Name of Faculty: Deepak Agrawal

**Department: Basic Science** 

Subject: Engg Math-2 (BT-202)

**Unit: 1 (Ordinary Differential Equation 1)** 



## YouTube Link

Topic 1: Higher order differential equation with constant coefficient (Method of CF)

Link 1: https://www.youtube.com/watch?v=IVL2KPKy7IA&t=5s

Topic 2: Numerical solution of CF for higher order differential equation with constant coefficient

Link 2: <a href="https://www.youtube.com/watch?v=l8vv55kxuCQ">https://www.youtube.com/watch?v=l8vv55kxuCQ</a>

Topic 3:Method of PI case no 1, for higher order differential equation with constant coefficient

Link 3: <a href="https://www.youtube.com/watch?v=8gLjNuYvbcs">https://www.youtube.com/watch?v=8gLjNuYvbcs</a>

Topic 4: Numerical by using case no 1 of PI, for higher order differential equation with constant coefficient

Link 4: <a href="https://www.youtube.com/watch?v=Yby630aZ0OE&t=43s">https://www.youtube.com/watch?v=Yby630aZ0OE&t=43s</a>

Topic 5: Numerical by using case no 2 of PI, for higher order differential equation with constant coefficient

Link 5: https://www.youtube.com/watch?v=blMbhQbCPf4

Topic 6: Numerical by using case no 3 of PI, for higher order differential equation with constant coefficient

Link 6: <a href="https://www.youtube.com/watch?v=PvmOA6McmEl">https://www.youtube.com/watch?v=PvmOA6McmEl</a>

Topic 7: Method of PI case no 4,

Link 7: <a href="https://www.youtube.com/watch?v=8ir2eFShc1s">https://www.youtube.com/watch?v=8ir2eFShc1s</a>

Topic 8: Numerical by using case no 4 of PI, for higher order differential equation with constant coefficient

Link 8: https://www.youtube.com/watch?v=TJ5aQs8dTE4

Topic 9: Method of PI Case no 5

Link 9: https://www.youtube.com/watch?v=kwOjyoxJ6YI

Topic 10: Method of PI case no 6

Link 10: <a href="https://www.youtube.com/watch?v=VL8hfsYMQhY">https://www.youtube.com/watch?v=VL8hfsYMQhY</a>

Topic 11: Numerical by using case no 6 of PI, for higher order differential equation with constant coefficient

Link 11: https://www.youtube.com/watch?v=PBgkM3U7LX8

Topic 12: Method of PI case no 7

Link 12: <a href="https://www.youtube.com/watch?v=scXFlzPAjc">https://www.youtube.com/watch?v=scXFlzPAjc</a>

Topic 13: Numerical by using case no 7 of PI, for higher order differential equation with

Link 13: https://www.youtube.com/watch?v=h6kpMeSj\_Tw

Topic 14: Numerical by using case no 8 of PI, for higher order differential equation with constant coefficient

Link 14: <a href="https://www.youtube.com/watch?v=rkS4KCYRoYQ">https://www.youtube.com/watch?v=rkS4KCYRoYQ</a>

Topic 15: Numerical by using Simultaneous differential equations

Link 15: <a href="https://www.youtube.com/watch?v=pfyNcinXwlk&t=159s">https://www.youtube.com/watch?v=pfyNcinXwlk&t=159s</a>

