



தொழில்நுட்பம் பயிலும் மாணவர்களுக்கான

காணொளி விரிவுரைகள்

தொழில் நுட்பக் கல்வி இயக்ககம்,  
சென்னை – 600 025

| Engineering maths 1 |                |                                                                                                                                                                                                                       |                                                                                     |
|---------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| unit                | topic          | url                                                                                                                                                                                                                   | qr                                                                                  |
| 1                   | algebra part 1 | <a href="https://www.youtube.com/watch?v=F5CBVx1Wdc8&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=1">https://www.youtube.com/watch?v=F5CBVx1Wdc8&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=1</a> |    |
|                     | algebra part 2 | <a href="https://www.youtube.com/watch?v=nvN7mP42FOM&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=2">https://www.youtube.com/watch?v=nvN7mP42FOM&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=2</a> |    |
|                     | algebra part 3 | <a href="https://www.youtube.com/watch?v=MRfXOHYVKb8&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=3">https://www.youtube.com/watch?v=MRfXOHYVKb8&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=3</a> |    |
|                     | algebra part 4 | <a href="https://www.youtube.com/watch?v=AXPZaa9lCJs&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=4">https://www.youtube.com/watch?v=AXPZaa9lCJs&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=4</a> |    |
|                     | algebra part 5 | <a href="https://www.youtube.com/watch?v=12K38fhYD2g&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=5">https://www.youtube.com/watch?v=12K38fhYD2g&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=5</a> |    |
|                     | algebra part 6 | <a href="https://www.youtube.com/watch?v=LglqHl0rDcE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=6">https://www.youtube.com/watch?v=LglqHl0rDcE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=6</a> |   |
|                     | algebra part 7 | <a href="https://www.youtube.com/watch?v=bpLYclFyHK0&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=7">https://www.youtube.com/watch?v=bpLYclFyHK0&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=7</a> |  |
|                     | algebra part 8 | <a href="https://www.youtube.com/watch?v=2eQDhxOArn0&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=8">https://www.youtube.com/watch?v=2eQDhxOArn0&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=8</a> |  |

|   |                        |                                                                                                                                                                                                                         |                                                                                     |
|---|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | algebra part 9         | <a href="https://www.youtube.com/watch?v=l-OfIr2PiXU&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=9">https://www.youtube.com/watch?v=l-OfIr2PiXU&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=9</a>   |    |
| 2 |                        |                                                                                                                                                                                                                         |                                                                                     |
|   | COMPLEX NUMBERS PART 1 | <a href="https://www.youtube.com/watch?v=hN8ohjjKHC4&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=10">https://www.youtube.com/watch?v=hN8ohjjKHC4&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=10</a> |    |
|   | COMPLEX NUMBERS PART 2 | <a href="https://www.youtube.com/watch?v=yFxaQTIVhkE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=11">https://www.youtube.com/watch?v=yFxaQTIVhkE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=11</a> |    |
|   | COMPLEX NUMBERS PART 3 | <a href="https://www.youtube.com/watch?v=CKN0MuMHY3w&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=12">https://www.youtube.com/watch?v=CKN0MuMHY3w&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=12</a> |    |
|   | COMPLEX NUMBERS PART 4 | <a href="https://www.youtube.com/watch?v=grhsUDFsv7I&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=13">https://www.youtube.com/watch?v=grhsUDFsv7I&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=13</a> |    |
|   | COMPLEX NUMBERS PART 5 | <a href="https://www.youtube.com/watch?v=wnPeV9pnzrE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=14">https://www.youtube.com/watch?v=wnPeV9pnzrE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=14</a> |   |
|   | COMPLEX NUMBERS PART 6 | <a href="https://www.youtube.com/watch?v=A4D4BDcC8gw&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=15">https://www.youtube.com/watch?v=A4D4BDcC8gw&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=15</a> |  |
|   | COMPLEX NUMBERS PART 7 | <a href="https://www.youtube.com/watch?v=GMiib0a6Zno&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=16">https://www.youtube.com/watch?v=GMiib0a6Zno&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=16</a> |  |

|   |                              |                                                                                                                                                                                                                         |                                                                                     |
|---|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | COMPLEX<br>NUMBERS PART<br>8 | <a href="https://www.youtube.com/watch?v=-t4esXLlu0&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=17">https://www.youtube.com/watch?v=-t4esXLlu0&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=17</a>   |    |
|   | COMPLEX<br>NUMBERS PART<br>9 | <a href="https://www.youtube.com/watch?v=U9D4iSQMIqA&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=18">https://www.youtube.com/watch?v=U9D4iSQMIqA&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=18</a> |    |
| 3 |                              |                                                                                                                                                                                                                         |                                                                                     |
|   | TRIGONOMETRY<br>PART 1       | <a href="https://www.youtube.com/watch?v=gCfw1goLpgE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=19">https://www.youtube.com/watch?v=gCfw1goLpgE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=19</a> |    |
|   | TRIGONOMETRY<br>PART 2       | <a href="https://www.youtube.com/watch?v=e-nEYob2x4M&amp;iist=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=20">https://www.youtube.com/watch?v=e-nEYob2x4M&amp;iist=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=20</a> |    |
|   | TRIGONOMETRY<br>PART 3       | <a href="https://www.youtube.com/watch?v=aZvlw49B29g&amp;iist=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=21">https://www.youtube.com/watch?v=aZvlw49B29g&amp;iist=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=21</a> |    |
|   | TRIGONOMETRY<br>PART 4       | <a href="https://www.youtube.com/watch?v=a8yCbd00UcE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=22">https://www.youtube.com/watch?v=a8yCbd00UcE&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=22</a> |   |
|   | TRIGONOMETRY<br>PART 5       | <a href="https://www.youtube.com/watch?v=6YODuxaH9Tc&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=23">https://www.youtube.com/watch?v=6YODuxaH9Tc&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=23</a> |  |
|   | TRIGONOMETRY<br>PART 6       | <a href="https://www.youtube.com/watch?v=96yX_T60yso&amp;iist=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=24">https://www.youtube.com/watch?v=96yX_T60yso&amp;iist=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=24</a> |  |

|   |                                                                      |                                                                                                                                                                                                                         |                                                                                     |
|---|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | TRIGONOMETRY<br>PART 7                                               | <a href="https://www.youtube.com/watch?v=X0w38h34XxY&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=25">https://www.youtube.com/watch?v=X0w38h34XxY&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=25</a> |    |
|   | TRIGONOMETRY<br>PART 8                                               | <a href="https://www.youtube.com/watch?v=OAD_FY-R2e4&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=26">https://www.youtube.com/watch?v=OAD_FY-R2e4&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=26</a> |    |
|   | TRIGONOMETRY<br>PART 9                                               | <a href="https://www.youtube.com/watch?v=jWUINLWiBzo&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=27">https://www.youtube.com/watch?v=jWUINLWiBzo&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=27</a> |    |
|   | TRIGONOMETRY<br>PART 10                                              | <a href="https://www.youtube.com/watch?v=trrQ-8G4WG4&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=28">https://www.youtube.com/watch?v=trrQ-8G4WG4&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=28</a> |    |
| 4 |                                                                      |                                                                                                                                                                                                                         |                                                                                     |
|   | INVERSE<br>TRIGONOMETRIC<br>RATIOS AND<br>DIFFERENTIAL<br>CALCULUS 1 | <a href="https://www.youtube.com/watch?v=U-lHiYcEMrc&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=29">https://www.youtube.com/watch?v=U-lHiYcEMrc&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=29</a> |    |
|   | INVERSE<br>TRIGONOMETRIC<br>RATIOS AND<br>DIFFERENTIAL<br>CALCULUS 2 | <a href="https://www.youtube.com/watch?v=-NtFy62QRyE&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=30">https://www.youtube.com/watch?v=-NtFy62QRyE&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=30</a> |   |
|   | INVERSE<br>TRIGONOMETRIC<br>RATIOS AND<br>DIFFERENTIAL<br>CALCULUS 3 | <a href="https://www.youtube.com/watch?v=xRcBo7EoAco&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=31">https://www.youtube.com/watch?v=xRcBo7EoAco&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=31</a> |  |
|   | INVERSE<br>TRIGONOMETRIC<br>RATIOS AND<br>DIFFERENTIAL<br>CALCULUS 4 | <a href="https://www.youtube.com/watch?v=7Uwb2X56VHY&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=35">https://www.youtube.com/watch?v=7Uwb2X56VHY&amp;list=PL1b9Ht9ISqIEJtEKI-IHrzPS-cj_k17om&amp;index=35</a> |  |

|   |                                                                      |                                                                                                                                                                                                                         |                                                                                    |
|---|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|   | INVERSE<br>TRIGONOMETRIC<br>RATIOS AND<br>DIFFERENTIAL<br>CALCULUS 5 | <a href="https://www.youtube.com/watch?v=onR4jA8W7eo&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=36">https://www.youtube.com/watch?v=onR4jA8W7eo&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=36</a> |   |
| 5 |                                                                      |                                                                                                                                                                                                                         |                                                                                    |
|   | DIFFERENTIAL<br>CALCULUS 1                                           | <a href="https://www.youtube.com/watch?v=G7jknKrAOQI&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=32">https://www.youtube.com/watch?v=G7jknKrAOQI&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=32</a> |   |
|   | DIFFERENTIAL<br>CALCULUS 2                                           | <a href="https://www.youtube.com/watch?v=dMG88S50kCM&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=33">https://www.youtube.com/watch?v=dMG88S50kCM&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=33</a> |   |
|   | DIFFERENTIAL<br>CALCULUS 3                                           | <a href="https://www.youtube.com/watch?v=F-rI2RF2BW4&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=34">https://www.youtube.com/watch?v=F-rI2RF2BW4&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=34</a> |   |
|   | DIFFERENTIAL<br>CALCULUS 4                                           | <a href="https://www.youtube.com/watch?v=Zt1lv2RzPqU&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=37">https://www.youtube.com/watch?v=Zt1lv2RzPqU&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=37</a> |   |
|   | DIFFERENTIAL<br>CALCULUS 5                                           | <a href="https://www.youtube.com/watch?v=SfXAdtY8d_A&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=38">https://www.youtube.com/watch?v=SfXAdtY8d_A&amp;list=PL1b9Ht9ISqIEJtEKI-lHrzPS-cj_k17om&amp;index=38</a> |  |

| ENGINEERING MATHS 2 |                                 |                                                                                                                                                                                                                         |                                                                                     |
|---------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                | TOPICS                          | URL                                                                                                                                                                                                                     | QR                                                                                  |
| 1                   | ANALYTICAL<br>GEOMETRY 1 PART 1 | <a href="https://www.youtube.com/watch?v=BzxvL_Skrd90&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=1">https://www.youtube.com/watch?v=BzxvL_Skrd90&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=1</a> |    |
|                     | ANALYTICAL<br>GEOMETRY 1 PART 2 | <a href="https://www.youtube.com/watch?v=A10gRy2z-Hw&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=2">https://www.youtube.com/watch?v=A10gRy2z-Hw&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=2</a>   |    |
|                     | ANALYTICAL<br>GEOMETRY 1 PART 3 | <a href="https://www.youtube.com/watch?v=lqueUvtijos&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=3">https://www.youtube.com/watch?v=lqueUvtijos&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=3</a>   |    |
|                     | ANALYTICAL<br>GEOMETRY 1 PART 4 | <a href="https://www.youtube.com/watch?v=JT_rQf_Dg8I&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=4">https://www.youtube.com/watch?v=JT_rQf_Dg8I&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=4</a>   |    |
|                     | ANALYTICAL<br>GEOMETRY 1 PART 5 | <a href="https://www.youtube.com/watch?v=lwRZsbMxegk&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=5">https://www.youtube.com/watch?v=lwRZsbMxegk&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=5</a>   |    |
| 2                   |                                 |                                                                                                                                                                                                                         |                                                                                     |
|                     | VECTOR ALGEBRA 1<br>PART 1      | <a href="https://www.youtube.com/watch?v=ag_s0H0_gME&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=6">https://www.youtube.com/watch?v=ag_s0H0_gME&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=6</a>   |   |
|                     | VECTOR ALGEBRA 1<br>PART 2      | <a href="https://www.youtube.com/watch?v=r2HnMW1PEsQ&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=7">https://www.youtube.com/watch?v=r2HnMW1PEsQ&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=7</a>   |  |
|                     | VECTOR ALGEBRA 1<br>PART 3      | <a href="https://www.youtube.com/watch?v=96-lwpDdLuA&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=8">https://www.youtube.com/watch?v=96-lwpDdLuA&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=8</a>   |  |

|   |                               |                                                                                                                                                                                                                         |                                                                                     |
|---|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | VECTOR ALGEBRA 1<br>PART 4    | <a href="https://www.youtube.com/watch?v=wNO9LPqrgo&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=9">https://www.youtube.com/watch?v=wNO9LPqrgo&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=9</a>     |    |
| 3 |                               |                                                                                                                                                                                                                         |                                                                                     |
|   | VECTOR ALGEBRA 2<br>PART 1    | <a href="https://www.youtube.com/watch?v=FI5wHdMwoLc&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=10">https://www.youtube.com/watch?v=FI5wHdMwoLc&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=10</a> |    |
|   | VECTOR ALGEBRA 2<br>PART 2    | <a href="https://www.youtube.com/watch?v=BD_2UR7k5MU&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=11">https://www.youtube.com/watch?v=BD_2UR7k5MU&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=11</a> |    |
|   | VECTOR ALGEBRA 2<br>PART 3    | <a href="https://www.youtube.com/watch?v=8MoB8WgUeu0&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=12">https://www.youtube.com/watch?v=8MoB8WgUeu0&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=12</a> |    |
|   | VECTOR ALGEBRA 2<br>PART 4    | <a href="https://www.youtube.com/watch?v=tgyqOsXWxko&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=13">https://www.youtube.com/watch?v=tgyqOsXWxko&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=13</a> |    |
|   | VECTOR ALGEBRA 2<br>PART 5    | <a href="https://www.youtube.com/watch?v=R1vF9GLpht0&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=14">https://www.youtube.com/watch?v=R1vF9GLpht0&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=14</a> |   |
| 4 |                               |                                                                                                                                                                                                                         |                                                                                     |
|   | INTEGRAL CALCULUS 1<br>PART 1 | <a href="https://www.youtube.com/watch?v=-eOFALZ-S8s&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=15">https://www.youtube.com/watch?v=-eOFALZ-S8s&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=15</a> |  |
|   | INTEGRAL CALCULUS 1<br>PART 2 | <a href="https://www.youtube.com/watch?v=GB4w_df6f_o&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=16">https://www.youtube.com/watch?v=GB4w_df6f_o&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=16</a> |  |

|   |                               |                                                                                                                                                                                                                         |                                                                                     |
|---|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | INTEGRAL CALCULUS 1<br>PART 3 | <a href="https://www.youtube.com/watch?v=9aFT76gkn5Y&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=17">https://www.youtube.com/watch?v=9aFT76gkn5Y&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=17</a> |    |
|   | INTEGRAL CALCULUS 1<br>PART 4 | <a href="https://www.youtube.com/watch?v=TgPSpl36pUl&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=18">https://www.youtube.com/watch?v=TgPSpl36pUl&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=18</a> |    |
|   | INTEGRAL CALCULUS 1<br>PART 5 | <a href="https://www.youtube.com/watch?v=8cCwX6ZD7KA&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=19">https://www.youtube.com/watch?v=8cCwX6ZD7KA&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=19</a> |    |
| 5 |                               |                                                                                                                                                                                                                         |                                                                                     |
|   | INTEGRAL CALCULUS 2<br>PART 1 | <a href="https://www.youtube.com/watch?v=xHFOxY3OhiA&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=20">https://www.youtube.com/watch?v=xHFOxY3OhiA&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=20</a> |    |
|   | INTEGRAL CALCULUS 2<br>PART 2 | <a href="https://www.youtube.com/watch?v=13CYTR7Ev00&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=21">https://www.youtube.com/watch?v=13CYTR7Ev00&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=21</a> |    |
|   | INTEGRAL CALCULUS 2<br>PART 3 | <a href="https://www.youtube.com/watch?v=iww53PC9rXY&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=22">https://www.youtube.com/watch?v=iww53PC9rXY&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=22</a> |   |
|   | INTEGRAL CALCULUS 2<br>PART 4 | <a href="https://www.youtube.com/watch?v=IL7-7Fck31w&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=23">https://www.youtube.com/watch?v=IL7-7Fck31w&amp;list=PL1b9Ht9ISqIFkZCBBefwWQp38MjRZD7UG&amp;index=23</a> |  |

