



Introduction to Differential equation by MC sir

LESSON 1 OF 1



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Differential Equation

JEE Advanced

Success Mantra
KEEP Thinking
(Problems only :D)

Prepared By :
Manoj Chauhan
IIT Delhi



About Me

- **Star Educator (Maths), Unacademy.**
- **Ex Sr. faculty at Vibrant Classes (Kota)** (2013-2018)
- **Online Maths faculty at Etoos India.** (2011-2013)
- **Ex Sr. faculty at Bansal Classes (Kota)** (2008-2011)
- **Ex Sr. faculty at Career Point (Kota)** (2007-2008)
- **B.Tech, IIT Delhi** (2003-2007)
- **Teaching Experience of more than 11.5 years.**

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Already taught on Unacademy

- **Functions, IITJEE, Limits, Continuity, Differentiability, Methods of Differentiation, Indefinite Integration, Definite Integration, Tangent & Normal, Monotonicity, Maxima & Minima, Area Under The Curve**
- **Theory, Solved Examples, Illustrations, Problems (Easy, Medium, Difficult) Previous Year Questions of the Last 40 years.**

What's on Unacademy Plus by Manoj Chauhan Sir ???

- **Live Courses going on Unacademy**
 - **EVOLVE : Complete course for Class XIIth**
Unit 2 - Inverse Trigonometric Functions, Determinants
 - **EMERGE : Complete course for Class XIth**
Unit 2 - Trigonometry (Compound Angles, Trigonometric Equations)
 - **Bridge Course on Maths for Repeaters for JEE Main 2020**
Unit - Quadratic Equations
 - **Foundation Course on Maths for Class 10th**
Unit - Pair of Linear Equations in two variables.



Upcoming Courses

- **EVOLVE : Complete course for Class XIIth**

Unit 3 - Matrices, Limits

- **EMERGE : Complete course for Class XIth**

Unit 3 - Quadratic Equations & Linear Inequalities

- **EXCEL for Droppers - Batch Course for JEE Main + Advanced**

**Unit 1 - Logarithm, Compound Angles, Trigonometric Equations,
Quadratic Equations.**

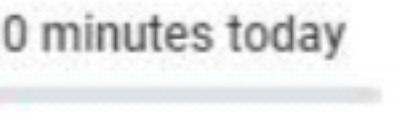
What should be the Student's Strategy ?

- ❖ **Revise** what has been done in the previous lectures.
- ❖ **Writing Notes.** Making notes while the lecture is an important task. Don't just listen to the video. Write each and everything. Keep pen and paper ready.
- ❖ **Pause the video** according to your speed. And learning ability.
- ❖ **Draw graphs** timely.
- ❖ **Try to solve** before I solve.
- ❖ **Follow** the courses regularly.
- ❖ **Practice Assignments.**

Important Features of My Lectures

- ❖ **More than one approach** to solve.
- ❖ **Well laid out plan.**
- ❖ **Complete discussion** of each and every topic.
- ❖ All types of questions covered :
Easy, Medium, Difficult, Super Difficult.
- ❖ **Previous year problems** of the last 40 years discussed.
- ❖ Target is **IIT Advanced**, also helps you in all the **Engineering entrance exams** as well as for boards.
- ❖ Making Maths **interesting and entertaining.**

Manoj Chauhan on Unacademy

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 **Manoj Chauhan**  **VERIFIED** 
Maths faculty for IIT JEE (Main and Advance), Maths Specialist for Calculus,
Ex Senior faculty Vibrant Academy, Top notch online faculty

 74,143 Views in last 30 days  260,945 Lifetime Views

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Testimonials



Aman Bhargava • about 3h ago

Sir! A question of type $f(a+b)=f(a)f(b)$ came directly from your notes 9th April morning shift! You are great



...



dhaval5611 Best maths teacher i have got im one of your virtual student



10w 1 like Reply



crati_avi And a similar problem regarding even and odd function ,which you taught us in vibrant came in yesterday's Evening shift.



1w 2 likes Reply



Saurav Choudhary

reviewed on April 18, 2019

The best teacher in INDIA, believe me I know him from around 1 year, if anyone of you don't know him ask about him in Kota, then u will come to know that you are blessed that u r learning from such a superb teacher. thank you again for such a wonderful course



Nilabha Das

Dedicated on 3 Feb 2019

A BLUE HAT HAS BEEN DEDICATED TO YOU!

Dedications



X

Brown Hat

Dedicated at 10k minutes



Zaira Sheikh

Dedicated on 4 Apr 2019

"Sir. You are next level maths teacher. Your way of teaching is so simple and humorous that none could be bored. Your way of teaching literally made Maths my Favourite subject. You not only teach. ❤"

"Sir you are great math tutor.. aapke function vol me se 2ques. Mains me aaye the aap bhut ache teacher hai. Next bar jee2020 bhi aap kuch ques bta diye jisse bihar ke bchhe mains nikal payenge."

by Shubham Rangrajan



vijay jain 3 weeks ago

Thank you sir ,sir plz upload other videos lecture of class 12 and 11



REPLY

T

Tarsem Kumar • about 2h ago



I don't have words for the work of this teacher. He is fabulous teacher and doing a very good job for student who can't afford coaching and all. Personally i am in a coaching institute but for math i only follow sir and his instruction. Thank you so much sir

0

suryasingh885 Tbh sir you are a self institution ❤️ and i like these words specially you keep on repeating "theek hai sab"

3w 3 likes Reply

mattstonie36 Yes sir you teach fabulous and keep up the great work

3w 1 like Reply

agniveshpandita Sir I feel confident in maths because of ur motivation.. thank u sir....

3w 1 like Reply

Contents

- ❖ Differential Equation - Introduction, Order & Degree.
- ❖ Formation of Differential Equations.
- ❖ Solution of a Differential Equation.
- ❖ Differential Equations of the First Order and First Degree.
- ❖ Type-II : Differential Equations Reducible to the Separable Variable Type.
- ❖ Type-III, Type-IV, Type-V : Polar Coordinate Type
- ❖ Homogeneous Equations.
- ❖ Non Homogeneous Differential Equation.
- ❖ General Solution of Non Homogeneous Differential Equation.
- ❖ Linear Differential Equations.

- ❖ First Order Linear Differential Equations.
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- ❖ Bernoulli's Equation.
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