



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, ITF, 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



Manoj Chauhan ✓ VERIFIED

 Edit Profile

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

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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



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



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



Nilabha Das

Dedicated on 3 Feb 2019

"Thank you for your courses Sir, in addition to being extremely fulfilling in them, putting in so much of personal attention in the form of humour makes everyone bound to be focused."

A BLUE HAT HAS BEEN DEDICATED TO YOU!

Dedicated to Manoj Chauhan

"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 dijie jisse bihar ke bchhe mains nikal payenge."

by Shubham Rangrajan



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



Dedications



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."



vijay jain 3 weeks ago

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



REPLY



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.
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- ❖ 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.
- ❖ Exact Differential Equations, Equations Reducible to the Exact Form.
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