| APPLIED MATHS |                                                      |                                                                                                                                                                                                                     |                                                                                     |
|---------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT          | TOPIC                                                | URL                                                                                                                                                                                                                 | QR                                                                                  |
| 1             |                                                      |                                                                                                                                                                                                                     |                                                                                     |
|               | PROBABILITY DISTRIBUTION 1                           | <a href="https://www.youtube.com/watch?v=uQzCi1FSEvQ&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=1">https://www.youtube.com/watch?v=uQzCi1FSEvQ&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=1</a> |    |
|               | PROBABILITY DISTRIBUTION 2                           | <a href="https://www.youtube.com/watch?v=GVChcwFewSM&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=2">https://www.youtube.com/watch?v=GVChcwFewSM&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=2</a> |    |
|               | PROBABILITY DISTRIBUTION 3                           | <a href="https://www.youtube.com/watch?v=tMkP-l1H3QY&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=3">https://www.youtube.com/watch?v=tMkP-l1H3QY&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=3</a> |    |
|               | PROBABILITY DISTRIBUTION 4                           | <a href="https://www.youtube.com/watch?v=L2srkHnQh3U&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=4">https://www.youtube.com/watch?v=L2srkHnQh3U&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=4</a> |    |
|               | MATHEMATICAL EXPECTATION OF DISCRETE RANDOM VARIABLE | <a href="https://www.youtube.com/watch?v= ScoDH45D6Q&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=5">https://www.youtube.com/watch?v= ScoDH45D6Q&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=5</a> |    |
|               | BINOMIAL DISTRIBUTION 1                              | <a href="https://www.youtube.com/watch?v=dMn6URt_lms&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=6">https://www.youtube.com/watch?v=dMn6URt_lms&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=6</a> |   |
|               | BINOMIAL DISTRIBUTION 2                              | <a href="https://www.youtube.com/watch?v=PUybuQ2ds-0&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=7">https://www.youtube.com/watch?v=PUybuQ2ds-0&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=7</a> |  |
| 2             |                                                      |                                                                                                                                                                                                                     |                                                                                     |
|               | PROBABILITY DISTRIBUTION 1                           | <a href="https://www.youtube.com/watch?v=r1TYAEY1GNo&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=8">https://www.youtube.com/watch?v=r1TYAEY1GNo&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=8</a> |  |

|   |                                  |                                                                                                                                                                                                                         |                                                                                     |
|---|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | PROBABILITY DISTRIBUTION 2       | <a href="https://www.youtube.com/watch?v=St0g6FT9ZFg&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=9">https://www.youtube.com/watch?v=St0g6FT9ZFg&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=9</a>   |    |
|   | PROBABILITY DISTRIBUTION 3       | <a href="https://www.youtube.com/watch?v=qW3hyN3IPfw&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=10">https://www.youtube.com/watch?v=qW3hyN3IPfw&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=10</a> |    |
|   | PROBABILITY DISTRIBUTION 4       | <a href="https://www.youtube.com/watch?v=AMoZRI0IJD0&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=11">https://www.youtube.com/watch?v=AMoZRI0IJD0&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=11</a> |    |
|   | PROBABILITY DISTRIBUTION 5       | <a href="https://www.youtube.com/watch?v=3zrDPuQGKUy&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=12">https://www.youtube.com/watch?v=3zrDPuQGKUy&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=12</a> |    |
| 3 |                                  |                                                                                                                                                                                                                         |                                                                                     |
|   | APPLICATION OF DIFFERENTIATION 1 | <a href="https://www.youtube.com/watch?v=IFKu8aBF_Cg&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=13">https://www.youtube.com/watch?v=IFKu8aBF_Cg&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=13</a> |    |
|   | APPLICATION OF DIFFERENTIATION 2 | <a href="https://www.youtube.com/watch?v=DI7d7jHmALU&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=14">https://www.youtube.com/watch?v=DI7d7jHmALU&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=14</a> |    |
|   | APPLICATION OF DIFFERENTIATION 3 | <a href="https://www.youtube.com/watch?v=dJHlbzphSo&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=15">https://www.youtube.com/watch?v=dJHlbzphSo&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=15</a>   |  |
|   | APPLICATION OF DIFFERENTIATION 4 | <a href="https://www.youtube.com/watch?v=zoW_1LP81xE&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=16">https://www.youtube.com/watch?v=zoW_1LP81xE&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=16</a> |  |
|   | APPLICATION OF DIFFERENTIATION 5 | <a href="https://www.youtube.com/watch?v=L5p1R27I3TU&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=17">https://www.youtube.com/watch?v=L5p1R27I3TU&amp;list=PL1b9Ht9ISqIGIGjVNBijt8OFA1LW22U4N&amp;index=17</a> |  |

|   |                                  |                                                                                                                                                                                                                       |                                                                                     |
|---|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | APPLICATION OF DIFFERENTIATION 6 | <a href="https://www.youtube.com/watch?v=-HISM3K9TtU&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=18">https://www.youtube.com/watch?v=-HISM3K9TtU&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=18</a> |    |
|   | APPLICATION OF DIFFERENTIATION 7 | <a href="https://www.youtube.com/watch?v=BEa_cvmBII0&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=19">https://www.youtube.com/watch?v=BEa_cvmBII0&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=19</a> |    |
|   | APPLICATION OF DIFFERENTIATION 8 | <a href="https://www.youtube.com/watch?v=8VvjTIKS8Cg&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=20">https://www.youtube.com/watch?v=8VvjTIKS8Cg&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=20</a> |    |
| 4 |                                  |                                                                                                                                                                                                                       |                                                                                     |
|   | APPLICATION OF INTEGERATION 1    | <a href="https://www.youtube.com/watch?v=iYYtwk5fkXw&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=21">https://www.youtube.com/watch?v=iYYtwk5fkXw&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=21</a> |    |
|   | APPLICATION OF INTEGERATION 2    | <a href="https://www.youtube.com/watch?v=BLikzJpyTC&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=22">https://www.youtube.com/watch?v=BLikzJpyTC&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=22</a>   |    |
|   | APPLICATION OF INTEGERATION 3    | <a href="https://www.youtube.com/watch?v=VNvMt005GMY&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=23">https://www.youtube.com/watch?v=VNvMt005GMY&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=23</a> |    |
|   | APPLICATION OF INTEGERATION 4    | <a href="https://www.youtube.com/watch?v=OsKerquQ70c&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=24">https://www.youtube.com/watch?v=OsKerquQ70c&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=24</a> |  |
|   | APPLICATION OF INTEGERATION 5    | <a href="https://www.youtube.com/watch?v=YIsNRMUt76w&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=25">https://www.youtube.com/watch?v=YIsNRMUt76w&amp;list=PL1b9Ht9ISqIGiGjVNbjt8OFA1LW22U4N&amp;index=25</a> |  |
| 5 |                                  |                                                                                                                                                                                                                       |                                                                                     |

|  |                                          |                                                                                                                                                                                                                     |                                                                                   |
|--|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | APPLICATION OF<br>INTEGRATION -II PART 1 | <a href="https://www.youtube.com/watch?v=q2YaTa20QZk&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=26">https://www.youtube.com/watch?v=q2YaTa20QZk&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=26</a> |  |
|  | APPLICATION OF<br>INTEGRATION -II PART 2 | <a href="https://www.youtube.com/watch?v=b39-LW7T3nU&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=27">https://www.youtube.com/watch?v=b39-LW7T3nU&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=27</a> |  |
|  | APPLICATION OF<br>INTEGRATION -II PART 3 | <a href="https://www.youtube.com/watch?v=rNGXMdBaDE4&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=28">https://www.youtube.com/watch?v=rNGXMdBaDE4&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=28</a> |  |
|  | APPLICATION OF<br>INTEGRATION -II PART 4 | <a href="https://www.youtube.com/watch?v=7HQNV6Jxb2U&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=29">https://www.youtube.com/watch?v=7HQNV6Jxb2U&amp;list=PL1b9Ht9ISqIGjVNBijt8OFA1LW22U4N&amp;index=29</a> |  |

| ENGINEERING PHYSICS 1 |                                        |                                                                                                                                                                                                                         |                                                                                     |
|-----------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                  | TOPIC                                  | URL                                                                                                                                                                                                                     | QR CODE                                                                             |
| 1                     | A) LESSON 1.1 DIMENSIONS               | <a href="https://www.youtube.com/watch?v=Auw9MecSz2o&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj">https://www.youtube.com/watch?v=Auw9MecSz2o&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj</a>                           |    |
|                       | B) LESSON 1.1 S.I. UNITS AND STATICS 1 | <a href="https://www.youtube.com/watch?v=a3h7Q0JIXpl&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=2">https://www.youtube.com/watch?v=a3h7Q0JIXpl&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=2</a>   |    |
|                       | C) LESSON 1.1 S.I. UNITS AND STATICS 2 | <a href="https://www.youtube.com/watch?v=Ax-3WLaikUU&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=3">https://www.youtube.com/watch?v=Ax-3WLaikUU&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=3</a>   |    |
|                       | D) LESSON 1.2 STATICS PART 1           | <a href="https://www.youtube.com/watch?v=Yis3K_L4zXQ&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=4">https://www.youtube.com/watch?v=Yis3K_L4zXQ&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=4</a>   |    |
|                       | E) LESSON 1.2 STATICS PART 2           | <a href="https://www.youtube.com/watch?v=rjF7o0uxlHM&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=5">https://www.youtube.com/watch?v=rjF7o0uxlHM&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=5</a>   |    |
|                       | F) LESSON 1.2 STATICS PART 3           | <a href="https://www.youtube.com/watch?v=Rh6Mu3r06Os&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=6">https://www.youtube.com/watch?v=Rh6Mu3r06Os&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=6</a>   |    |
| UNIT 2                |                                        |                                                                                                                                                                                                                         |                                                                                     |
|                       | A) LESSON 2.1 ELASTICITY PART I        | <a href="https://www.youtube.com/watch?v=tTIL42Y7TEI&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=7">https://www.youtube.com/watch?v=tTIL42Y7TEI&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=7</a>   |  |
|                       | B) LESSON 2.1 ELASTICITY PART 2        | <a href="https://www.youtube.com/watch?v=oRQ66FCSlY&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=8">https://www.youtube.com/watch?v=oRQ66FCSlY&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=8</a>     |  |
|                       | D) LESSON 2.2 VISCOSITY PART 2         | <a href="https://www.youtube.com/watch?v=yc1ATWCDb3I&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=10">https://www.youtube.com/watch?v=yc1ATWCDb3I&amp;list=PL1b9Ht9ISqIHStwn0NEHONGecMJ84S6cj&amp;index=10</a> |  |

|        |                                                       |                                                                                                                                                                                                                         |                                                                                     |
|--------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|        | C) LESSON 2.2 VISCOSITY<br>PART 1                     | <a href="https://www.youtube.com/watch?v=JfOiozY3GDM&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=9">https://www.youtube.com/watch?v=JfOiozY3GDM&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=9</a>   |    |
|        | E) LESSON 2.3 SURFACE<br>TENSION PART 1               | <a href="https://www.youtube.com/watch?v=9hsZYeXwY-Q&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=11">https://www.youtube.com/watch?v=9hsZYeXwY-Q&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=11</a> |    |
|        | F) LESSON 2.3 SURFACE<br>TENSION PART 2               | <a href="https://www.youtube.com/watch?v=Vjse-vR6m3Q&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=12">https://www.youtube.com/watch?v=Vjse-vR6m3Q&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=12</a> |    |
| UNIT 3 |                                                       |                                                                                                                                                                                                                         |                                                                                     |
|        | A) LESSON 3.1 DYNAMICS                                | <a href="https://www.youtube.com/watch?v=UTFc1Qy-Hw4&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=13">https://www.youtube.com/watch?v=UTFc1Qy-Hw4&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=13</a> |    |
|        | B) LESSON 3.2 PROJECTILE<br>MOTION PART 1             | <a href="https://www.youtube.com/watch?v=sDupF5R51RI&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=14">https://www.youtube.com/watch?v=sDupF5R51RI&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=14</a> |    |
|        | C) LESSON 3.2 PROJECTILE<br>MOTION PART 2             | <a href="https://www.youtube.com/watch?v=HS3G6ecRCnM&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=15">https://www.youtube.com/watch?v=HS3G6ecRCnM&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=15</a> |    |
|        | D) LESSON 3.3 CIRCULAR<br>MOTION PART 1               | <a href="https://www.youtube.com/watch?v=9N1QwFQkQMI&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=16">https://www.youtube.com/watch?v=9N1QwFQkQMI&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=16</a> |    |
|        | E) LESSON 3.3 CIRCULAR<br>MOTION PART 2               | <a href="https://www.youtube.com/watch?v=k2RDz9bYnE0&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=17">https://www.youtube.com/watch?v=k2RDz9bYnE0&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=17</a> |   |
| UNIT 4 |                                                       |                                                                                                                                                                                                                         |                                                                                     |
|        | A) LESSON 4.1<br>ROTATIONAL MOTION OF<br>RIGID BODIES | <a href="https://www.youtube.com/watch?v=EhinYBd9doA&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=18">https://www.youtube.com/watch?v=EhinYBd9doA&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=18</a> |  |
|        | B) LESSON 4.2<br>GRAVITATION PART 1                   | <a href="https://www.youtube.com/watch?v=Ezq9cTslwOA&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=19">https://www.youtube.com/watch?v=Ezq9cTslwOA&amp;list=PL1b9Ht9ISqIHStwn0NEHongecMJ84S6cj&amp;index=19</a> |  |

|        |                                     |                                                                                                                                                                                                                         |                                                                                   |
|--------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|        | C) LESSON 4.2<br>GRAVITATION PART 2 | <a href="https://www.youtube.com/watch?v=6YTsmILHjSs&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=20">https://www.youtube.com/watch?v=6YTsmILHjSs&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=20</a> |  |
|        | D) LESSON 4.3 SATELLITE             | <a href="https://www.youtube.com/watch?v=CiKPPNeAkP0&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=21">https://www.youtube.com/watch?v=CiKPPNeAkP0&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=21</a> |  |
| UNIT 5 |                                     |                                                                                                                                                                                                                         |                                                                                   |
|        | A) LESSON 5.1 SOUND<br>PART 1       | <a href="https://www.youtube.com/watch?v=YluEampSCSc&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=22">https://www.youtube.com/watch?v=YluEampSCSc&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=22</a> |  |
|        | D) LESSON 5.2 MAGNETISM             | <a href="https://www.youtube.com/watch?v=TpYjNkJ92kA&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=25">https://www.youtube.com/watch?v=TpYjNkJ92kA&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=25</a> |  |
|        | B) LESSON 5.1 SOUND<br>PART 2       | <a href="https://www.youtube.com/watch?v=TO0Cm8NOugM&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=23">https://www.youtube.com/watch?v=TO0Cm8NOugM&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=23</a> |  |
|        | C) LESSON 5.1 SOUND<br>PART 3       | <a href="https://www.youtube.com/watch?v=R7WAs_In-7k&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=24">https://www.youtube.com/watch?v=R7WAs_In-7k&amp;list=PL1b9Ht9ISqIHStwn0NEHONGECMJ84S6cj&amp;index=24</a> |  |

| ENG. PHYSICS 2 |                               |                                                                                                                                                                                                                       |                                                                                     |
|----------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT           | TOPIC                         | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1              |                               |                                                                                                                                                                                                                       |    |
|                | HEAT                          | <a href="https://www.youtube.com/watch?v=xzECamQRUVE&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=1">https://www.youtube.com/watch?v=xzECamQRUVE&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=1</a> |                                                                                     |
|                | KINETIC THEORY OF GASES 1     | <a href="https://www.youtube.com/watch?v=qj6BPJmE1CU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=2">https://www.youtube.com/watch?v=qj6BPJmE1CU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=2</a> |    |
|                | KINETIC THEORY OF GASES 2     | <a href="https://www.youtube.com/watch?v=qb8DyQuDurg&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=3">https://www.youtube.com/watch?v=qb8DyQuDurg&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=3</a> |    |
|                | SPECIFIC HEAT CAPACITY OF GAS | <a href="https://www.youtube.com/watch?v=1R8vrwibfNo&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=4">https://www.youtube.com/watch?v=1R8vrwibfNo&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=4</a> |    |
| 2              |                               |                                                                                                                                                                                                                       |    |
|                | THERMODYNAMICS1               | <a href="https://www.youtube.com/watch?v=IivGUE9z5oU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=5">https://www.youtube.com/watch?v=IivGUE9z5oU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=5</a> |                                                                                     |
|                | THERMODYNAMICS2               | <a href="https://www.youtube.com/watch?v=YtgEZkcPW5E&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=6">https://www.youtube.com/watch?v=YtgEZkcPW5E&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=6</a> |   |
|                | LIQIFICATION OF GASES 1       | <a href="https://www.youtube.com/watch?v=Ddkw3Hbblk4&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=7">https://www.youtube.com/watch?v=Ddkw3Hbblk4&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=7</a> |  |
|                | LIQIFICATION OF GASES 1       | <a href="https://www.youtube.com/watch?v=f94y-vsJSE8&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=8">https://www.youtube.com/watch?v=f94y-vsJSE8&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=8</a> |  |

