

Module	Date	Topics[1Hr Each]	PPT	Video Links	E-Materials	Old QP & Link
18MAT21	26-03-2020	Lecture 1 Variation Of parameter	-	<a href="https://www.youtube.com/watch?v=a63v4-zrDeQ&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=23">https://www.youtube.com/watch?v=a63v4-zrDeQ&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=23</a>	<a href="https://drive.google.com/open?id=1RmR03o0B7LSV1pEUec94uu2pzMteWfeD">https://drive.google.com/open?id=1RmR03o0B7LSV1pEUec94uu2pzMteWfeD</a>	<a href="https://drive.google.com/file/d/1IZeTHiNRQ6jInKS4ZFUjlk4aRGEYw4Yg/view?usp=sharing">https://drive.google.com/file/d/1IZeTHiNRQ6jInKS4ZFUjlk4aRGEYw4Yg/view?usp=sharing</a>
	27-03-2020	Lecture 2 Variation of Parameter	-	<a href="https://www.youtube.com/watch?v=5ffS6OoiTIU&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=24">https://www.youtube.com/watch?v=5ffS6OoiTIU&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=24</a>		
	28-03-2020	Lecture 3 Cauchy's Linear DE	-	<a href="https://www.youtube.com/watch?v=2BhQ_YmCx0&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=25">https://www.youtube.com/watch?v=2BhQ_YmCx0&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=25</a>	<a href="https://drive.google.com/open?id=1Z4xGMbnmpUdR6BTWclrkns87a0FHaZnZH">https://drive.google.com/open?id=1Z4xGMbnmpUdR6BTWclrkns87a0FHaZnZH</a>	
	29-03-2020	Lecture 4 Cauchy's Linear DE	-	<a href="https://www.youtube.com/watch?v=fSf9apByzd8&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=26">https://www.youtube.com/watch?v=fSf9apByzd8&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=26</a>		
	30-03-2020	Lecture 5 Legendre's Linear DE	-	<a href="https://www.youtube.com/watch?v=u81bGFAHDoA&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=32">https://www.youtube.com/watch?v=u81bGFAHDoA&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=32</a>	<a href="https://drive.google.com/open?id=1ZBfE6Ztg5d8JvBgKLiYxxbbBsiMBYJuh">https://drive.google.com/open?id=1ZBfE6Ztg5d8JvBgKLiYxxbbBsiMBYJuh</a>	
	31-03-2020	Lecture 6 Legendre's Linear DE	-	<a href="https://www.youtube.com/watch?v=gny1HXujUR8&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=33">https://www.youtube.com/watch?v=gny1HXujUR8&amp;list=PLMLsjhQWWIUqInjYi1pnhAsiVBd-tyRqW&amp;index=33</a>		
	01-04-2020	Lecture 7 Application Of ODE	-	<a href="https://www.youtube.com/watch?v=f2wGE_n5xtA&amp;list=PLROOIV7hGpZhwo_9uWHau40Haws-maU4r">https://www.youtube.com/watch?v=f2wGE_n5xtA&amp;list=PLROOIV7hGpZhwo_9uWHau40Haws-maU4r</a>	<a href="https://drive.google.com/open?id=17Twu-xaOPE593_VW-M_kjf8Zk3RQWS">https://drive.google.com/open?id=17Twu-xaOPE593_VW-M_kjf8Zk3RQWS</a>	
	02-04-2020	Lecture 8 Application Of ODE Problems	-	<a href="https://www.youtube.com/watch?v=Ux_G2UCVfBM">https://www.youtube.com/watch?v=Ux_G2UCVfBM</a>	<a href="https://drive.google.com/open?id=12t2DJF3UfyGABh52lqgY1ZK3yzJWtgpz">https://drive.google.com/open?id=12t2DJF3UfyGABh52lqgY1ZK3yzJWtgpz</a>	
	03-04-	Lecture 9 Module 3-	-	<a href="http://nptel.vtu.ac.in/econtent/courses/maths/17MAT21/4.php">http://nptel.vtu.ac.in/econtent/courses/maths/17MAT21/4.php</a>	<a href="https://drive.google.com/open?">https://drive.google.com/open?</a>	<a href="https://drive.google.com/open?">https://drive.google.com/open?</a>



