the Incharge :- T. Naveen Chander Raju
Topic of the Seminor :- Differential Equations
Number of Students present :- 14
Method of presentation :- Lecture Method
Summary of the class :- Explaned about the Differential Equations

Differential Equations :- An equation which involves dependents and independent variables and the derivative of one (or) more dependent variables with respect to one (or) more independent variables is called a "Differential Equations"

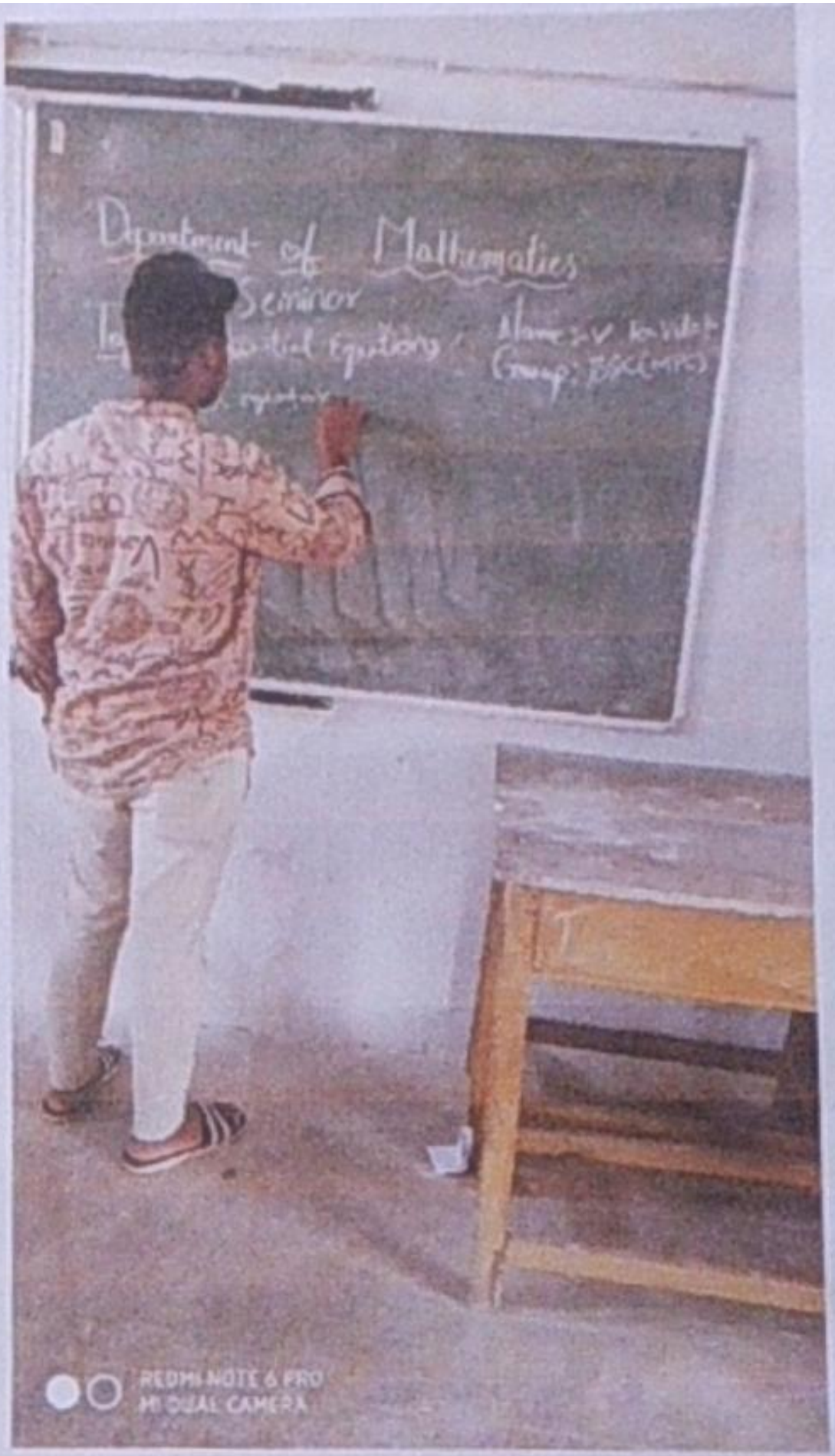
Examples :- 1) $\frac{dy}{dx} = \sin x + \cos x$