|   |                          |                                                                                                                                                                                                                         |                                                                                     |
|---|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | NON CONVENTIONAL ENERGY  | <a href="https://www.youtube.com/watch?v=3lCesiyGdBw&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=9">https://www.youtube.com/watch?v=3lCesiyGdBw&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=9</a>   |    |
| 3 |                          |                                                                                                                                                                                                                         |                                                                                     |
|   | LIGHT AND REMOTE SENSING | <a href="https://www.youtube.com/watch?v=anolwfe_ZsE&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=10">https://www.youtube.com/watch?v=anolwfe_ZsE&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=10</a> |    |
|   | LIGHT 2                  | <a href="https://www.youtube.com/watch?v=mb1eWsr2BQs&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=11">https://www.youtube.com/watch?v=mb1eWsr2BQs&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=11</a> |    |
|   | LIGHT 3                  | <a href="https://www.youtube.com/watch?v=aJSgOWl1_CQ&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=12">https://www.youtube.com/watch?v=aJSgOWl1_CQ&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=12</a> |    |
|   | LIGHT LASER              | <a href="https://www.youtube.com/watch?v=HTZVdh0MRYk&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=13">https://www.youtube.com/watch?v=HTZVdh0MRYk&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=13</a> |    |
|   | REMOTE SENSING           | <a href="https://www.youtube.com/watch?v=1ND59chGkHU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=14">https://www.youtube.com/watch?v=1ND59chGkHU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=14</a> |    |
| 4 |                          |                                                                                                                                                                                                                         |                                                                                     |
|   | ELECTRICITY 1            | <a href="https://www.youtube.com/watch?v=PPUaEMPLwUc&amp;iist=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=15">https://www.youtube.com/watch?v=PPUaEMPLwUc&amp;iist=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=15</a> |  |
|   | ELECTRICITY 2            | <a href="https://www.youtube.com/watch?v=5B3vw6mCJjg&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=16">https://www.youtube.com/watch?v=5B3vw6mCJjg&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=16</a> |  |

|   |                            |                                                                                                                                                                                                                         |                                                                                     |
|---|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | ELECTRICITY 3              | <a href="https://www.youtube.com/watch?v=9qd4rDY7ZB0&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=17">https://www.youtube.com/watch?v=9qd4rDY7ZB0&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=17</a> |    |
|   | ELECTRICITY 4              | <a href="https://www.youtube.com/watch?v=keGuki4tDOs&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=18">https://www.youtube.com/watch?v=keGuki4tDOs&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=18</a> |    |
|   | ELECTRICITY 5              | <a href="https://www.youtube.com/watch?v=qx528dZ1jhc&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=20">https://www.youtube.com/watch?v=qx528dZ1jhc&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=20</a> |    |
| 5 |                            |                                                                                                                                                                                                                         |                                                                                     |
|   | ELECTRONICS SEMICONDUCTORS | <a href="https://www.youtube.com/watch?v=jErh36IBH4s&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=19">https://www.youtube.com/watch?v=jErh36IBH4s&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=19</a> |    |
|   | ELECTRONICS DIODE          | <a href="https://www.youtube.com/watch?v=hzt48azWcrU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=21">https://www.youtube.com/watch?v=hzt48azWcrU&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=21</a> |    |
|   | ELECTRONICS TRANSISTORS    | <a href="https://www.youtube.com/watch?v=qbWDa7dPszQ&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=22">https://www.youtube.com/watch?v=qbWDa7dPszQ&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=22</a> |    |
|   | BASIC LOGIC GATES          | <a href="https://www.youtube.com/watch?v=YMUbsSxlrUo&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=23">https://www.youtube.com/watch?v=YMUbsSxlrUo&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=23</a> |  |
|   | UNIVERSAL LOGIC GATES      | <a href="https://www.youtube.com/watch?v=h1bXBik3C_g&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=24">https://www.youtube.com/watch?v=h1bXBik3C_g&amp;list=PL1b9Ht9ISqIFUWvOqFTEdUPmtZadrXNk4&amp;index=24</a> |  |

| ENGINEERING CHEMISTRY 1 |                             |                                                                                                                                                                                                                       |                                                                                     |
|-------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                    | TOPIC                       | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1                       | A) 1.1 - ATOMIC STRUCTURE 1 | <a href="https://www.youtube.com/watch?v=tNaqCtxzZYw&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4">https://www.youtube.com/watch?v=tNaqCtxzZYw&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4</a>                         |    |
|                         | B) 1.1 . ATOMIC STRUCTURE 2 | <a href="https://www.youtube.com/watch?v=MudEc9Fbd2M&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=2">https://www.youtube.com/watch?v=MudEc9Fbd2M&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=2</a> |    |
|                         | C) 1.2 MOLECULAR MASS       | <a href="https://www.youtube.com/watch?v=KC7wINRYqEY&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=3">https://www.youtube.com/watch?v=KC7wINRYqEY&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=3</a> |    |
|                         | D) 1.3 ACIDS AND BASES      | <a href="https://www.youtube.com/watch?v=eQWmobEbgf0&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=4">https://www.youtube.com/watch?v=eQWmobEbgf0&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=4</a> |    |
| 2                       |                             |                                                                                                                                                                                                                       |                                                                                     |
|                         | A) 2.1 SOLUTION             | <a href="https://www.youtube.com/watch?v=GN3hVvr0LQE&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=5">https://www.youtube.com/watch?v=GN3hVvr0LQE&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=5</a> |    |
|                         | B) 2.2 COLLOIDS PART 1      | <a href="https://www.youtube.com/watch?v=hZDFCUKos4U&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=6">https://www.youtube.com/watch?v=hZDFCUKos4U&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=6</a> |   |
|                         | C) 2.2 COLLOIDS PART 2      | <a href="https://www.youtube.com/watch?v=oCp6-pu3xuM&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=7">https://www.youtube.com/watch?v=oCp6-pu3xuM&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=7</a> |  |
|                         | D) 2.3 NANO TECHNOLOGY      | <a href="https://www.youtube.com/watch?v=g8ftdqCVh5I&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=8">https://www.youtube.com/watch?v=g8ftdqCVh5I&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=8</a> |  |
| 3                       |                             |                                                                                                                                                                                                                       |                                                                                     |

|   |                              |                                                                                                                                                                                                                         |                                                                                     |
|---|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | A) 3.1 TECHNOLOGY OF WATER 1 | <a href="https://www.youtube.com/watch?v=f46iGCMIFBM&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=9">https://www.youtube.com/watch?v=f46iGCMIFBM&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=9</a>   |    |
|   | B) 3.1 TECHNOLOGY OF WATER 2 | <a href="https://www.youtube.com/watch?v=-hKFNUlAls4&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=10">https://www.youtube.com/watch?v=-hKFNUlAls4&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=10</a> |    |
|   | C) 3.1 TECHNOLOGY OF WATER 3 | <a href="https://www.youtube.com/watch?v=TKPPOTqgQyA&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=11">https://www.youtube.com/watch?v=TKPPOTqgQyA&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=11</a> |    |
|   | D) 3.2 CATALYSIS             | <a href="https://www.youtube.com/watch?v=IS0aqaVX1h4&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=12">https://www.youtube.com/watch?v=IS0aqaVX1h4&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=12</a> |    |
|   | E) 3.3 GLASS                 | <a href="https://www.youtube.com/watch?v=03vkHCW5Q1s&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=13">https://www.youtube.com/watch?v=03vkHCW5Q1s&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=13</a> |    |
| 4 |                              |                                                                                                                                                                                                                         |                                                                                     |
|   | A) 4.1 ELECTRO CHEMISTRY 1   | <a href="https://www.youtube.com/watch?v=zaOR7oo7qAg&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=14">https://www.youtube.com/watch?v=zaOR7oo7qAg&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=14</a> |   |
|   | B) 4.1 ELECTRO CHEMISTRY 2   | <a href="https://www.youtube.com/watch?v=ibFyc1aja24&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=15">https://www.youtube.com/watch?v=ibFyc1aja24&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=15</a> |  |
|   | C) 4.2 ELECTRO CHEMICAL CELL | <a href="https://www.youtube.com/watch?v=we5l4RDRD6o&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=16">https://www.youtube.com/watch?v=we5l4RDRD6o&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=16</a> |  |

|   |                                           |                                                                                                                                                                                                                         |                                                                                   |
|---|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|   | D) 4.3 ENERGY SOURCES                     | <a href="https://www.youtube.com/watch?v=zciNCwd3eig&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=17">https://www.youtube.com/watch?v=zciNCwd3eig&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=17</a> |  |
| 5 |                                           |                                                                                                                                                                                                                         |                                                                                   |
|   | A) 5.1 CORROSION 1                        | <a href="https://www.youtube.com/watch?v=KcFUctIdM9I&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=18">https://www.youtube.com/watch?v=KcFUctIdM9I&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=18</a> |  |
|   | B) 5.1 CORROSION 2                        | <a href="https://www.youtube.com/watch?v=1b6cBw9JFI&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=19">https://www.youtube.com/watch?v=1b6cBw9JFI&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=19</a>   |  |
|   | C) 5.2 METHODS OF PREVENTION OF CORROSION | <a href="https://www.youtube.com/watch?v=LZKLxUx_c2Q&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=20">https://www.youtube.com/watch?v=LZKLxUx_c2Q&amp;list=PL1b9Ht9ISqIFsliqREfRjehR2WAs3qCW4&amp;index=20</a> |  |

| ENGINEERING CHEMISTRY 2   |                        |                                                                                                                                                                                                                       |                                                                                     |
|---------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                      | TOPIC                  | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1.ENVIRONMENTAL CHEMISTRY | AIR POLLUTION          | <a href="https://www.youtube.com/watch?v=yGXINHfUUzQ&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=1">https://www.youtube.com/watch?v=yGXINHfUUzQ&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=1</a> |    |
|                           | WATER POLLUTION        | <a href="https://www.youtube.com/watch?v=Uc3YsodLcco&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=2">https://www.youtube.com/watch?v=Uc3YsodLcco&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=2</a> |    |
|                           | SOLID WASTE MANAGEMENT | <a href="https://www.youtube.com/watch?v=sMeUGwpvLtk&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=3">https://www.youtube.com/watch?v=sMeUGwpvLtk&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=3</a> |    |
|                           | GREEN CHEMISTRY        | <a href="https://www.youtube.com/watch?v=KHIOXta9Q4U&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=4">https://www.youtube.com/watch?v=KHIOXta9Q4U&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=4</a> |    |
| 2                         |                        |                                                                                                                                                                                                                       |                                                                                     |
|                           | FUEL                   | <a href="https://www.youtube.com/watch?v=OFRgfmj01c&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=5">https://www.youtube.com/watch?v=OFRgfmj01c&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=5</a>   |    |
|                           | COMBUSTION             | <a href="https://www.youtube.com/watch?v=B1ZT84hyCsE&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=6">https://www.youtube.com/watch?v=B1ZT84hyCsE&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=6</a> |   |
|                           | COMBUSTION             | <a href="https://www.youtube.com/watch?v=o3GvVDW7R4&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=7">https://www.youtube.com/watch?v=o3GvVDW7R4&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=7</a>   |  |
| 3                         |                        |                                                                                                                                                                                                                       |                                                                                     |
|                           | EXTRACTION OF METAL    | <a href="https://www.youtube.com/watch?v=IO_KUWj5LuU&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=8">https://www.youtube.com/watch?v=IO_KUWj5LuU&amp;list=PL1b9Ht9ISqLEmoksyUA5Ab5WRuhWgB5V5&amp;index=8</a> |  |

|   |                   |                                                                                                                                                                                                                         |                                                                                     |
|---|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | POWDER METALLURGY | <a href="https://www.youtube.com/watch?v=DqhL7d22uSc&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=9">https://www.youtube.com/watch?v=DqhL7d22uSc&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=9</a>   |    |
|   | ALLOYS            | <a href="https://www.youtube.com/watch?v=gTuhMwj0CbY&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=10">https://www.youtube.com/watch?v=gTuhMwj0CbY&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=10</a> |    |
|   | ABRASIVES         | <a href="https://www.youtube.com/watch?v=vCWS9w9dk1U&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=11">https://www.youtube.com/watch?v=vCWS9w9dk1U&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=11</a> |    |
| 4 |                   |                                                                                                                                                                                                                         |                                                                                     |
|   | CEMENT            | <a href="https://www.youtube.com/watch?v=y9tC8I3P45E&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=12">https://www.youtube.com/watch?v=y9tC8I3P45E&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=12</a> |    |
|   | CERAMICS          | <a href="https://www.youtube.com/watch?v=OUEbwEYYIHQ&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=13">https://www.youtube.com/watch?v=OUEbwEYYIHQ&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=13</a> |    |
|   | LUBRICANTS        | <a href="https://www.youtube.com/watch?v=n27ruqVboO0&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=14">https://www.youtube.com/watch?v=n27ruqVboO0&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=14</a> |    |
|   | ADHESIVES         | <a href="https://www.youtube.com/watch?v=S8UKXw1LcKE&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=15">https://www.youtube.com/watch?v=S8UKXw1LcKE&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=15</a> |  |
| 5 |                   |                                                                                                                                                                                                                         |                                                                                     |
|   | PLASTICS          | <a href="https://www.youtube.com/watch?v=bOsvSylohc&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=16">https://www.youtube.com/watch?v=bOsvSylohc&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=16</a>   |  |
|   | RUBBER            | <a href="https://www.youtube.com/watch?v=KKH1LJxi8VM&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=17">https://www.youtube.com/watch?v=KKH1LJxi8VM&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=17</a> |  |

|  |                          |                                                                                                                                                                                                                         |                                                                                   |
|--|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | COMPOSITE MATERIAL       | <a href="https://www.youtube.com/watch?v=u2Z7X3QRbPE&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=18">https://www.youtube.com/watch?v=u2Z7X3QRbPE&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=18</a> |  |
|  | .environmental chemistry | <a href="https://www.youtube.com/watch?v=vQgJp6HIKR&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=19">https://www.youtube.com/watch?v=vQgJp6HIKR&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=19</a>   |  |
|  | chemistry practical 2    | <a href="https://www.youtube.com/watch?v=0mB7_bBZ7So&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=20">https://www.youtube.com/watch?v=0mB7_bBZ7So&amp;list=PL1b9Ht9ISqIEmoksyUA5Ab5WRuhWgB5V5&amp;index=20</a> |  |

| THEORY OF STRUCTURES |                                 |                                                                                                                                                                                                                         |                                                                                     |
|----------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                 | TOPIC                           | URL                                                                                                                                                                                                                     | QR                                                                                  |
| 1                    |                                 |                                                                                                                                                                                                                         |                                                                                     |
|                      | SLOPE AND DEFLECTION OF BEAMS 1 | <a href="https://www.youtube.com/watch?v=aRgLS_t6GZrg&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=1">https://www.youtube.com/watch?v=aRgLS_t6GZrg&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=1</a> |    |
|                      | SLOPE AND DEFLECTION OF BEAMS 2 | <a href="https://www.youtube.com/watch?v=WEDt1GTD_eY&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=2">https://www.youtube.com/watch?v=WEDt1GTD_eY&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=2</a>   |    |
|                      | SLOPE AND DEFLECTION OF BEAMS 3 | <a href="https://www.youtube.com/watch?v=ulWjS8ChXd8&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=3">https://www.youtube.com/watch?v=ulWjS8ChXd8&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=3</a>   |    |
|                      | PROPPED CANTILEVER 1            | <a href="https://www.youtube.com/watch?v=QX-llpkelRc&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=4">https://www.youtube.com/watch?v=QX-llpkelRc&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=4</a>   |    |
|                      | PROPPED CANTILEVER 2            | <a href="https://www.youtube.com/watch?v=YR3ULXeb5QM&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=5">https://www.youtube.com/watch?v=YR3ULXeb5QM&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=5</a>   |    |
| 2                    |                                 |                                                                                                                                                                                                                         |                                                                                     |
|                      | FIXED BEAM 1                    | <a href="https://www.youtube.com/watch?v=HUQImkgptpk&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=7">https://www.youtube.com/watch?v=HUQImkgptpk&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=7</a>   |   |
|                      | FIXED BEAM 2                    | <a href="https://www.youtube.com/watch?v=WSgZBaPcR7s&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=6">https://www.youtube.com/watch?v=WSgZBaPcR7s&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=6</a>   |  |
|                      | FIXED BEAM 3                    | <a href="https://www.youtube.com/watch?v=nyRg3APIZM0&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=9">https://www.youtube.com/watch?v=nyRg3APIZM0&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=9</a>   |  |

|   |                                                                |                                                                                                                                                                                                                         |                                                                                     |
|---|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | CONTINUOUS BEAMS - THEORY OF THREE MOMENTS 1                   | <a href="https://www.youtube.com/watch?v=laXO3ArkW9o&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=8">https://www.youtube.com/watch?v=laXO3ArkW9o&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=8</a>   |    |
|   | CONTINUOUS BEAMS - THEORY OF THREE MOMENTS 2                   | <a href="https://www.youtube.com/watch?v=ETeaW8m2hZw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=10">https://www.youtube.com/watch?v=ETeaW8m2hZw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=10</a> |    |
| 3 |                                                                |                                                                                                                                                                                                                         |                                                                                     |
|   | CONTINUOUS BEAM - MOMENT DISTRIBUTION METHOD 1                 | <a href="https://www.youtube.com/watch?v=amHrTQAo21Q&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=11">https://www.youtube.com/watch?v=amHrTQAo21Q&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=11</a> |    |
|   | CONTINUOUS BEAM - MOMENT DISTRIBUTION METHOD 2                 | <a href="https://www.youtube.com/watch?v=WG6cMok354Y&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=12">https://www.youtube.com/watch?v=WG6cMok354Y&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=12</a> |    |
|   | CONTINUOUS BEAM - MOMENT DISTRIBUTION METHOD 3                 | <a href="https://www.youtube.com/watch?v=yw01kzZfanU&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=13">https://www.youtube.com/watch?v=yw01kzZfanU&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=13</a> |    |
|   | CONTINUOUS BEAM - MOMENT DISTRIBUTION METHOD AND PORTAL FRAMES | <a href="https://www.youtube.com/watch?v=F4Azk0enCUw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=14">https://www.youtube.com/watch?v=F4Azk0enCUw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=14</a> |    |
| 4 |                                                                |                                                                                                                                                                                                                         |                                                                                     |
|   | COLOUMS AND STRUTS 1                                           | <a href="https://www.youtube.com/watch?v=d-UqZPuBtOM&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=15">https://www.youtube.com/watch?v=d-UqZPuBtOM&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=15</a> |  |
|   | COLOUMS AND STRUTS 2                                           | <a href="https://www.youtube.com/watch?v=5lQ57aB2qCU&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=16">https://www.youtube.com/watch?v=5lQ57aB2qCU&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=16</a> |  |
| 5 |                                                                |                                                                                                                                                                                                                         |                                                                                     |