04-2020	Solution of non homogeneous PDE		<a href="https://www.youtube.com/watch?v=wKsOk0-3xSw&amp;list=PLMLsjhQWWIUqScDUXfdKWQK2cJWYLQvWm&amp;index=15">v=wKsOk0-3xSw&amp;list=PLMLsjhQWWIUqScDUXfdKWQK2cJWYLQvWm&amp;index=15</a> <a href="https://www.youtube.com/watch?v=9odwPp0B2H0&amp;list=PLMLsjhQWWIUqScDUXfdKWQK2cJWYLQvWm&amp;index=16">https://www.youtube.com/watch?v=9odwPp0B2H0&amp;list=PLMLsjhQWWIUqScDUXfdKWQK2cJWYLQvWm&amp;index=16</a>		
11-04-2020	Lecture 17 Lagranges linear PDE		<a href="https://drive.google.com/open?id=12kC5cf9nP1h_RmR0EDMyBWWLLW-ggVOra">https://drive.google.com/open?id=12kC5cf9nP1h_RmR0EDMyBWWLLW-ggVOra</a>	<a href="https://drive.google.com/open?id=1ZL2rOeF_gzVR-6K78o8W4QM">https://drive.google.com/open?id=1ZL2rOeF_gzVR-6K78o8W4QM</a> <a href="https://drive.google.com/open?id=1WqhdW_C4j">WqhdW_C4j</a>	
12-04-2020	Lecture 18 Lagranges linear PDE				
13-04-2020	Lecture 19 Derivation of Wave Equation				
14-04-2020	Lecture 20 Derivation of Heat Equation				
15-04-2020	Lecture 21 Derivation of Heat Equation		<a href="https://drive.google.com/open?id=1RvO4prMNYiaYIKcOsMSRO8hdiWPUV9Kt">https://drive.google.com/open?id=1RvO4prMNYiaYIKcOsMSRO8hdiWPUV9Kt</a>	<a href="https://drive.google.com/open?id=16_ktnj9LLgi55qP_NPSbpOqzsTqKSIf">https://drive.google.com/open?id=16_ktnj9LLgi55qP_NPSbpOqzsTqKSIf</a>	<a href="https://drive.google.com/open?id=1LiPN_cY2FD2nUMpT6hKf-5oHdICKIFeZ">https://drive.google.com/open?id=1LiPN_cY2FD2nUMpT6hKf-5oHdICKIFeZ</a>
16-04-2020	Lecture 22 Solution of Wave and Heat Equations				
17-04-2020	Lecture 23 Convergence and divergence		<a href="https://youtu.be/H2vh8NQv62o">https://youtu.be/H2vh8NQv62o</a>		
20-04-2020	Lecture 24 Cauchy's Root test		<a href="https://youtu.be/Z-vJPnzG-74">https://youtu.be/Z-vJPnzG-74</a>	<a href="https://drive.google.com/open?id=1Ad5Vdu8K906gox_DN_X-VITpbjuWy6YW">https://drive.google.com/open?id=1Ad5Vdu8K906gox_DN_X-VITpbjuWy6YW</a>	
21-04-2020	Lecture 25 D'Alembert's ratio Test		<a href="https://youtu.be/5lYgTtjdXlg">https://youtu.be/5lYgTtjdXlg</a>		
23-	Power series		<a href="https://youtu.be/bG0pzNPmKyM">https://youtu.be/bG0pzNPmKyM</a>		

	04-2020	Solution of Second ODE				
	24-04-2020	Power series method of Frobenius method		<a href="https://youtu.be/sDJwmzdnWd0">https://youtu.be/sDJwmzdnWd0</a>		
	27-04-2020	Series solution of Bessels DE leading to Bessels Function		<a href="https://www.youtube.com/playlist?list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA">https://www.youtube.com/playlist?list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA</a>		
	28-04-2020	Proprties of Bessel Function		<a href="https://www.youtube.com/watch?v=DotPCf6srk&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=2&amp;t=0s">https://www.youtube.com/watch?v=DotPCf6srk&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=2&amp;t=0s</a>		
	30-04-2020	E-IA(Maths)				
	01-05-2020	E-IA				
	02-05-2020	E-IA				
	03-05-2020	Recurrence Relation(J1/2 and J-1/2)		<a href="https://www.youtube.com/watch?v=Tj24vRPlxF4&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=4">https://www.youtube.com/watch?v=Tj24vRPlxF4&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=4</a>		
	04-05-2020	Orthogonal Property		<a href="https://www.youtube.com/watch?v=aKK6vnFJbE&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=2">https://www.youtube.com/watch?v=aKK6vnFJbE&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=2</a>		
	05-05-2020	Series solution of Legendres DE		<a href="https://www.youtube.com/watch?v=GzkyXT2ibAk&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=8">https://www.youtube.com/watch?v=GzkyXT2ibAk&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=8</a>		
	06-05-2020	Legendres Polynomial		<a href="https://www.youtube.com/watch?v=f86K0QerUug&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=7">https://www.youtube.com/watch?v=f86K0QerUug&amp;list=PLMLsjhQWWIUoaBtRXJ-MIWu_xbdNr3VMA&amp;index=7</a>		