2) $y = \sqrt{x} \cdot \frac{dy}{dx} + \frac{k}{\frac{dy}{dx}}$

3) $k \cdot \frac{d^2y}{dx^2} = \left[1 + \left(\frac{dy}{dx}\right)^2\right]^{3/2}$

4) $y = x\frac{dy}{dx} + k\left[\sqrt{1 + \left(\frac{dy}{dx}\right)^2}\right]$

Guided by :- T. Naveen Chander Raju
(Asst. prof. of Mathematics)


Department of Mathematics
Seminar
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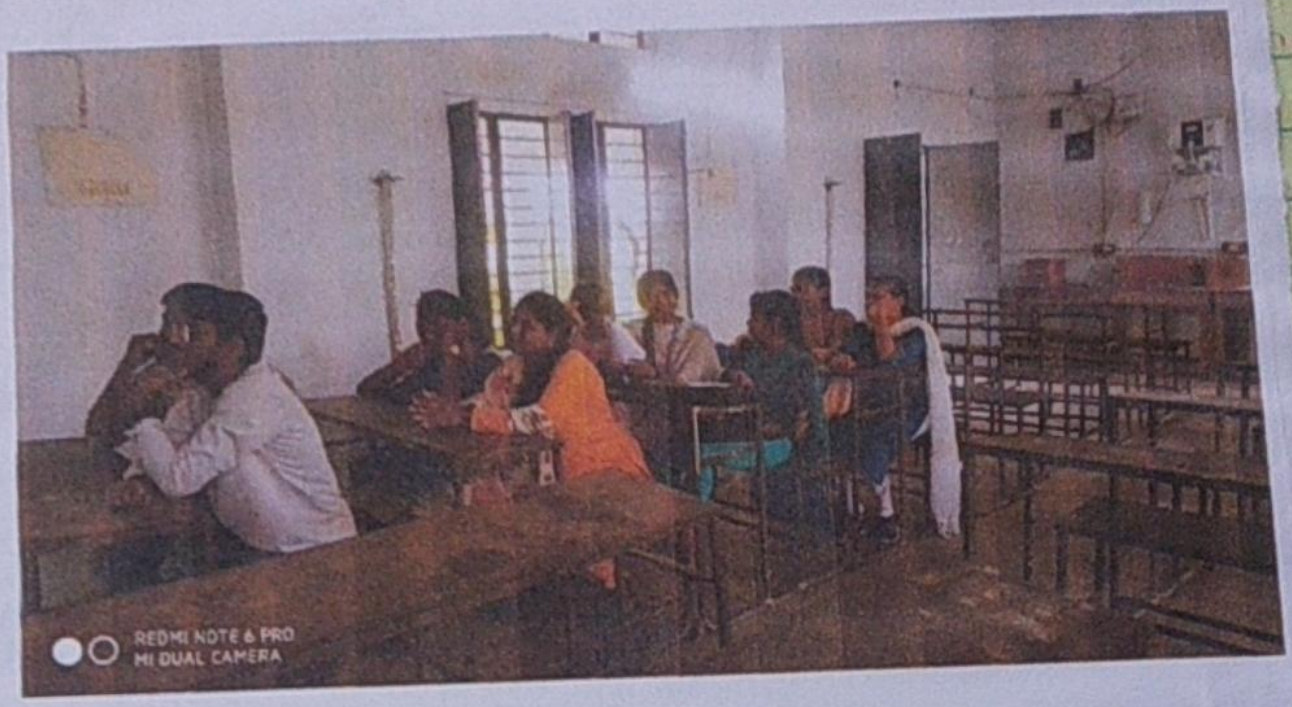
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Students attendence :- 14