|  |                                                      |                                                                                                                                                                                                                         |                                                                                   |
|--|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | Combined bending and direct stresses 1               | <a href="https://www.youtube.com/watch?v=q9iySd40Jcg&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=21">https://www.youtube.com/watch?v=q9iySd40Jcg&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=21</a> |  |
|  | Combined bending and direct stresses 2               | <a href="https://www.youtube.com/watch?v=hbV11p24iSw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=22">https://www.youtube.com/watch?v=hbV11p24iSw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=22</a> |  |
|  | Masonry dam and earth pressure and retaining walls 1 | <a href="https://www.youtube.com/watch?v=DulpJgPa1Qk&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=23">https://www.youtube.com/watch?v=DulpJgPa1Qk&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=23</a> |  |
|  | Masonry dam and earth pressure and retaining walls 2 | <a href="https://www.youtube.com/watch?v=SeZmNIBZIEQ&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=24">https://www.youtube.com/watch?v=SeZmNIBZIEQ&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=24</a> |  |
|  | Masonry dam and earth pressure and retaining walls 3 | <a href="https://www.youtube.com/watch?v=V1Rn2tmEcr0&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=25">https://www.youtube.com/watch?v=V1Rn2tmEcr0&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=25</a> |  |
|  | Masonry dam and earth pressure and retaining walls 4 | <a href="https://www.youtube.com/watch?v=C-_IEOgLoYA&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=26">https://www.youtube.com/watch?v=C-_IEOgLoYA&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=26</a> |  |

| ESTIMATING AND COSTING |                                             |                                                                                                                                                                                                                         |                                                                                     |
|------------------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                   | TOPIC                                       | URL                                                                                                                                                                                                                     | QR                                                                                  |
| 1                      | ESTIMATING AND COSTING                      |                                                                                                                                                                                                                         |                                                                                     |
|                        | INTRODUCTION OF ESTIMATION                  | <a href="https://www.youtube.com/watch?v=G0valPRePMk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=24">https://www.youtube.com/watch?v=G0valPRePMk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=24</a> |    |
|                        | UNIT OF MEASUREMENT FOR MATERIALS AND WORKS | <a href="https://www.youtube.com/watch?v=OpAnk4AiQXs&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=23">https://www.youtube.com/watch?v=OpAnk4AiQXs&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=23</a> |    |
|                        | Random rubble masonry                       | <a href="https://www.youtube.com/watch?v=-ERXIkKjIDQ&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=25">https://www.youtube.com/watch?v=-ERXIkKjIDQ&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=25</a> |    |
|                        | Lead statement                              | <a href="https://www.youtube.com/watch?v=OrU7dL9mXbk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=26">https://www.youtube.com/watch?v=OrU7dL9mXbk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=26</a> |    |
| 2                      |                                             |                                                                                                                                                                                                                         |                                                                                     |
|                        | AREAS AND VOLUME-1                          | <a href="https://www.youtube.com/watch?v=sCVJ2U2JlhE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=27">https://www.youtube.com/watch?v=sCVJ2U2JlhE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=27</a> |    |
|                        | AREAS AND VOLUME-2                          | <a href="https://www.youtube.com/watch?v=1fSs_JAeb0E&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=28">https://www.youtube.com/watch?v=1fSs_JAeb0E&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=28</a> |   |
|                        | AREAS AND VOLUME-3                          | <a href="https://www.youtube.com/watch?v=AXRpNTsEm20&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=29">https://www.youtube.com/watch?v=AXRpNTsEm20&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=29</a> |  |
|                        | AREAS AND VOLUME-4                          | NIL                                                                                                                                                                                                                     |  |

|   |                              |                                                                                                                                                                                                                           |                                                                                     |
|---|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | AREAS AND VOLUME-5           | <a href="https://www.youtube.com/watch?v=rokeRClymYi&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=30">https://www.youtube.com/watch?v=rokeRClymYi&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=30</a> |    |
|   | AREAS AND VOLUME-6           | <a href="https://www.youtube.com/watch?v=6w1PS0FYTrA&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=31">https://www.youtube.com/watch?v=6w1PS0FYTrA&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=31</a> |    |
| 3 |                              |                                                                                                                                                                                                                           |                                                                                     |
|   | Analysis of rates            | <a href="https://www.youtube.com/watch?v=64JhoffTbe0&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=10">https://www.youtube.com/watch?v=64JhoffTbe0&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=10</a> |    |
|   | Analysis of rates problems 1 | <a href="https://www.youtube.com/watch?v=XNEtSFMOphe&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=9">https://www.youtube.com/watch?v=XNEtSFMOphe&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=9</a>   |    |
|   | Analysis of rates problems 2 | <a href="https://www.youtube.com/watch?v=hWOOm62j4Pc&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=11">https://www.youtube.com/watch?v=hWOOm62j4Pc&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=11</a> |    |
|   | Analysis of rates problems 3 | <a href="https://www.youtube.com/watch?v=qPFqtYeYdmM&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=12">https://www.youtube.com/watch?v=qPFqtYeYdmM&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=12</a> |    |
|   | Analysis of rates problems 4 | <a href="https://www.youtube.com/watch?v=AX82HiypYPU&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=13">https://www.youtube.com/watch?v=AX82HiypYPU&amp;list=PL1b9Ht9ISqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=13</a> |  |
| 4 |                              |                                                                                                                                                                                                                           |                                                                                     |
|   | LECT-1                       | NIL                                                                                                                                                                                                                       |  |

|   |                                        |                                                                                                                                                                                                                         |                                                                                     |
|---|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | Taking of quantities by trade system1  | <a href="https://www.youtube.com/watch?v=Y4_IAAKaZEk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=15">https://www.youtube.com/watch?v=Y4_IAAKaZEk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=15</a> |    |
|   | Taking of quantities by trade system2  | <a href="https://www.youtube.com/watch?v=vbnSwITXuXk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=14">https://www.youtube.com/watch?v=vbnSwITXuXk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=14</a> |    |
|   | Taking of quantities by trade system3  | <a href="https://www.youtube.com/watch?v=K8l8OQy7jGk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=17">https://www.youtube.com/watch?v=K8l8OQy7jGk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=17</a> |    |
|   | Taking of quantities by trade system4  | <a href="https://www.youtube.com/watch?v=xnylIQYAnjo&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=16">https://www.youtube.com/watch?v=xnylIQYAnjo&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=16</a> |    |
| 5 |                                        |                                                                                                                                                                                                                         |                                                                                     |
|   | Taking of quantities by group system 1 | <a href="https://www.youtube.com/watch?v=8IUuGDzB0KE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=18">https://www.youtube.com/watch?v=8IUuGDzB0KE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=18</a> |    |
|   | Taking of quantities by group system 2 | <a href="https://www.youtube.com/watch?v=f98izDhkSjc&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=19">https://www.youtube.com/watch?v=f98izDhkSjc&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=19</a> |    |
|   | Taking of quantities by group system 3 | <a href="https://www.youtube.com/watch?v=Rl-UtdBYIOc&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=20">https://www.youtube.com/watch?v=Rl-UtdBYIOc&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=20</a> |  |
|   | Taking of quantities by group system 4 | <a href="https://www.youtube.com/watch?v=bOIEkCNxSfM&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=21">https://www.youtube.com/watch?v=bOIEkCNxSfM&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=21</a> |  |
|   | Taking of quantities by group system 5 | <a href="https://www.youtube.com/watch?v=bGkAhG4NSt4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=22">https://www.youtube.com/watch?v=bGkAhG4NSt4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=22</a> |  |

| SURVEYING 1 |                                                  |                                                                                                                                                                                                                         |                                                                                     |
|-------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT        | TOPIC                                            | URL                                                                                                                                                                                                                     | QR                                                                                  |
| 1           |                                                  |                                                                                                                                                                                                                         |                                                                                     |
|             | INTRODUCTION OF SURVEYING AND CHAIN SURVEYING -1 | <a href="https://www.youtube.com/watch?v=djEYYXAW1Jc&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=1">https://www.youtube.com/watch?v=djEYYXAW1Jc&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=1</a> |    |
|             | INTRODUCTION OF SURVEYING AND CHAIN SURVEYING -2 | <a href="https://www.youtube.com/watch?v=bzHD0cof6fw&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=2">https://www.youtube.com/watch?v=bzHD0cof6fw&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=2</a> |    |
|             | INTRODUCTION OF SURVEYING AND CHAIN SURVEYING -3 | <a href="https://www.youtube.com/watch?v=U3UtVGh7zoY&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=3">https://www.youtube.com/watch?v=U3UtVGh7zoY&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=3</a> |    |
|             | INTRODUCTION OF SURVEYING AND CHAIN SURVEYING -4 | <a href="https://www.youtube.com/watch?v=qAzLqYczX1I&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=4">https://www.youtube.com/watch?v=qAzLqYczX1I&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=4</a> |    |
|             | INTRODUCTION OF SURVEYING AND CHAIN SURVEYING -5 | <a href="https://www.youtube.com/watch?v=AdR6t9CJO8c&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=5">https://www.youtube.com/watch?v=AdR6t9CJO8c&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=5</a> |    |
| 2           |                                                  |                                                                                                                                                                                                                         |                                                                                     |
|             | LECTURE -1                                       | NIL                                                                                                                                                                                                                     |   |
|             | Meridians, bearings 1                            | <a href="https://www.youtube.com/watch?v=PWHMBQN0ppg&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=7">https://www.youtube.com/watch?v=PWHMBQN0ppg&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=7</a> |  |
|             | Meridians, bearings 2                            | <a href="https://www.youtube.com/watch?v=W1iBmUvr0l0&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=6">https://www.youtube.com/watch?v=W1iBmUvr0l0&amp;list=PL1b9Ht9lSqIFHJJPzdL3s0Qi7Tz2S2cdD_&amp;index=6</a> |  |

|   |                                                        |                                                                                                                                                                                                                         |                                                                                     |
|---|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | Meridians, bearings 3                                  | <a href="https://www.youtube.com/watch?v=8m_bAG0nr0M&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=8">https://www.youtube.com/watch?v=8m_bAG0nr0M&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=8</a>   |    |
| 3 |                                                        |                                                                                                                                                                                                                         |                                                                                     |
|   | Leveling                                               | <a href="https://www.youtube.com/watch?v=AlznSZIuovg&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=41">https://www.youtube.com/watch?v=AlznSZIuovg&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=41</a> |    |
|   | Leveling                                               | <a href="https://www.youtube.com/watch?v=FNr9kLkNMK4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=42">https://www.youtube.com/watch?v=FNr9kLkNMK4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=42</a> |    |
|   | Types                                                  | <a href="https://www.youtube.com/watch?v=fXYTN-u6Mi8&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=43">https://www.youtube.com/watch?v=fXYTN-u6Mi8&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=43</a> |    |
|   | Leveling staff                                         | <a href="https://www.youtube.com/watch?v=saWX56SyH-I&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=44">https://www.youtube.com/watch?v=saWX56SyH-I&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=44</a> |    |
|   | Adjustment of leveling instrument                      | <a href="https://www.youtube.com/watch?v=Jyh_2glryKg&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=45">https://www.youtube.com/watch?v=Jyh_2glryKg&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=45</a> |   |
|   | R L calculation hight of collimation and rise and fall | <a href="https://www.youtube.com/watch?v=M5n26_ggLuk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=46">https://www.youtube.com/watch?v=M5n26_ggLuk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=46</a> |  |
| 4 |                                                        |                                                                                                                                                                                                                         |                                                                                     |
|   | Levelling types 1                                      | <a href="https://www.youtube.com/watch?v=QfK0f_8eFcQ&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=36">https://www.youtube.com/watch?v=QfK0f_8eFcQ&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=36</a> |  |

|   |                     |                                                                                                                                                                                                                         |                                                                                     |
|---|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | Levelling types 2   | <a href="https://www.youtube.com/watch?v=ws52b6Ueilo&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=37">https://www.youtube.com/watch?v=ws52b6Ueilo&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=37</a> |    |
|   | Levelling types 3   | <a href="https://www.youtube.com/watch?v=5NSLUbdHMD4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=38">https://www.youtube.com/watch?v=5NSLUbdHMD4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=38</a> |    |
|   | Levelling types 4   | <a href="https://www.youtube.com/watch?v=uzMr6DbwdoE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=39">https://www.youtube.com/watch?v=uzMr6DbwdoE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=39</a> |    |
|   | Levelling types 5   | <a href="https://www.youtube.com/watch?v=VjXJExhCbZk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=40">https://www.youtube.com/watch?v=VjXJExhCbZk&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=40</a> |    |
| 5 |                     |                                                                                                                                                                                                                         |                                                                                     |
|   | Contour Surveying 1 | <a href="https://www.youtube.com/watch?v=rxLTBp6XLK4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=32">https://www.youtube.com/watch?v=rxLTBp6XLK4&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=32</a> |    |
|   | Contour Surveying 2 | <a href="https://www.youtube.com/watch?v=zm8ZTjXTcQw&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=33">https://www.youtube.com/watch?v=zm8ZTjXTcQw&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=33</a> |   |
|   | Contour Surveying 3 | <a href="https://www.youtube.com/watch?v=EN9-z6P-hR0&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=34">https://www.youtube.com/watch?v=EN9-z6P-hR0&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=34</a> |  |
|   | Contour Surveying 4 | NIL                                                                                                                                                                                                                     |  |

|  |                     |                                                                                                                                                                                                                         |                                                                                   |
|--|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | Contour Surveying 5 | <a href="https://www.youtube.com/watch?v=Yy51yaTtljE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=35">https://www.youtube.com/watch?v=Yy51yaTtljE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=35</a> |  |
|--|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|

| SURVEYING - 2 |                |                                                                                                                                                                                                                       |                                                                                     |
|---------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT          | TOPIC          | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1             |                |                                                                                                                                                                                                                       |                                                                                     |
|               | THEODELITE - 1 | <a href="https://www.youtube.com/watch?v=75s0Gsj_0Os&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=1">https://www.youtube.com/watch?v=75s0Gsj_0Os&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=1</a> |    |
|               | THEODELITE - 2 | <a href="https://www.youtube.com/watch?v=V7cMLTvAoeg&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=2">https://www.youtube.com/watch?v=V7cMLTvAoeg&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=2</a> |    |
|               | THEODELITE - 3 | <a href="https://www.youtube.com/watch?v=Zwgz-GmYezc&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=3">https://www.youtube.com/watch?v=Zwgz-GmYezc&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=3</a> |    |
|               | THEODELITE - 4 | <a href="https://www.youtube.com/watch?v=TIkEV8rugco&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=4">https://www.youtube.com/watch?v=TIkEV8rugco&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=4</a> |    |
|               | THEODELITE - 5 | <a href="https://www.youtube.com/watch?v=7qtlC3Fh6aM&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=5">https://www.youtube.com/watch?v=7qtlC3Fh6aM&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=5</a> |    |
|               | THEODELITE - 6 | <a href="https://www.youtube.com/watch?v=hedbQANeVmo&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=6">https://www.youtube.com/watch?v=hedbQANeVmo&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=6</a> |   |
|               | THEODELITE - 7 | <a href="https://www.youtube.com/watch?v=pqqZUaA-IoY&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=7">https://www.youtube.com/watch?v=pqqZUaA-IoY&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=7</a> |  |
|               | THEODELITE - 8 | <a href="https://www.youtube.com/watch?v=93AeMHvHgvQ&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=8">https://www.youtube.com/watch?v=93AeMHvHgvQ&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=8</a> |  |

|  |                 |                                                                                                                                                                                                                         |                                                                                     |
|--|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | THEODELITE - 9  | <a href="https://www.youtube.com/watch?v=-EM6ccSK7nA&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=9">https://www.youtube.com/watch?v=-EM6ccSK7nA&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=9</a>   |    |
|  | THEODELITE - 10 | <a href="https://www.youtube.com/watch?v=8L6cz02pkwc&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=10">https://www.youtube.com/watch?v=8L6cz02pkwc&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=10</a> |    |
|  | THEODELITE - 11 | <a href="https://www.youtube.com/watch?v=V98gpjQ0hQs&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=11">https://www.youtube.com/watch?v=V98gpjQ0hQs&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=11</a> |    |
|  | THEODELITE - 12 | <a href="https://www.youtube.com/watch?v=Uo-v9MgWdo4&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=12">https://www.youtube.com/watch?v=Uo-v9MgWdo4&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=12</a> |    |
|  | THEODELITE - 13 | <a href="https://www.youtube.com/watch?v=DpCaCdxGrJc&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=13">https://www.youtube.com/watch?v=DpCaCdxGrJc&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=13</a> |    |
|  | THEODELITE - 14 | <a href="https://www.youtube.com/watch?v=c5yW8hTkVfU&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=14">https://www.youtube.com/watch?v=c5yW8hTkVfU&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=14</a> |    |
|  | THEODELITE - 15 | <a href="https://www.youtube.com/watch?v=QRzyzUvMLUA&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=15">https://www.youtube.com/watch?v=QRzyzUvMLUA&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=15</a> |  |
|  | THEODELITE - 16 | <a href="https://www.youtube.com/watch?v=rHKiA85uvKU&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=16">https://www.youtube.com/watch?v=rHKiA85uvKU&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=16</a> |  |
|  | THEODELITE - 17 | <a href="https://www.youtube.com/watch?v=0CmzToWT_NY&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=17">https://www.youtube.com/watch?v=0CmzToWT_NY&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=17</a> |  |