	07-05-2020	Rodrigue's Formula				
	08-05-2020	Rodrigue's Formula-problems				
	11-05-2020	Lecturer 36 Newton's Interpolations	-	<a href="https://drive.google.com/open?id=1rwE6uDqn6xl8Z_Ofr52DueJ0qrwSDTS">https://drive.google.com/open?id=1rwE6uDqn6xl8Z_Ofr52DueJ0qrwSDTS</a>	<a href="https://drive.google.com/open?id=1EUfdm80pFiHh73Z30G9_StBh-Tra5YvD">https://drive.google.com/open?id=1EUfdm80pFiHh73Z30G9_StBh-Tra5YvD</a>	<a href="https://drive.google.com/open?id=19fnTHbmnX8HZJZgGs97dc_ujX9NfnXH">https://drive.google.com/open?id=19fnTHbmnX8HZJZgGs97dc_ujX9NfnXH</a>
	12-05-2020	Lecturer 37 Newton's Interpolations	-			
	13-05-2020	Lecturer 38 Newton's Interpolations	-			
	14-05-2020	Lecturer 39 Newton's DD and Lagrange's Interpolations	-	<a href="https://drive.google.com/open?id=1rmqS32h3Ke8H2ANFna8psKXZOrAMxMoj">https://drive.google.com/open?id=1rmqS32h3Ke8H2ANFna8psKXZOrAMxMoj</a>	<a href="https://drive.google.com/open?id=17OPNuHk3YiLhImWnt5IH8OnZEoHj9aN">https://drive.google.com/open?id=17OPNuHk3YiLhImWnt5IH8OnZEoHj9aN</a>	<a href="https://drive.google.com/open?id=1gspTUNz7ZGaXmmr2GG3n1mWpNFBB5Vg6">https://drive.google.com/open?id=1gspTUNz7ZGaXmmr2GG3n1mWpNFBB5Vg6</a>
	15-05-2020	Lecturer 40 Newton's DD and Lagrange's Interpolations	-			
	18-05-2020	Lecturer 41 Newton's DD and Lagrange's Interpolations				
	19-05-2020	Lecturer 42 Newton's DD and Lagrange's Interpolations				
	20-05-2020	Regula Falsi				
	21-	Il internal		<a href="https://drive.google.com/open?id=">https://drive.google.com/open?id=</a>	<a href="https://drive.go">https://drive.go</a>	

	05-2020	assesment(maths)		<a href="https://drive.google.com/open?id=1qNxsjYt_JPH_yy730VmWJfCkVXro5Xeij">1qNxsjYt_JPH_yy730VmWJfCkVXro5Xeij</a>	<a href="https://drive.google.com/open?id=11R7zFDsW4t1rLEBstDxTXtKgJCp6zAJT">ogle.com/open?id=11R7zFDsW4t1rLEBstDxTXtKgJCp6zAJT</a>	
	22-05-2020	II internal assesment		<a href="https://drive.google.com/open?id=1UnfAKB6IniYRn8a7jyKU4Mjw-zyILkKk">https://drive.google.com/open?id=1UnfAKB6IniYRn8a7jyKU4Mjw-zyILkKk</a>		
	23-05-2020	II internal assesment				
	26-05-2020	Lecturer 44 Regula-Falsi method		<a href="https://drive.google.com/open?id=1tObaCGEpO0eHd7tUKJhB7YsmhY8oCYM6">https://drive.google.com/open?id=1tObaCGEpO0eHd7tUKJhB7YsmhY8oCYM6</a>	<a href="https://drive.google.com/open?id=1XT4bCKIcyKVawd5AOMQ5rv4TpF41Yhu6">https://drive.google.com/open?id=1XT4bCKIcyKVawd5AOMQ5rv4TpF41Yhu6</a>	<a href="https://drive.google.com/open?id=1M8GL_ybyWHbpKTgtvDeUBXWgqLU4yVd0">https://drive.google.com/open?id=1M8GL_ybyWHbpKTgtvDeUBXWgqLU4yVd0</a>
	27-05-2020	Lecturer 45 Regula-Falsi method		<a href="https://drive.google.com/open?id=1DkcdLogPiZgBPoH524TMMnCG5CslWreG">https://drive.google.com/open?id=1DkcdLogPiZgBPoH524TMMnCG5CslWreG</a>	<a href="https://drive.google.com/open?id=1XT4bCKIcyKVawd5AOMQ5rv4TpF41Yhu6">https://drive.google.com/open?id=1XT4bCKIcyKVawd5AOMQ5rv4TpF41Yhu6</a>	
	28-05-2020	Lecturer 46 Newton-Raphson method		<a href="https://drive.google.com/open?id=10E_qHg40uqPbM1oRzMfT0dDPGbByT_Gl">https://drive.google.com/open?id=10E_qHg40uqPbM1oRzMfT0dDPGbByT_Gl</a>	<a href="https://drive.google.com/open?id=14YQADoXGkVthpXgsj9V1BrUBIQ47uw_k">https://drive.google.com/open?id=14YQADoXGkVthpXgsj9V1BrUBIQ47uw_k</a>	
	29-05-2020	Lecturer 47 Newton-Raphson method		<a href="https://drive.google.com/open?id=10E_qHg40uqPbM1oRzMfT0dDPGbByT_Gl">https://drive.google.com/open?id=10E_qHg40uqPbM1oRzMfT0dDPGbByT_Gl</a>		