Hall Ticket No	Student Name	Group
054-20-4001	A. Bhagya	MPC
054-20-4009	J. Rahul	MPC
054-20-4010	J. Saikrishna	MPC
054-20-4013	M. Sathyanarayana	MPC
054-20-4014	N. Manasa	MPC
054-20-4015	P. Ramadevi	MPC
054-20-4016	P. Saiteja	MPC
054-20-4017	R. Ravalika	MPC
054-20-4019	S. Sravani	MPC
054-20-4020	S. Shireesha	MPC
054-20-4021	T. Sravanthi	MPC
054-20-4022	V. Raviteja	MPC
054-20-4105	K. Sai Nikhitha	MPCs
054-20-4110	S. Anirudh	MPCs

T. Naveen chander Raju
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STUDENT SEMINOR-7

Date:- 16/02/21

Name of the student :- T. Sravanthi
Hall Ticket Number :- 054-21-4021
Group :- MPC
Name of the Incharge:-
Topic of the Seminar :- Order of Differential Equations
Number of students present:- 14
Method of Presentation :- Lecture Method
Summary of the class :- Explained about the order of Differential Equations and Degree of a Differential Equations.

Order of Differential Equations:-

The highest derivatives of the differential equation is called as Order of the differential equation.

Examples:- 1) $\frac{d^2z}{dx^2} + \frac{d^2z}{dy^2} = 0 \Rightarrow$ order = 2

2) $\frac{d^3v}{dt^3} = k.\left(\frac{\partial^2 v}{dx^2}\right)^2 \rightarrow$ order = 3