|   |                       |                                                                                                                                                                                                                         |                                                                                     |
|---|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | THEODELITE - 18       | <a href="https://www.youtube.com/watch?v=tRaigRnVuhM&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=18">https://www.youtube.com/watch?v=tRaigRnVuhM&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=18</a> |    |
|   | THEODELITE - 19       | <a href="https://www.youtube.com/watch?v=bot1pFBCVL4&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=19">https://www.youtube.com/watch?v=bot1pFBCVL4&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=19</a> |    |
|   | THEODELITE - 20       | <a href="https://www.youtube.com/watch?v=fmePdIOI56g&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=20">https://www.youtube.com/watch?v=fmePdIOI56g&amp;list=PL1b9Ht9ISqIE2pMnEGj-gdlw8O8X3clYq&amp;index=20</a> |    |
|   | THEODELITE - 21       | <a href="https://www.youtube.com/watch?v=9YJAQ8iYZ3c&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=47">https://www.youtube.com/watch?v=9YJAQ8iYZ3c&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=47</a> |    |
|   | THEODELITE - 22       | <a href="https://www.youtube.com/watch?v=wsmXhsoRpKE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=48">https://www.youtube.com/watch?v=wsmXhsoRpKE&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=48</a> |    |
|   | THEODELITE - 23       | <a href="https://www.youtube.com/watch?v=0DiQYyvuGVA&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=49">https://www.youtube.com/watch?v=0DiQYyvuGVA&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=49</a> |    |
|   | THEODELITE - 24       | <a href="https://www.youtube.com/watch?v=wHSQABKZmw0&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=50">https://www.youtube.com/watch?v=wHSQABKZmw0&amp;list=PL1b9Ht9ISqIFHJPzdL3s0Qi7Tz2S2cdD_&amp;index=50</a> |  |
| 2 | THEORY OF STRUCTURE 1 | <a href="https://www.youtube.com/watch?v=-MzhXcFh_uQ&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=17">https://www.youtube.com/watch?v=-MzhXcFh_uQ&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=17</a> |  |
|   | THEORY OF STRUCTURE 2 | <a href="https://www.youtube.com/watch?v=z9vot4WVRgw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=18">https://www.youtube.com/watch?v=z9vot4WVRgw&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=18</a> |  |

|  |                       |                                                                                                                                                                                                                         |                                                                                   |
|--|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | THEORY OF STRUCTURE 3 | <a href="https://www.youtube.com/watch?v=KXo4Y4wwBuk&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=19">https://www.youtube.com/watch?v=KXo4Y4wwBuk&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=19</a> |  |
|  | THEORY OF STRUCTURE 4 | <a href="https://www.youtube.com/watch?v=XJz548y6EF0&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=20">https://www.youtube.com/watch?v=XJz548y6EF0&amp;list=PL1b9Ht9ISqIGuYN2RbiN45VB-KztoWYI3&amp;index=20</a> |  |

| STRUCTURAL ENGINEERING |                              |                                                                                                                                                                                                                       |                                                                                     |
|------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                   | TOPIC                        | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1                      |                              |                                                                                                                                                                                                                       |                                                                                     |
|                        | INTRODUCTION TO WSM          | <a href="https://www.youtube.com/watch?v=W6lrNmAQRQ8&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=1">https://www.youtube.com/watch?v=W6lrNmAQRQ8&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=1</a> |    |
|                        | LSM 1                        | <a href="https://www.youtube.com/watch?v=V3CfSbrn_Qg&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=2">https://www.youtube.com/watch?v=V3CfSbrn_Qg&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=2</a> |    |
|                        | LSM 2                        | <a href="https://www.youtube.com/watch?v=Z9vfRAQ0Wro&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=3">https://www.youtube.com/watch?v=Z9vfRAQ0Wro&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=3</a> |    |
|                        | LSM 3                        | <a href="https://www.youtube.com/watch?v=cJYhY4agJt0&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=4">https://www.youtube.com/watch?v=cJYhY4agJt0&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=4</a> |    |
|                        | PROBLEMS                     | <a href="https://www.youtube.com/watch?v=ICJKhNljZmE&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=5">https://www.youtube.com/watch?v=ICJKhNljZmE&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=5</a> |    |
|                        | RCC STRUCTURES               | <a href="https://www.youtube.com/watch?v=9Vf3iplXOLc&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=6">https://www.youtube.com/watch?v=9Vf3iplXOLc&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=6</a> |    |
|                        | SINGLY REINFORCED BEAM (LSM) | <a href="https://www.youtube.com/watch?v=MrQIBAKpQnk&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=7">https://www.youtube.com/watch?v=MrQIBAKpQnk&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=7</a> |   |
|                        | DOUBLY REINFORCED BEAM(LSM)  | <a href="https://www.youtube.com/watch?v=JtTZ8QwkTqA&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=8">https://www.youtube.com/watch?v=JtTZ8QwkTqA&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=8</a> |  |
| 2                      |                              |                                                                                                                                                                                                                       |                                                                                     |
|                        | ANALYSIS OF T-BEAMS BY LSM   | <a href="https://www.youtube.com/watch?v=3k6yGfEwuig&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=9">https://www.youtube.com/watch?v=3k6yGfEwuig&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHaLVjAxCoc&amp;index=9</a> |  |
| 3                      |                              |                                                                                                                                                                                                                       |                                                                                     |

|   |                             |                                                                                                                                                                                                                         |                                                                                     |
|---|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | SLABS                       | <a href="https://www.youtube.com/watch?v=aeEBcei7fXA&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=24">https://www.youtube.com/watch?v=aeEBcei7fXA&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=24</a> |    |
|   | SLAB PROBLEMS               | <a href="https://www.youtube.com/watch?v=cY9MTc4L4Dw&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=25">https://www.youtube.com/watch?v=cY9MTc4L4Dw&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=25</a> |    |
|   | CONTINUOUS SLABS            | <a href="https://www.youtube.com/watch?v=zQVXU7XSfv0&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=26">https://www.youtube.com/watch?v=zQVXU7XSfv0&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=26</a> |    |
| 4 |                             |                                                                                                                                                                                                                         |                                                                                     |
|   | RCC COLOUMNS                | <a href="https://www.youtube.com/watch?v=1loIu8P2jQ0&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=10">https://www.youtube.com/watch?v=1loIu8P2jQ0&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=10</a> |    |
|   | RCC COLOUMNS                | <a href="https://www.youtube.com/watch?v=0u916vYIsVU&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=12">https://www.youtube.com/watch?v=0u916vYIsVU&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=12</a> |    |
|   | RCC COLOUMNS AND FOOTINGS   | <a href="https://www.youtube.com/watch?v=3w58aWqmNIY&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=11">https://www.youtube.com/watch?v=3w58aWqmNIY&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=11</a> |    |
|   | COLUMN FOOTING              | <a href="https://www.youtube.com/watch?v=GMgZiZHUj50&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=13">https://www.youtube.com/watch?v=GMgZiZHUj50&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=13</a> |    |
| 5 |                             |                                                                                                                                                                                                                         |                                                                                     |
|   | STEEL STRUCTURES            | <a href="https://www.youtube.com/watch?v=4SXS7gQE8ts&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=14">https://www.youtube.com/watch?v=4SXS7gQE8ts&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=14</a> |  |
|   | STEEL STRUCTURES            | <a href="https://www.youtube.com/watch?v=Q7Fz6LvS-1E&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=15">https://www.youtube.com/watch?v=Q7Fz6LvS-1E&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=15</a> |  |
|   | STEEL STRUCTURES - PROBLEMS | <a href="https://www.youtube.com/watch?v=6zg0XDU73So&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=16">https://www.youtube.com/watch?v=6zg0XDU73So&amp;list=PL1b9Ht9ISqIF2M8xaSI4oHMHalVjAxCoc&amp;index=16</a> |  |

|  |                                            |                                                                                                                                                                                                                         |                                                                                   |
|--|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | CLASSIFICATION OF COLOUMN<br>CROSS SECTION | <a href="https://www.youtube.com/watch?v=yXgSWCcM7rs&amp;list=PL1b9Ht9lSqlF2M8xaSI4oHMHaLVjAxCoc&amp;index=17">https://www.youtube.com/watch?v=yXgSWCcM7rs&amp;list=PL1b9Ht9lSqlF2M8xaSI4oHMHaLVjAxCoc&amp;index=17</a> |  |
|  | SIMPLE BEAM AND WELDED<br>CONNECTIONS      | <a href="https://www.youtube.com/watch?v=xKUkcCOP7vM&amp;list=PL1b9Ht9lSqlF2M8xaSI4oHMHaLVjAxCoc&amp;index=18">https://www.youtube.com/watch?v=xKUkcCOP7vM&amp;list=PL1b9Ht9lSqlF2M8xaSI4oHMHaLVjAxCoc&amp;index=18</a> |  |

| ENGINEERING MECHANICS |                                                      |                                                                                                                                                                                                                           |                                                                                     |
|-----------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                  | TOPICS                                               | URL                                                                                                                                                                                                                       | QR                                                                                  |
| 1                     |                                                      |                                                                                                                                                                                                                           |                                                                                     |
|                       | ELASTIC CONSTANTS - APPLICATION OF STRESS AND STRAIN | <a href="https://www.youtube.com/watch?v=pgFyp2bvZmM&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=2">https://www.youtube.com/watch?v=pgFyp2bvZmM&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=2</a>   |    |
|                       | STRESS AND STRAIN                                    | <a href="https://www.youtube.com/watch?v=tmdGq49eJwI&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=1">https://www.youtube.com/watch?v=tmdGq49eJwI&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=1</a>   |    |
|                       | STRESS AND STRAIN PROBLEMS                           | <a href="https://www.youtube.com/watch?v=btIo4Vnzj44&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=3">https://www.youtube.com/watch?v=btIo4Vnzj44&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=3</a>   |    |
| 2                     |                                                      |                                                                                                                                                                                                                           |                                                                                     |
|                       | SHEAR FORCE AND BENDING MOMENT                       | <a href="https://www.youtube.com/watch?v=J8G15nZlZcQ&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=8">https://www.youtube.com/watch?v=J8G15nZlZcQ&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=8</a>   |    |
|                       | SHEAR FORCE AND BENDING MOMENT PROBLEMS 1            | <a href="https://www.youtube.com/watch?v=U6OGxEr7kGM&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=9">https://www.youtube.com/watch?v=U6OGxEr7kGM&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=9</a>   |    |
|                       | SHEAR FORCE AND BENDING MOMENT PROBLEMS 2            | <a href="https://www.youtube.com/watch?v=z7GR7cwq1F0&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=10">https://www.youtube.com/watch?v=z7GR7cwq1F0&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=10</a> |   |
| 3                     |                                                      |                                                                                                                                                                                                                           |                                                                                     |
|                       | GEOMETRICAL PROPERTIES OF SECTION 1                  | <a href="https://www.youtube.com/watch?v=lqLjQWNi92c&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=4">https://www.youtube.com/watch?v=lqLjQWNi92c&amp;list=PL1b9Ht9ISqLE-vW4ZOOp-bxUBsUAAq-xyw&amp;index=4</a>   |  |
|                       | lecture 8                                            |                                                                                                                                                                                                                           |  |

|   |                                     |                                                                                                                                                                                                                         |                                                                                   |
|---|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|   | GEOMETRICAL PROPERTIES OF SECTION 2 | <a href="https://www.youtube.com/watch?v=63vZldY2RbY&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=5">https://www.youtube.com/watch?v=63vZldY2RbY&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=5</a>   |  |
|   | GEOMETRICAL PROPERTIES OF SECTION 3 | <a href="https://www.youtube.com/watch?v=JCqHOe-j2BA&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=6">https://www.youtube.com/watch?v=JCqHOe-j2BA&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=6</a>   |  |
|   | GEOMETRICAL PROPERTIES OF SECTION 4 | <a href="https://www.youtube.com/watch?v=opVOXYIXAPw&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=7">https://www.youtube.com/watch?v=opVOXYIXAPw&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=7</a>   |  |
| 4 |                                     |                                                                                                                                                                                                                         |                                                                                   |
|   | BENDING EQUATION                    | <a href="https://www.youtube.com/watch?v=A5MoJK2eyPs&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=16">https://www.youtube.com/watch?v=A5MoJK2eyPs&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=16</a> |  |
|   | PIN JOINED FRAMES                   | <a href="https://www.youtube.com/watch?v=KhncqB8TNSk&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=17">https://www.youtube.com/watch?v=KhncqB8TNSk&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=17</a> |  |
| 5 |                                     |                                                                                                                                                                                                                         |                                                                                   |
|   | PIN JOINED FRAMES PROBLEMS          | <a href="https://www.youtube.com/watch?v=mm3BKezIb68&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=18">https://www.youtube.com/watch?v=mm3BKezIb68&amp;list=PL1b9Ht9ISqIE-vW4ZOq-bxUBsUAAq-xyw&amp;index=18</a> |  |

| FLUID MECHANICS AND FLUID POWER |                                               |                                                                                                                                                                                                                       |                                                                                     |
|---------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                            | TOPIC                                         | URL                                                                                                                                                                                                                   | QR CODE                                                                             |
| 1                               |                                               |                                                                                                                                                                                                                       |                                                                                     |
|                                 | PRAPERTIES OF FLUID AND PRESSURE MEASURMENT 1 | <a href="https://www.youtube.com/watch?v=xmkh7M9R7nM&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=1">https://www.youtube.com/watch?v=xmkh7M9R7nM&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=1</a> |    |
|                                 | PRAPERTIES OF FLUID AND PRESSURE MEASURMENT 2 | <a href="https://www.youtube.com/watch?v=P44ltefqDOE&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=2">https://www.youtube.com/watch?v=P44ltefqDOE&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=2</a> |    |
|                                 | PRAPERTIES OF FLUID AND PRESSURE MEASURMENT 3 | <a href="https://www.youtube.com/watch?v=E9VivAuNEnY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=3">https://www.youtube.com/watch?v=E9VivAuNEnY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=3</a> |    |
|                                 | PRAPERTIES OF FLUID AND PRESSURE MEASURMENT 4 | <a href="https://www.youtube.com/watch?v=1FtT5D4qyY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=4">https://www.youtube.com/watch?v=1FtT5D4qyY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=4</a>   |    |
| 2                               | PRAPERTIES OF FLUID AND PRESSURE MEASURMENT 5 | <a href="https://www.youtube.com/watch?v=HVR1RRoXAtQ&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=6">https://www.youtube.com/watch?v=HVR1RRoXAtQ&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=6</a> |    |
|                                 |                                               |                                                                                                                                                                                                                       |                                                                                     |
|                                 | FLOW OF FLUID AND FLOW THROUGH PIPES 1        | <a href="https://www.youtube.com/watch?v=5wNP1KaMQJ0&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=5">https://www.youtube.com/watch?v=5wNP1KaMQJ0&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=5</a> |   |
|                                 | FLOW OF FLUID AND FLOW THROUGH PIPES 2        | <a href="https://www.youtube.com/watch?v=0Ks-McQ0FKc&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=7">https://www.youtube.com/watch?v=0Ks-McQ0FKc&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=7</a> |  |
|                                 | FLOW OF FLUID AND FLOW THROUGH PIPES 3        | <a href="https://www.youtube.com/watch?v=wHZaEwH6CQ4&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=8">https://www.youtube.com/watch?v=wHZaEwH6CQ4&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=8</a> |  |