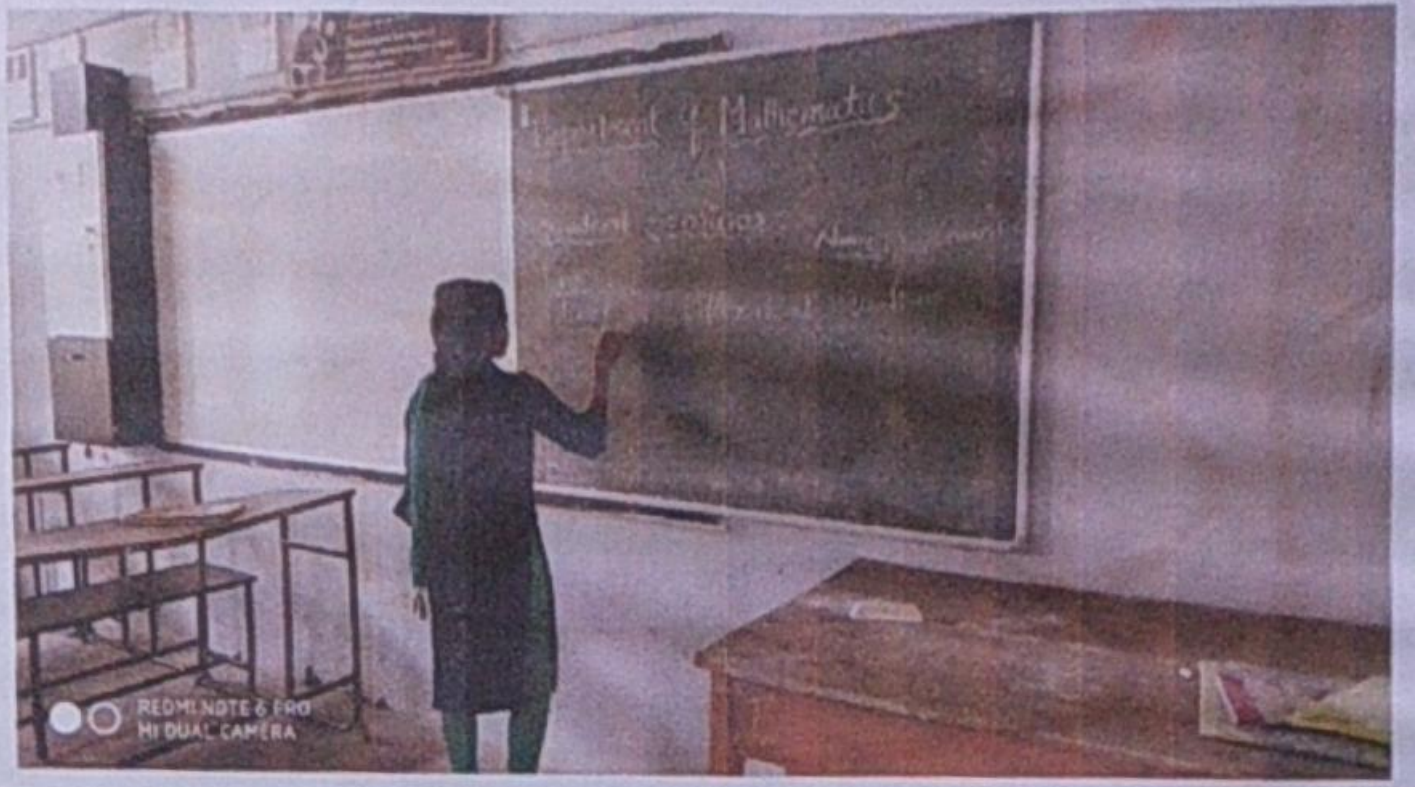
Degree of a Differential Equations:-

The power of the highest derivative of the differential equation and which is free from radical Part (or) fraction part is called as Degree of the Differential Equation.

Examples:- 1) $\left(\frac{d^2z}{dx^2}\right)^2 + \frac{d^2z}{dy^2} = 0 \Rightarrow$ degree = 2

2) $\left(\frac{d^3z}{dx^3} + 2xyz\right)^3 . \left(\frac{\partial^2 z}{dxdy}\right)^4 = 0 \rightarrow$ degree = 3

Guided by :-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Student attedence :- 14

Hall Ticket No	Student Name	Group
054-20-4001	A. Bagya	MPC
054-20-4003	B. Sandeep	MPC
054-20-4004	B. Punnam	MPC
054-20-4009	J. Rahul	MPC
054-20-4010	J. Saikrishna	MPC
054-20-4011	J. Ramya	MPC
054-20-4016	P. Saiteja	MPC
054-20-4017	R. Ravalika	MPC
054-20-4018	S. Sravan Kumar	MPC
054-20-4019	S. Sravani	MPC
054-20-4021	T. Sravanthi	MPC
054-20-4015	K. Sai Nikhitha	MPCs
054-20-4016	K. Bhavani	MPCs
054-20-40110	S. Anirudh	MPCs

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STUDENT SEMINOR-8

23/02/2021

Name of the student :- B. Sandeep
Hall Ticket Number :- 054-20-4003
Group :- MPC
Name of the Incharge :-
Topic of the Seminor :- Variable seperable Method
Number of Students present :- 12
Method of presentation :- Lecture Method
Summary of class :- Explained about the Variable Seperable method with suitable example.

Variable Seperable Method :-

If the differential equation can be put in the form of $f_1(x)\,dx + f_2(y)\,dy = 0$ then the variables are seperable and the solution is obtained by integrating $\int f_1(x)\,dx + \int f_2(y)\,dy = \int 0$