|   |                                                                          |                                                                                                                                                                                                                           |                                                                                     |
|---|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | FLOW OF FLUID AND FLOW THROUGH PIPES 4                                   | <a href="https://www.youtube.com/watch?v=CHMk8ZxghWM&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=9">https://www.youtube.com/watch?v=CHMk8ZxghWM&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=9</a>     |    |
|   | FLOW OF FLUID AND FLOW THROUGH PIPES 5                                   | <a href="https://www.youtube.com/watch?v=8fcN4dOhBi8&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=11">https://www.youtube.com/watch?v=8fcN4dOhBi8&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=11</a>   |    |
|   | FLOW OF FLUID AND FLOW THROUGH PIPES 6                                   | <a href="https://www.youtube.com/watch?v=9QCeL-cRwzo&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=10">https://www.youtube.com/watch?v=9QCeL-cRwzo&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=10</a>   |    |
|   | FLOW OF FLUID AND FLOW THROUGH PIPES 7                                   | <a href="https://www.youtube.com/watch?v=H97wLqFmY00&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=12">https://www.youtube.com/watch?v=H97wLqFmY00&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=12</a>   |    |
|   | FLOW OF FLUID AND FLOW THROUGH PIPES 8                                   | <a href="https://www.youtube.com/watch?v=ZgHMWWMHegfA&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=13">https://www.youtube.com/watch?v=ZgHMWWMHegfA&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=13</a> |    |
|   | FLOW OF FLUID AND FLOW THROUGH PIPES 9                                   | <a href="https://www.youtube.com/watch?v=H8tBaHUTD6k&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=14">https://www.youtube.com/watch?v=H8tBaHUTD6k&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=14</a>   |    |
|   | FLOW OF FLUID AND FLOW THROUGH PIPES 10                                  | <a href="https://www.youtube.com/watch?v=W2HgsfhTRFA&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=15">https://www.youtube.com/watch?v=W2HgsfhTRFA&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=15</a>   |    |
| 3 |                                                                          |                                                                                                                                                                                                                           |                                                                                     |
|   | IMPACT OF JETS, HYDRAULIC TURBINES, CENTRIFUGAL AND RECIPROCATING PUMP 1 | <a href="https://www.youtube.com/watch?v=K0_fmfoW1wA&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=16">https://www.youtube.com/watch?v=K0_fmfoW1wA&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=16</a>   |  |
|   | IMPACT OF JETS, HYDRAULIC TURBINES, CENTRIFUGAL AND RECIPROCATING PUMP 2 | <a href="https://www.youtube.com/watch?v=xRkP3yEdOsk&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=17">https://www.youtube.com/watch?v=xRkP3yEdOsk&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=17</a>   |  |

|   |                                                                                 |                                                                                                                                                                                                                         |                                                                                     |
|---|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>3  | <a href="https://www.youtube.com/watch?v=7pYJftsRhqw&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=18">https://www.youtube.com/watch?v=7pYJftsRhqw&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=18</a> |    |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>4  | <a href="https://www.youtube.com/watch?v=SkatJlMTOp8&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=19">https://www.youtube.com/watch?v=SkatJlMTOp8&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=19</a> |    |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>5  | <a href="https://www.youtube.com/watch?v=PzY2LUvvep8&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=20">https://www.youtube.com/watch?v=PzY2LUvvep8&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=20</a> |    |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>6  | <a href="https://www.youtube.com/watch?v=DpUgZzivzU0&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=21">https://www.youtube.com/watch?v=DpUgZzivzU0&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=21</a> |    |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>7  | <a href="https://www.youtube.com/watch?v=hc35VQlEN98&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=22">https://www.youtube.com/watch?v=hc35VQlEN98&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=22</a> |    |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>8  | <a href="https://www.youtube.com/watch?v=G3mufgCPvHU&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=23">https://www.youtube.com/watch?v=G3mufgCPvHU&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=23</a> |    |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>9  | <a href="https://www.youtube.com/watch?v=AehUhUaiial&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=24">https://www.youtube.com/watch?v=AehUhUaiial&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=24</a> |    |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>10 | <a href="https://www.youtube.com/watch?v=YLPruhlQroA&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=25">https://www.youtube.com/watch?v=YLPruhlQroA&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=25</a> |  |
|   | IMPACT OF JETS, HYDRAULIC TURBINES,<br>CENTRIFUGAL AND RECIPROCATING PUMP<br>11 | <a href="https://www.youtube.com/watch?v=2l1Z1vP23YM&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=26">https://www.youtube.com/watch?v=2l1Z1vP23YM&amp;list=PL1b9Ht9lSqlHpYlanUmZMrVUnF_CABwRk&amp;index=26</a> |  |
| 4 |                                                                                 |                                                                                                                                                                                                                         |                                                                                     |

|   |                     |                                                                                                                                                                                                                         |                                                                                     |
|---|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | PNEUMATIC SYSTEMS 1 | <a href="https://www.youtube.com/watch?v=TS2RXSlu3hY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=27">https://www.youtube.com/watch?v=TS2RXSlu3hY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=27</a> |    |
|   | PNEUMATIC SYSTEMS 2 | <a href="https://www.youtube.com/watch?v=90aWYaj7Uq8&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=28">https://www.youtube.com/watch?v=90aWYaj7Uq8&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=28</a> |    |
|   | PNEUMATIC SYSTEMS 3 | <a href="https://www.youtube.com/watch?v=ymDcv09k5Js&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=29">https://www.youtube.com/watch?v=ymDcv09k5Js&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=29</a> |    |
|   | PNEUMATIC SYSTEMS 4 | <a href="https://www.youtube.com/watch?v=6oRgFwLChYY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=30">https://www.youtube.com/watch?v=6oRgFwLChYY&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=30</a> |    |
|   | PNEUMATIC SYSTEMS 5 | <a href="https://www.youtube.com/watch?v=IV3WgFMztRs&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=31">https://www.youtube.com/watch?v=IV3WgFMztRs&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=31</a> |    |
| 5 |                     |                                                                                                                                                                                                                         |                                                                                     |
|   | HYDRAULIC SYSTEMS 1 | <a href="https://www.youtube.com/watch?v=c-cbwCVweNE&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=32">https://www.youtube.com/watch?v=c-cbwCVweNE&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=32</a> |    |
|   | HYDRAULIC SYSTEMS 2 | <a href="https://www.youtube.com/watch?v=b1jQseqJuDU&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=33">https://www.youtube.com/watch?v=b1jQseqJuDU&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=33</a> |  |
|   | HYDRAULIC SYSTEMS 3 | <a href="https://www.youtube.com/watch?v=pDjHwMge-c0&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=34">https://www.youtube.com/watch?v=pDjHwMge-c0&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=34</a> |  |
|   | HYDRAULIC SYSTEMS 4 | <a href="https://www.youtube.com/watch?v=P3tNv8EQjPc&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=35">https://www.youtube.com/watch?v=P3tNv8EQjPc&amp;list=PL1b9Ht9ISqIHpYlanUmZMrVUnF_CABwRk&amp;index=35</a> |  |

|  |                     |                                                                                                                                                                                                                       |                                                                                   |
|--|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | HYDRAULIC SYSTEMS 5 | <a href="https://www.youtube.com/watch?v=CIOM9pium6s&amp;list=PL1b9Ht9lSqiHpYlanUmZMrVUnFCABwRk&amp;index=36">https://www.youtube.com/watch?v=CIOM9pium6s&amp;list=PL1b9Ht9lSqiHpYlanUmZMrVUnFCABwRk&amp;index=36</a> |  |
|--|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|

| STRENGTH OF MATERIALS |                                      |                                                                                                                                                                                                                       |                                                                                     |
|-----------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                  | TOPIC                                | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1                     |                                      |                                                                                                                                                                                                                       |                                                                                     |
|                       | SYSTEM OF FORCES                     | <a href="https://www.youtube.com/watch?v=IT-3ln1szHY&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=1">https://www.youtube.com/watch?v=IT-3ln1szHY&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=1</a> |    |
|                       | SYSTEM OF FORCES                     | <a href="https://www.youtube.com/watch?v=eauBxokT634&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=2">https://www.youtube.com/watch?v=eauBxokT634&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=2</a> |    |
| 2                     |                                      |                                                                                                                                                                                                                       |                                                                                     |
|                       | MECHANICAL PROPERTIES OF MATERIALS 1 | <a href="https://www.youtube.com/watch?v=2IHZXqAZ-b8&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=3">https://www.youtube.com/watch?v=2IHZXqAZ-b8&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=3</a> |    |
|                       | MECHANICAL PROPERTIES OF MATERIALS 2 | <a href="https://www.youtube.com/watch?v=LQxiol5MDqo&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=4">https://www.youtube.com/watch?v=LQxiol5MDqo&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=4</a> |    |
|                       | MECHANICAL PROPERTIES OF MATERIALS 3 | <a href="https://www.youtube.com/watch?v=2nBh1BvE5cc&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=5">https://www.youtube.com/watch?v=2nBh1BvE5cc&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=5</a> |    |
| 3                     |                                      |                                                                                                                                                                                                                       |                                                                                     |
|                       | GEOMETRICAL PROPERTIES OF SECTIONS 1 | <a href="https://www.youtube.com/watch?v=EELPo1GwH8&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=6">https://www.youtube.com/watch?v=EELPo1GwH8&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=6</a>   |    |
|                       | GEOMETRICAL PROPERTIES OF SECTIONS 2 | <a href="https://www.youtube.com/watch?v=mwHr1QJ5N7s&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=7">https://www.youtube.com/watch?v=mwHr1QJ5N7s&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=7</a> |   |
|                       | GEOMETRICAL PROPERTIES OF SECTIONS 3 | <a href="https://www.youtube.com/watch?v=DQBUyYyEqTo&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=8">https://www.youtube.com/watch?v=DQBUyYyEqTo&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=8</a> |  |
|                       | GEOMETRICAL PROPERTIES OF SECTIONS 4 | <a href="https://www.youtube.com/watch?v=ETTPTh5r2A&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=12">https://www.youtube.com/watch?v=ETTPTh5r2A&amp;list=PL1b9Ht9ISqIFinLTS7xxQ6dRdlp4Jc8Vh&amp;index=12</a> |  |
| 4                     |                                      |                                                                                                                                                                                                                       |                                                                                     |

|   |                                  |                                                                                                                                                                                                                         |                                                                                     |
|---|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | SFD AND BMD                      | <a href="https://www.youtube.com/watch?v=I37o48LitiM&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=9">https://www.youtube.com/watch?v=I37o48LitiM&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=9</a>   |    |
|   | SFD AND BMD                      | <a href="https://www.youtube.com/watch?v=CnbCLi9j7_Y&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=10">https://www.youtube.com/watch?v=CnbCLi9j7_Y&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=10</a> |    |
|   | SFD AND BMD                      | <a href="https://www.youtube.com/watch?v=VVkCAnNHgVw&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=11">https://www.youtube.com/watch?v=VVkCAnNHgVw&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=11</a> |    |
|   | SFD AND BMD                      | <a href="https://www.youtube.com/watch?v=OLx1yPQxwxi&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=13">https://www.youtube.com/watch?v=OLx1yPQxwxi&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=13</a> |    |
| 5 |                                  |                                                                                                                                                                                                                         |                                                                                     |
|   | THEORY OF TORSION AND SPRING - 1 | <a href="https://www.youtube.com/watch?v=JAqGFyRks3s&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=14">https://www.youtube.com/watch?v=JAqGFyRks3s&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=14</a> |    |
|   | THEORY OF TORSION AND SPRING - 2 | <a href="https://www.youtube.com/watch?v=plPX31kiCx&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=15">https://www.youtube.com/watch?v=plPX31kiCx&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=15</a>   |    |
|   | THEORY OF TORSION AND SPRING - 3 | <a href="https://www.youtube.com/watch?v=k6uqWwu8CbA&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=16">https://www.youtube.com/watch?v=k6uqWwu8CbA&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=16</a> |    |
|   | THEORY OF TORSION AND SPRING - 4 | <a href="https://www.youtube.com/watch?v=GAyj6re9wQY&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=17">https://www.youtube.com/watch?v=GAyj6re9wQY&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=17</a> |   |
|   | THEORY OF TORSION AND SPRING - 5 | <a href="https://www.youtube.com/watch?v=PhfdohNYORQ&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=18">https://www.youtube.com/watch?v=PhfdohNYORQ&amp;list=PL1b9Ht9ISqIFInLTS7xxQ6dRdlp4Jc8Vh&amp;index=18</a> |  |

| DESIGN OF MACHINE ELEMENTS |                                      |                                                                                                                                                                                                                       |                                                                                     |
|----------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                       | TOPIC                                | URL                                                                                                                                                                                                                   | QR                                                                                  |
|                            | 1 INTRODUCTION TO ENGINEERING DESIGN | <a href="https://www.youtube.com/watch?v=zD-DviP4BjM&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=1">https://www.youtube.com/watch?v=zD-DviP4BjM&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=1</a> |    |
|                            | TYPES OF FAILURE AND PROBLEM SOLVING | <a href="https://www.youtube.com/watch?v=I_6G_8ggmKo&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=2">https://www.youtube.com/watch?v=I_6G_8ggmKo&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=2</a> |    |
|                            | DESIGN OF JOINTS AND FASTENERS       | <a href="https://www.youtube.com/watch?v=WIEmZpENtB8&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=3">https://www.youtube.com/watch?v=WIEmZpENtB8&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=3</a> |    |
|                            | DESIGN OF SLEEVE AND COTTER JOINT    | <a href="https://www.youtube.com/watch?v=DKMKhSi36Co&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=4">https://www.youtube.com/watch?v=DKMKhSi36Co&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=4</a> |    |
|                            | DESIGN OF KNUCKLE JOINT              | <a href="https://www.youtube.com/watch?v=WQzXzNjEwnc&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=5">https://www.youtube.com/watch?v=WQzXzNjEwnc&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=5</a> |    |
|                            | 2 DESIGN OF SHAFT 1                  | <a href="https://www.youtube.com/watch?v=vuf4f_pUJ6o&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=6">https://www.youtube.com/watch?v=vuf4f_pUJ6o&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=6</a> |  |
|                            | DESIGN OF SHAFT 2                    | <a href="https://www.youtube.com/watch?v=gY8XkXuje10&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=7">https://www.youtube.com/watch?v=gY8XkXuje10&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=7</a> |  |

|   |                               |                                                                                                                                                                                                                           |                                                                                     |
|---|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | DESIGN OF COUPLING            | <a href="https://www.youtube.com/watch?v=u0BsgoqmA8E&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=8">https://www.youtube.com/watch?v=u0BsgoqmA8E&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=8</a>     |    |
|   | DESIGN OF COUPLING            | <a href="https://www.youtube.com/watch?v=yFiSK8fkHcl&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=9">https://www.youtube.com/watch?v=yFiSK8fkHcl&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=9</a>     |    |
| 3 | DESIGN OF BELTS 1             | <a href="https://www.youtube.com/watch?v=93pyq-RTT4M&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=10">https://www.youtube.com/watch?v=93pyq-RTT4M&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=10</a>   |    |
|   | DESIGN OF BELTS 2             | <a href="https://www.youtube.com/watch?v=PZJ4WmQdU2o&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=11">https://www.youtube.com/watch?v=PZJ4WmQdU2o&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=11</a>   |    |
|   | DESIGN OF V BELT 1            | <a href="https://www.youtube.com/watch?v=ArQtJcUXKWw&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=12">https://www.youtube.com/watch?v=ArQtJcUXKWw&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=12</a>   |    |
| 4 | DESIGN OF BEARINGS            | <a href="https://www.youtube.com/watch?v=sAP0gKCcu28c&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=13">https://www.youtube.com/watch?v=sAP0gKCcu28c&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=13</a> |   |
|   | DESIGN OF BEARINGS            | <a href="https://www.youtube.com/watch?v=o6waxuPRmfA&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=14">https://www.youtube.com/watch?v=o6waxuPRmfA&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=14</a>   |  |
|   | DESIGN OF BEARINGS AND LEVERS | <a href="https://www.youtube.com/watch?v=Y4UOEJ2BMuI&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=15">https://www.youtube.com/watch?v=Y4UOEJ2BMuI&amp;list=PL1b9Ht9ISqIFNZEMMpaLDI5Vo0_PWdnlm&amp;index=15</a>   |  |

|   |                    |                                                                                                                                                                                                                         |                                                                                   |
|---|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 5 | DESIGN OF LEVERS 1 | <a href="https://www.youtube.com/watch?v=8J0PML_WDB0&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=16">https://www.youtube.com/watch?v=8J0PML_WDB0&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=16</a> |  |
|   | DESIGN OF LEVERS 2 | <a href="https://www.youtube.com/watch?v=y1XCRZvJZGk&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=17">https://www.youtube.com/watch?v=y1XCRZvJZGk&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=17</a> |  |
|   | DESIGN OF LEVERS 3 | <a href="https://www.youtube.com/watch?v=bTtI2IB5OEg&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=18">https://www.youtube.com/watch?v=bTtI2IB5OEg&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=18</a> |  |
|   | DESIGN OF GEARS    | <a href="https://www.youtube.com/watch?v=Q6s8QYR6gKM&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=20">https://www.youtube.com/watch?v=Q6s8QYR6gKM&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=20</a> |  |
|   | DESIGN OF GEARS    | <a href="https://www.youtube.com/watch?v=9lhqVwyZ7jQ&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=19">https://www.youtube.com/watch?v=9lhqVwyZ7jQ&amp;list=PL1b9Ht9ISqIFNZEMMpaldI5Vo0_PWdnlm&amp;index=19</a> |  |