$$\boxed{\int f_1(x)\,dx + \int f_2(y)\,dy = c}$$

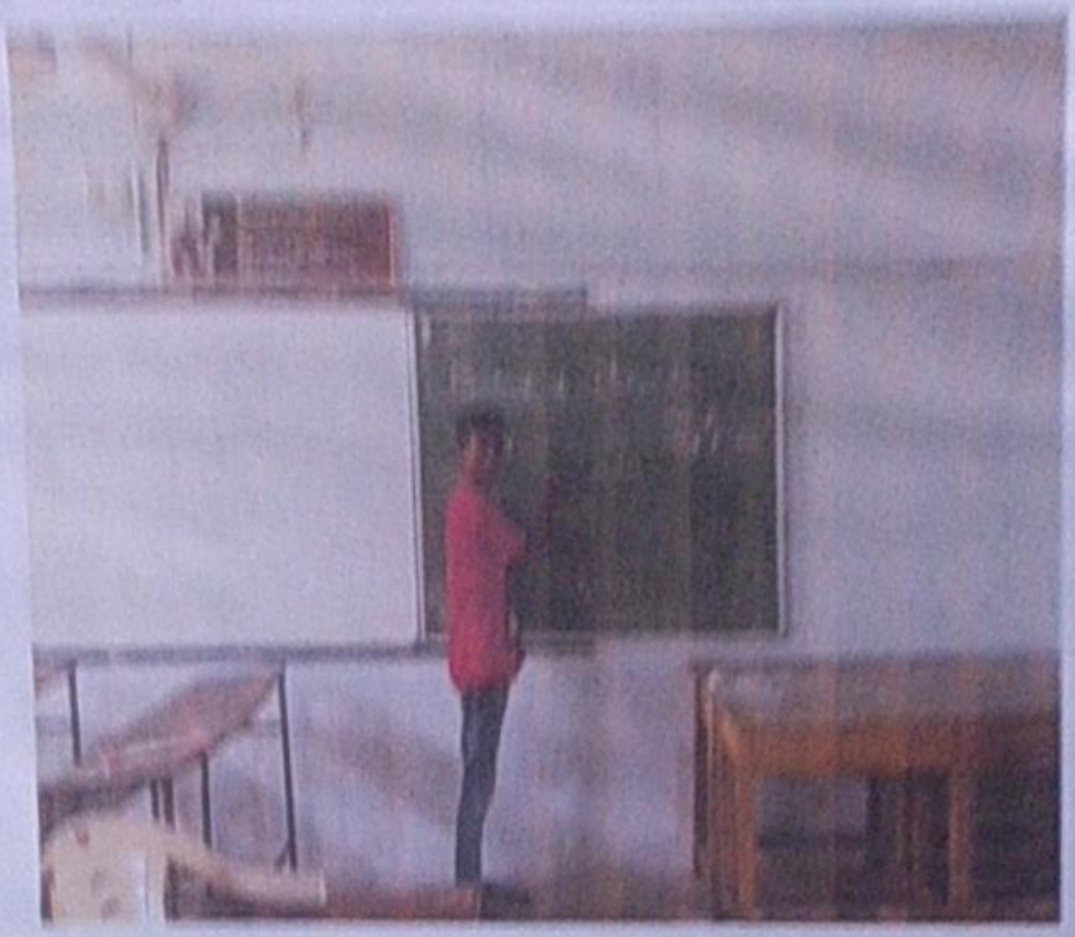
Example :- Solve $(1-x)\,dy + (1-y)\,dx = 0$

Given D.E $(1-x)\,dy + (1-y)\,dx = 0$

The given D.E is can be written as

$$\Rightarrow (1-x)\,dy = -(1-y)\,dx$$

$$\Rightarrow \frac{dx}{1-x} + \frac{dy}{1-y} = 0$$



Integrating on both sides

$$\int \frac{1}{1-x}\,dx + \int \frac{1}{1-y}\,dy = \int 0$$

$$\Rightarrow \log(1-x)(-1) + \log(1-y)(-1) = -\log c_1$$

$$\Rightarrow \log[(1-x)(1-y)] = \log c_1$$

$$\Rightarrow (1-x)(1-y) = c_1$$

Guided by :- T. Naveen Chandar Raju

Students attended :- 12

Hall Ticket No :	Student Name	Group
054-20- 4001	A. Bhagya	MPC
054-20 - 4003	B. Sandeep	MPC
054-20- 4004	B. Punnam	MPC
054- 20- 4010	J. Saikrishna	MPC
054- 20- 4011	J. Ramya	MPC
054- 20- 4017	R. Ravalika	MPC
054- 20- 4018	S. Sravankumar	MPC
054-20- 4019	S. Sravani	MPC
054-20- 4021	T. Sravanthi	MPC
054-20- 4015	K. Sai Nikhitha	MPCs
054-20- 4016	K. Bhavani	MPCS
054-20- 4110	S. Anirudh	MPCs

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