| HEAT POWER ENGINEERING |                          |                                                                                                                                                                                                                     |                                                                                     |
|------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                   | TOPIC                    | URL                                                                                                                                                                                                                 | QR                                                                                  |
| 1                      |                          |                                                                                                                                                                                                                     |                                                                                     |
|                        | Basics of thermodynamics | <a href="https://www.youtube.com/watch?v=NpI017XBMl&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=1">https://www.youtube.com/watch?v=NpI017XBMl&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=1</a>   |    |
|                        | Specific heat capacities | <a href="https://www.youtube.com/watch?v=NBkzQpIPeFk&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=2">https://www.youtube.com/watch?v=NBkzQpIPeFk&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=2</a> |    |
|                        | Thermodynamic cycles     | <a href="https://www.youtube.com/watch?v=CgA12MPG30Q&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=3">https://www.youtube.com/watch?v=CgA12MPG30Q&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=3</a> |    |
|                        | Universal gas constant   | <a href="https://www.youtube.com/watch?v=vp-eXJpelw&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=4">https://www.youtube.com/watch?v=vp-eXJpelw&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=4</a>   |    |
|                        | Problems 1               | <a href="https://www.youtube.com/watch?v=RyfMEnZ-3zY&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=5">https://www.youtube.com/watch?v=RyfMEnZ-3zY&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=5</a> |    |
|                        | Thermodynamic processes  | <a href="https://www.youtube.com/watch?v=oWoPE3Sng1Y&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=6">https://www.youtube.com/watch?v=oWoPE3Sng1Y&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=6</a> |   |
|                        | Problems 2               | <a href="https://www.youtube.com/watch?v=OZb1A2g1Yc0&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=7">https://www.youtube.com/watch?v=OZb1A2g1Yc0&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=7</a> |  |
|                        | Steady flow system       | <a href="https://www.youtube.com/watch?v=zlKezE3pMes&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=8">https://www.youtube.com/watch?v=zlKezE3pMes&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=8</a> |  |
| 2                      |                          |                                                                                                                                                                                                                     |                                                                                     |
|                        | Thermodynamic air cycles | <a href="https://www.youtube.com/watch?v=o8_ZAfR7zsQ&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=9">https://www.youtube.com/watch?v=o8_ZAfR7zsQ&amp;list=PL1b9Ht9ISqIGJqTGxcqmSEwLa_WWI83e&amp;index=9</a> |  |

|  |                                      |                                                                                                                                                                                                                         |                                                                                     |
|--|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | Otto cycle                           | <a href="https://www.youtube.com/watch?v=4GKw89f1TLc&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=10">https://www.youtube.com/watch?v=4GKw89f1TLc&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=10</a> |    |
|  | Desiel cycle                         | <a href="https://www.youtube.com/watch?v=wa3PR6ZIK3k&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=11">https://www.youtube.com/watch?v=wa3PR6ZIK3k&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=11</a> |    |
|  | Important formulas                   | <a href="https://www.youtube.com/watch?v=9NQ49YTJl2o&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=12">https://www.youtube.com/watch?v=9NQ49YTJl2o&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=12</a> |    |
|  | Problems 1                           | <a href="https://www.youtube.com/watch?v=XXZLB36MKaw&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=13">https://www.youtube.com/watch?v=XXZLB36MKaw&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=13</a> |    |
|  | Problems 2                           | <a href="https://www.youtube.com/watch?v=s6e6piV1ZKE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=14">https://www.youtube.com/watch?v=s6e6piV1ZKE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=14</a> |    |
|  | Fuels and cumbusion 1                | <a href="https://www.youtube.com/watch?v=BQHNB1_z2f8&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=15">https://www.youtube.com/watch?v=BQHNB1_z2f8&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=15</a> |    |
|  | Fuels and cumbusion 2                | <a href="https://www.youtube.com/watch?v=eEfF-uIeXkc&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=16">https://www.youtube.com/watch?v=eEfF-uIeXkc&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=16</a> |   |
|  | Fuels and cumbusion 3                | <a href="https://www.youtube.com/watch?v=-TcECsixCw&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=17">https://www.youtube.com/watch?v=-TcECsixCw&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=17</a>   |  |
|  | Problems in excess air calculations1 | <a href="https://www.youtube.com/watch?v=AJ-ZRi1tnfA&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=18">https://www.youtube.com/watch?v=AJ-ZRi1tnfA&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=18</a> |  |

|   |                                            |                                                                                                                                                                                                                         |                                                                                     |
|---|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | Problems in excess air calculations2       | <a href="https://www.youtube.com/watch?v=VLU8AB9KQQE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=19">https://www.youtube.com/watch?v=VLU8AB9KQQE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=19</a> |    |
| 3 | Air compressors 1                          | <a href="https://www.youtube.com/watch?v=yMVpTkdtfx8&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=20">https://www.youtube.com/watch?v=yMVpTkdtfx8&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=20</a> |    |
|   | Air compressors 2                          | <a href="https://www.youtube.com/watch?v=nRUEqQBA1Zg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=21">https://www.youtube.com/watch?v=nRUEqQBA1Zg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=21</a> |    |
|   | Air compressors 3                          | <a href="https://www.youtube.com/watch?v=BeDcKdZIA2Y&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=22">https://www.youtube.com/watch?v=BeDcKdZIA2Y&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=22</a> |    |
|   | Air compressors 4                          | <a href="https://www.youtube.com/watch?v=bXSq2I8TFqE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=23">https://www.youtube.com/watch?v=bXSq2I8TFqE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=23</a> |    |
|   | Air compressors 5                          | <a href="https://www.youtube.com/watch?v=T1bfKG_lkHU&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=24">https://www.youtube.com/watch?v=T1bfKG_lkHU&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=24</a> |    |
|   | Air compressors 6                          | <a href="https://www.youtube.com/watch?v=9Nlh6WkqNg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=25">https://www.youtube.com/watch?v=9Nlh6WkqNg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=25</a>   |   |
| 4 |                                            |                                                                                                                                                                                                                         |                                                                                     |
|   | Formation of steam and steam calorimeter 1 | <a href="https://www.youtube.com/watch?v=hePx2Izq_xl&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=26">https://www.youtube.com/watch?v=hePx2Izq_xl&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=26</a> |  |
|   | Formation of steam and steam calorimeter 2 | <a href="https://www.youtube.com/watch?v=6G8HTrpL_h4&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=27">https://www.youtube.com/watch?v=6G8HTrpL_h4&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=27</a> |  |

|  |                                             |                                                                                                                                                                                                                         |                                                                                     |
|--|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | Formation of steam and steam calorimeter 3  | <a href="https://www.youtube.com/watch?v=yTA6Z2PWsfl&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=28">https://www.youtube.com/watch?v=yTA6Z2PWsfl&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=28</a> |    |
|  | Formation of steam and steam calorimeter 4  | <a href="https://www.youtube.com/watch?v=MMNkt570S0A&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=29">https://www.youtube.com/watch?v=MMNkt570S0A&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=29</a> |    |
|  | Formation of steam and steam calorimeter 5  | <a href="https://www.youtube.com/watch?v=F9PVUEjCN2Y&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=30">https://www.youtube.com/watch?v=F9PVUEjCN2Y&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=30</a> |    |
|  | Formation of steam and steam calorimeter 6  | <a href="https://www.youtube.com/watch?v=wxC14mTPW1g&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=31">https://www.youtube.com/watch?v=wxC14mTPW1g&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=31</a> |    |
|  | Formation of steam and steam calorimeter 7  | <a href="https://www.youtube.com/watch?v=EDx4cVTdFmY&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=32">https://www.youtube.com/watch?v=EDx4cVTdFmY&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=32</a> |    |
|  | Formation of steam and steam calorimeter 8  | <a href="https://www.youtube.com/watch?v=Q_X8N2lkkq4&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=33">https://www.youtube.com/watch?v=Q_X8N2lkkq4&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=33</a> |    |
|  | Formation of steam and steam calorimeter 9  | <a href="https://www.youtube.com/watch?v=4vf786pTwNA&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=34">https://www.youtube.com/watch?v=4vf786pTwNA&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=34</a> |   |
|  | Formation of steam and steam calorimeter 10 | <a href="https://www.youtube.com/watch?v=mImJ1WqrMg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=35">https://www.youtube.com/watch?v=mImJ1WqrMg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=35</a>   |  |
|  | Formation of steam and steam calorimeter 11 | <a href="https://www.youtube.com/watch?v=3qYI4AFihU&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=36">https://www.youtube.com/watch?v=3qYI4AFihU&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=36</a>   |  |

|   |                                             |                                                                                                                                                                                                                         |                                                                                     |
|---|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | Formation of steam and steam calorimeter 12 | <a href="https://www.youtube.com/watch?v=ZKepBHsOXLE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=37">https://www.youtube.com/watch?v=ZKepBHsOXLE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=37</a> |    |
| 5 |                                             |                                                                                                                                                                                                                         |                                                                                     |
|   | Steam boiler 1                              | <a href="https://www.youtube.com/watch?v=6NT1J5o80_Y&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=38">https://www.youtube.com/watch?v=6NT1J5o80_Y&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=38</a> |    |
|   | Steam boiler 2                              | <a href="https://www.youtube.com/watch?v=O7g9Dfgh8lg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=39">https://www.youtube.com/watch?v=O7g9Dfgh8lg&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=39</a> |    |
|   | Steam boiler 3                              | <a href="https://www.youtube.com/watch?v=k1jvEn7NEU&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=40">https://www.youtube.com/watch?v=k1jvEn7NEU&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=40</a>   |    |
|   | Steam boiler 4                              | <a href="https://www.youtube.com/watch?v=OF9tjJzs4c&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=41">https://www.youtube.com/watch?v=OF9tjJzs4c&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=41</a>   |    |
|   | Steam boiler 5                              | <a href="https://www.youtube.com/watch?v=D24WxN9AFjk&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=42">https://www.youtube.com/watch?v=D24WxN9AFjk&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=42</a> |    |
|   | Steam boiler 6                              | <a href="https://www.youtube.com/watch?v=pw6VePU0x8U&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=43">https://www.youtube.com/watch?v=pw6VePU0x8U&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=43</a> |   |
|   | Steam boiler 7                              | <a href="https://www.youtube.com/watch?v=wUB6MSaE1CE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=44">https://www.youtube.com/watch?v=wUB6MSaE1CE&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=44</a> |  |
|   | Steam boiler 8                              | <a href="https://www.youtube.com/watch?v=Rv8fRDig6w&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=45">https://www.youtube.com/watch?v=Rv8fRDig6w&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=45</a>   |  |

|  |                 |                                                                                                                                                                                                                         |                                                                                   |
|--|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | Steam boiler 9  | <a href="https://www.youtube.com/watch?v=HV5lvz0lrD8&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=46">https://www.youtube.com/watch?v=HV5lvz0lrD8&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=46</a> |  |
|  | Steam boiler 10 | <a href="https://www.youtube.com/watch?v=YAsMGXNxmok&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=47">https://www.youtube.com/watch?v=YAsMGXNxmok&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=47</a> |  |
|  | Steam boiler 11 | <a href="https://www.youtube.com/watch?v=E0DxpQ8UDMk&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=48">https://www.youtube.com/watch?v=E0DxpQ8UDMk&amp;list=PL1b9Ht9ISqIGJgqTGxcqmSEwLa_WWI83e&amp;index=48</a> |  |

| THERMAL AND AUTOMOBILE ENGG |                                            |                                                                                                                                                                                                                       |                                                                                     |
|-----------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                        | TOPIC                                      | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1                           |                                            |                                                                                                                                                                                                                       |                                                                                     |
|                             | Thermal power plant layout                 | <a href="https://www.youtube.com/watch?v=0Tw3QTj9Cu4">https://www.youtube.com/watch?v=0Tw3QTj9Cu4</a>                                                                                                                 |    |
|                             | Merits and demerits of thermal power plant | <a href="https://www.youtube.com/watch?v=6750nVvf-Rk">https://www.youtube.com/watch?v=6750nVvf-Rk</a>                                                                                                                 |    |
|                             | Electrostatic precipitator                 | <a href="https://www.youtube.com/watch?v=cVAcnq8yMuA&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=7">https://www.youtube.com/watch?v=cVAcnq8yMuA&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=7</a> |    |
|                             | Rankin cycle                               | <a href="https://www.youtube.com/watch?v=eTAQ6xEJukM&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=9">https://www.youtube.com/watch?v=eTAQ6xEJukM&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=9</a> |    |
|                             | Rankin cycle                               | <a href="https://www.youtube.com/watch?v=9c6yzentCAA">https://www.youtube.com/watch?v=9c6yzentCAA</a>                                                                                                                 |   |
|                             | Classification of condensers               | <a href="https://www.youtube.com/watch?v=E-9hwZla6_4&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=6">https://www.youtube.com/watch?v=E-9hwZla6_4&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=6</a> |  |
|                             | Evaporation of condensor                   | <a href="https://www.youtube.com/watch?v=kvL8EuiMeIQ&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=5">https://www.youtube.com/watch?v=kvL8EuiMeIQ&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=5</a> |  |

|  |                               |                                                                                                                                                                                                                       |                                                                                     |
|--|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | Problems 1                    | <a href="https://www.youtube.com/watch?v=r7egsacAUkQ">https://www.youtube.com/watch?v=r7egsacAUkQ</a>                                                                                                                 |    |
|  | Problems 2                    | <a href="https://www.youtube.com/watch?v=tdf3bylUP1c">https://www.youtube.com/watch?v=tdf3bylUP1c</a>                                                                                                                 |    |
|  | Refrigerents                  | <a href="https://www.youtube.com/watch?v=67gZ_Q8nbtM">https://www.youtube.com/watch?v=67gZ_Q8nbtM</a>                                                                                                                 |    |
|  | Air conditioning              | <a href="https://www.youtube.com/watch?v=la_JT8fZGr8">https://www.youtube.com/watch?v=la_JT8fZGr8</a>                                                                                                                 |    |
|  | 2 Introduction to heat engine | <a href="https://www.youtube.com/watch?v=53RmkTevadk&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=4">https://www.youtube.com/watch?v=53RmkTevadk&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=4</a> |    |
|  | Two stroke petrol engine      | <a href="https://www.youtube.com/watch?v=85K4_4PfRpQ&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=1">https://www.youtube.com/watch?v=85K4_4PfRpQ&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=1</a> |   |
|  | Liners and pistons            | <a href="https://www.youtube.com/watch?v=UYsu15LqZ2E&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=2">https://www.youtube.com/watch?v=UYsu15LqZ2E&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=2</a> |  |
|  | Rods and engines              | <a href="https://www.youtube.com/watch?v=96gzgrYKA50&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=3">https://www.youtube.com/watch?v=96gzgrYKA50&amp;list=PL1b9Ht9lSqiG_szHgF6Fie9fdDpf8WOE0&amp;index=3</a> |  |

|  |                                   |                                                                                                                                                                                                                         |                                                                                     |
|--|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | Performance of ic engine          | <a href="https://www.youtube.com/watch?v=8D4J06LFEQo">https://www.youtube.com/watch?v=8D4J06LFEQo</a>                                                                                                                   |    |
|  | IC engine performance test        | <a href="https://www.youtube.com/watch?v=R5WFbcebnhk&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=13">https://www.youtube.com/watch?v=R5WFbcebnhk&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=13</a> |    |
|  | Efficiency of ic engines          | <a href="https://www.youtube.com/watch?v=uuFLw-rl04I&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=14">https://www.youtube.com/watch?v=uuFLw-rl04I&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=14</a> |    |
|  | Heat balance sheet                | <a href="https://www.youtube.com/watch?v=gJhHiyZOBAs&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=16">https://www.youtube.com/watch?v=gJhHiyZOBAs&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=16</a> |    |
|  | Performance of ic engine problems | <a href="https://www.youtube.com/watch?v=eJ_Czwbm_5w&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=15">https://www.youtube.com/watch?v=eJ_Czwbm_5w&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=15</a> |    |
|  | NOTE                              | <a href="https://www.youtube.com/watch?v=eFa1mkpE5yA&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=10">https://www.youtube.com/watch?v=eFa1mkpE5yA&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=10</a> |   |
|  | NOTE                              | <a href="https://www.youtube.com/watch?v=rs2-FudbfTI&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=11">https://www.youtube.com/watch?v=rs2-FudbfTI&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=11</a> |  |
|  | NOTE                              | <a href="https://www.youtube.com/watch?v=stqpKzGeLu4&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=12">https://www.youtube.com/watch?v=stqpKzGeLu4&amp;list=PL1b9Ht9ISqIG_szHgF6Fie9fdDpf8WOE0&amp;index=12</a> |  |

## ELECTRICAL DRIVES AND CONTROL

| UNIT | TOPIC                         | URL                                                                                                                                                                                                                   | QR                                                                                  |
|------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1    | DC CIRCUITS AND DC MACHINES 1 | <a href="https://www.youtube.com/watch?v=a5A6-OymGQk&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=1">https://www.youtube.com/watch?v=a5A6-OymGQk&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=1</a> |    |
|      | DC CIRCUITS AND DC MACHINES 2 | <a href="https://www.youtube.com/watch?v=qymHkgawPmg&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=2">https://www.youtube.com/watch?v=qymHkgawPmg&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=2</a> |    |
|      | DC CIRCUITS AND DC MACHINES 3 | <a href="https://www.youtube.com/watch?v=12gsVXqzUpq&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=3">https://www.youtube.com/watch?v=12gsVXqzUpq&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=3</a> |    |
|      | DC CIRCUITS AND DC MACHINES 4 | <a href="https://www.youtube.com/watch?v=DsOAnLka5II&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=4">https://www.youtube.com/watch?v=DsOAnLka5II&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=4</a> |    |
|      | DC CIRCUITS AND DC MACHINES 5 | <a href="https://www.youtube.com/watch?v=DkAbMEAK4Zo&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=5">https://www.youtube.com/watch?v=DkAbMEAK4Zo&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=5</a> |    |
| 2    | AC CIRCUITS AND MACHINES 1    | <a href="https://www.youtube.com/watch?v=gSWxw1j5v04&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=6">https://www.youtube.com/watch?v=gSWxw1j5v04&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=6</a> |   |
|      | AC CIRCUITS AND MACHINES 2    | <a href="https://www.youtube.com/watch?v=KZ-A4bruVN0&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=7">https://www.youtube.com/watch?v=KZ-A4bruVN0&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=7</a> |  |
|      | AC CIRCUITS AND MACHINES 3    | <a href="https://www.youtube.com/watch?v=1cBJC98cen8&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=8">https://www.youtube.com/watch?v=1cBJC98cen8&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=8</a> |  |
|      | AC CIRCUITS AND MACHINES 4    | <a href="https://www.youtube.com/watch?v=-puJbpVG9vU&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=9">https://www.youtube.com/watch?v=-puJbpVG9vU&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=9</a> |  |

|   |                                          |                                                                                                                                                                                                                           |                                                                                     |
|---|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|   | AC CIRCUITS AND MACHINES<br>5            | <a href="https://www.youtube.com/watch?v=uEZSJk5lu0U&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=10">https://www.youtube.com/watch?v=uEZSJk5lu0U&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=10</a>   |    |
|   | AC CIRCUITS AND MACHINES<br>6            | <a href="https://www.youtube.com/watch?v=ENY8GPrOYhA&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=11">https://www.youtube.com/watch?v=ENY8GPrOYhA&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=11</a>   |    |
| 3 | STEPPER AND SERVO<br>MOTORS AND DRIVES 1 | <a href="https://www.youtube.com/watch?v=XlCelH2paaQ&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=12">https://www.youtube.com/watch?v=XlCelH2paaQ&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=12</a>   |    |
|   | STEPPER AND SERVO<br>MOTORS AND DRIVES 2 | <a href="https://www.youtube.com/watch?v=tquv11hp6L8&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=13">https://www.youtube.com/watch?v=tquv11hp6L8&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=13</a>   |    |
|   | STEPPER AND SERVO<br>MOTORS AND DRIVES 3 | <a href="https://www.youtube.com/watch?v=zB5ozdnR4bl&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=14">https://www.youtube.com/watch?v=zB5ozdnR4bl&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=14</a>   |    |
|   | STEPPER AND SERVO<br>MOTORS AND DRIVES 4 | <a href="https://www.youtube.com/watch?v=L9j0qoSWhvk&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=15">https://www.youtube.com/watch?v=L9j0qoSWhvk&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=15</a>   |    |
|   | STEPPER AND SERVO<br>MOTORS AND DRIVES 5 | <a href="https://www.youtube.com/watch?v=nmK_EXqglog&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=16">https://www.youtube.com/watch?v=nmK_EXqglog&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=16</a>   |   |
| 4 | POWER SUPPLY AND LOGIC<br>GATES 1        | <a href="https://www.youtube.com/watch?v=ToWH7FEExNpA&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=17">https://www.youtube.com/watch?v=ToWH7FEExNpA&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=17</a> |  |
|   | POWER SUPPLY AND LOGIC<br>GATES 2        | <a href="https://www.youtube.com/watch?v=LVImh8qvcIq&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=18">https://www.youtube.com/watch?v=LVImh8qvcIq&amp;list=PL1b9Ht9lSqiHM5wGLIFqxqsWE3CGQuGR3&amp;index=18</a>   |  |

|  |                                |                                                                                                                                                                                                                         |                                                                                   |
|--|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | POWER SUPPLY AND LOGIC GATES 3 | <a href="https://www.youtube.com/watch?v=g21dy1DPrk&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=19">https://www.youtube.com/watch?v=g21dy1DPrk&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=19</a>   |  |
|  | POWER SUPPLY AND LOGIC GATES 4 | <a href="https://www.youtube.com/watch?v=087mgcmBI5E&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=20">https://www.youtube.com/watch?v=087mgcmBI5E&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=20</a> |  |
|  | CONTROL ELEMENTS AND PLC 1     | <a href="https://www.youtube.com/watch?v=rDZ9f5tpjBE&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=21">https://www.youtube.com/watch?v=rDZ9f5tpjBE&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=21</a> |  |
|  | CONTROL ELEMENTS AND PLC 2     | <a href="https://www.youtube.com/watch?v=R_s_cmW8WyM&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=22">https://www.youtube.com/watch?v=R_s_cmW8WyM&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=22</a> |  |
|  | CONTROL ELEMENTS AND PLC 3     | <a href="https://www.youtube.com/watch?v=grKnLPTsTCA&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=23">https://www.youtube.com/watch?v=grKnLPTsTCA&amp;list=PL1b9Ht9ISqIHm5wGLIFqxqsWE3CGQuGR3&amp;index=23</a> |  |

| ELECTRICAL MACHINES |                                   |                                                                                                                                                                                                                       |                                                                                    |
|---------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| UNIT                | TOPIC                             | URL                                                                                                                                                                                                                   | QR                                                                                 |
| 1                   | EQUATION OF TRANSFORMERS          | <a href="https://www.youtube.com/watch?v=h9D-4VpHeeA&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=1">https://www.youtube.com/watch?v=h9D-4VpHeeA&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=1</a> |   |
| 2                   | FEILD CONTROL AND TAPPING METHODE | <a href="https://www.youtube.com/watch?v=FWq12BxgJ_w&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=2">https://www.youtube.com/watch?v=FWq12BxgJ_w&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=2</a> |   |
| 3                   | OC AND SC TEST                    | <a href="https://www.youtube.com/watch?v=g6_xXwJTBrM&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=3">https://www.youtube.com/watch?v=g6_xXwJTBrM&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=3</a> |   |
| 4                   | DC MACHINES                       | <a href="https://www.youtube.com/watch?v=qZkQbgq8jmY&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=4">https://www.youtube.com/watch?v=qZkQbgq8jmY&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=4</a> |   |
| 5                   | TRANSFORMER                       | <a href="https://www.youtube.com/watch?v=Lur0HgQJr10&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=5">https://www.youtube.com/watch?v=Lur0HgQJr10&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=5</a> |   |
| 6                   | INTRO DC MOTOR                    | <a href="https://www.youtube.com/watch?v=J2rU1jEAM-s&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=6">https://www.youtube.com/watch?v=J2rU1jEAM-s&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=6</a> |   |
| 7                   | CONSTANT AND VARIABLE LOSS        | <a href="https://www.youtube.com/watch?v=woFPa0vrCcl&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=7">https://www.youtube.com/watch?v=woFPa0vrCcl&amp;list=PL1b9Ht9ISqIG2A8ggseHfr803rtLYPV6Q&amp;index=7</a> |  |

| ELECTRICAL CIRCUITS AND INSTRUMENTS |                                        |                                                                                                                                                     |                                                                                     |
|-------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                                | TOPIC                                  | URL                                                                                                                                                 | QR                                                                                  |
|                                     | AC THROUGH PURE INDUCTOR AND CAPACITOR | <a href="https://www.youtube.com/watch?v=e9YRpLKD0Us">https://www.youtube.com/watch?v=e9YRpLKD0Us</a>                                               |    |
|                                     | KVL AND KCL                            | <a href="https://www.youtube.com/watch?v=zX5SiFQuxd8">https://www.youtube.com/watch?v=zX5SiFQuxd8</a>                                               |    |
|                                     | KVL AND KCL (COPY)                     | <a href="https://www.youtube.com/watch?v=zX5SiFQuxd8">https://www.youtube.com/watch?v=zX5SiFQuxd8</a>                                               |    |
|                                     | RESISTOR IN SERIES AND PARALLEL        | <a href="https://www.youtube.com/watch?v=W7SZQT26Jac">https://www.youtube.com/watch?v=W7SZQT26Jac</a>                                               |   |
|                                     | MESH METHOD AND THEVENIN THEOREM       | <a href="https://www.youtube.com/watch?v=B-cjGGCB74Q&amp;list=PL1b9Ht9ISqLU">https://www.youtube.com/watch?v=B-cjGGCB74Q&amp;list=PL1b9Ht9ISqLU</a> |  |

|  |                                                                                 |                                                                                                       |                                                                                     |
|--|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | THEVENINS<br>THEROM AND                                                         | <a href="https://www.youtube.com/watch?v=snUsb99vQOg">https://www.youtube.com/watch?v=snUsb99vQOg</a> |    |
|  | NORTON<br>THEROM                                                                | <a href="https://www.youtube.com/watch?v=EHdcvuUpws0">https://www.youtube.com/watch?v=EHdcvuUpws0</a> |    |
|  | SUPERPOSITI<br>ON AND MAX<br>POWER<br>TRANSFER<br>THEROMS<br>AND INTRO TO<br>AC | <a href="https://www.youtube.com/watch?v=m-rwjWajKj0">https://www.youtube.com/watch?v=m-rwjWajKj0</a> |    |
|  | AC THROUGE<br>PURE CAP<br>AND IND                                               | <a href="https://www.youtube.com/watch?v=CiNL736ific">https://www.youtube.com/watch?v=CiNL736ific</a> |    |
|  | AC THROUGH<br>PURE<br>INDUCTOR<br>AND<br>CAPACITOR                              | <a href="https://www.youtube.com/watch?v=e9YRpLKD0Us">https://www.youtube.com/watch?v=e9YRpLKD0Us</a> |   |
|  | INTRO TO RL<br>CIRCUITS                                                         | <a href="https://www.youtube.com/watch?v=clDoAoJGd0g">https://www.youtube.com/watch?v=clDoAoJGd0g</a> |  |

|  |                               |                                                                                                                                                                             |                                                                                     |
|--|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | AC THROUGH RC SERIES CIRCUIT\ | <a href="https://www.youtube.com/watch?v=BzIkW2APgeQ">https://www.youtube.com/watch?v=BzIkW2APgeQ</a>                                                                       |    |
|  | RLC SERIES RESONANCE          | <a href="https://www.youtube.com/watch?v=WdfkQN12nRI">https://www.youtube.com/watch?v=WdfkQN12nRI</a>                                                                       |    |
|  | RLC PARALLEL                  | <a href="https://www.youtube.com/watch?v=59V5AGqdvcc&amp;list=PL1b9Ht9ISqIHn-OPuWYNPkeD">https://www.youtube.com/watch?v=59V5AGqdvcc&amp;list=PL1b9Ht9ISqIHn-OPuWYNPkeD</a> |    |
|  | TRANSFORMERS AND DC MACHINES  | <a href="https://www.youtube.com/watch?v=pDoY-FWVXWY">https://www.youtube.com/watch?v=pDoY-FWVXWY</a>                                                                       |    |
|  | INSTRUMENTATION AND CONTROL   | <a href="https://www.youtube.com/watch?v=EFtt5_0mA34&amp;list=PL1b9Ht9ISqIHn-OPuWYNPkeD">https://www.youtube.com/watch?v=EFtt5_0mA34&amp;list=PL1b9Ht9ISqIHn-OPuWYNPkeD</a> |   |
|  | INSTRUMENTATION               | <a href="https://www.youtube.com/watch?v=NlyAZAZ2Kas&amp;list=PL1b9Ht9ISqIHn-OPuWYNPkeD">https://www.youtube.com/watch?v=NlyAZAZ2Kas&amp;list=PL1b9Ht9ISqIHn-OPuWYNPkeD</a> |  |

|  |                                          |                                                                                                       |                                                                                   |
|--|------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | MOTORS AND<br>M AND I                    | <a href="https://www.youtube.com/watch?v=x9jvixNuPpk">https://www.youtube.com/watch?v=x9jvixNuPpk</a> |  |
|  | PMMC                                     | <a href="https://www.youtube.com/watch?v=lkrtEGCZ1aY">https://www.youtube.com/watch?v=lkrtEGCZ1aY</a> |  |
|  | PMMC DC<br>AMMETERE<br>AND VOLT<br>METER | <a href="https://www.youtube.com/watch?v=FCoWyf9wR8k">https://www.youtube.com/watch?v=FCoWyf9wR8k</a> |  |

| LINEAR INTERGRATED CIRCUITS |                       |                                                                                                                                                                                                                       |                                                                                     |
|-----------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                        | TOPIC                 | URL                                                                                                                                                                                                                   | QR                                                                                  |
|                             | IC INTRODUCTION       | <a href="https://www.youtube.com/watch?v=gQtkOmYTuo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=1">https://www.youtube.com/watch?v=gQtkOmYTuo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=1</a>     |    |
|                             | TYPES OF ICS          | <a href="https://www.youtube.com/watch?v=xngXe0hqknI&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=2">https://www.youtube.com/watch?v=xngXe0hqknI&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=2</a> |    |
|                             | OP AMP IN PIN DIAGRAM | <a href="https://www.youtube.com/watch?v=2EiQXZFU6g4&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=1">https://www.youtube.com/watch?v=2EiQXZFU6g4&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=1</a> |    |
|                             | PARAMETER             | <a href="https://www.youtube.com/watch?v=5cZQzIignGc&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=2">https://www.youtube.com/watch?v=5cZQzIignGc&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=2</a>   |    |
|                             | OPEN LOOP OP AMP      | <a href="https://www.youtube.com/watch?v=I2CT1aNUHDo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=3">https://www.youtube.com/watch?v=I2CT1aNUHDo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=3</a>   |    |
|                             | INVERTING AMPLIFIER   | <a href="https://www.youtube.com/watch?v=XTU8d8G1_A&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=5">https://www.youtube.com/watch?v=XTU8d8G1_A&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=5</a>   |   |
|                             | SIGN CHANGER          | <a href="https://www.youtube.com/watch?v=bAbhNRVGlwE&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=3">https://www.youtube.com/watch?v=bAbhNRVGlwE&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=3</a> |  |
|                             | INTEGRATOR            | <a href="https://www.youtube.com/watch?v=U2duY-3Nakg&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=4">https://www.youtube.com/watch?v=U2duY-3Nakg&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=4</a>   |  |

|  |                           |                                                                                                                                                                                                                       |                                                                                     |
|--|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | V TO I AND I TO V         | <a href="https://www.youtube.com/watch?v=int1oOD9gkE&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=6">https://www.youtube.com/watch?v=int1oOD9gkE&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=6</a> |    |
|  | DIFFERENTIAL AMPLIFIER    | <a href="https://www.youtube.com/watch?v=xehHscQQ2vo&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=4">https://www.youtube.com/watch?v=xehHscQQ2vo&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=4</a> |    |
|  | INSTRUMENTATION AMPLIFIER | <a href="https://www.youtube.com/watch?v=az6T4yqtf5g&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=5">https://www.youtube.com/watch?v=az6T4yqtf5g&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=5</a>   |    |
|  | WAVEFORM GENERATOR        | <a href="https://www.youtube.com/watch?v=9h_2yJUXetw&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=6">https://www.youtube.com/watch?v=9h_2yJUXetw&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=6</a>   |    |
|  | DAC APPLICATION           | <a href="https://www.youtube.com/watch?v=GvL374oXdbM&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=7">https://www.youtube.com/watch?v=GvL374oXdbM&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=7</a> |    |
|  | DAC CONVERTER             | <a href="https://www.youtube.com/watch?v=RMHf6X0THOY&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=7">https://www.youtube.com/watch?v=RMHf6X0THOY&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=7</a>   |   |
|  | R 2 R LADDER              | <a href="https://www.youtube.com/watch?v=Qpk3EqZtkxg&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=8">https://www.youtube.com/watch?v=Qpk3EqZtkxg&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=8</a> |  |
|  | ADC                       | <a href="https://www.youtube.com/watch?v=pVxXn21R7Lo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=8">https://www.youtube.com/watch?v=pVxXn21R7Lo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvr8&amp;index=8</a>   |  |

|  |                          |                                                                                                                                                                                                                         |                                                                                     |
|--|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | DUAL SLOPER<br>ADC 1     | <a href="https://www.youtube.com/watch?v=q7pgsLVR0Io&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=9">https://www.youtube.com/watch?v=q7pgsLVR0Io&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=9</a>   |    |
|  | DUAL SLOPER<br>ADC 2     | <a href="https://www.youtube.com/watch?v=rfxZOKoMFMo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvd8&amp;index=9">https://www.youtube.com/watch?v=rfxZOKoMFMo&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvd8&amp;index=9</a>     |    |
|  | IC 555 TIMER             | <a href="https://www.youtube.com/watch?v=syXE40E7fZc&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=10">https://www.youtube.com/watch?v=syXE40E7fZc&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=10</a> |    |
|  | ASTABLE<br>MULTIVIBRATOR | <a href="https://www.youtube.com/watch?v=hzh_TYPorMM&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvd8&amp;index=10">https://www.youtube.com/watch?v=hzh_TYPorMM&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvd8&amp;index=10</a>   |    |
|  | IC<br>REGULATOR          | <a href="https://www.youtube.com/watch?v=7BW7uayah-E&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=11">https://www.youtube.com/watch?v=7BW7uayah-E&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=11</a> |    |
|  | PLL 1                    | <a href="https://www.youtube.com/watch?v=fcky2f6DrS4&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvd8&amp;index=11">https://www.youtube.com/watch?v=fcky2f6DrS4&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvd8&amp;index=11</a>   |   |
|  | PLL 2                    | <a href="https://www.youtube.com/watch?v=axY_Tc3TP2E&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=12">https://www.youtube.com/watch?v=axY_Tc3TP2E&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=12</a> |  |
|  | PLL 3                    | <a href="https://www.youtube.com/watch?v=4HkVvnF9Ey8&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=13">https://www.youtube.com/watch?v=4HkVvnF9Ey8&amp;list=PL1b9Ht9ISqIGDvsfugB4iTF7bzCSYulHV&amp;index=13</a> |  |

|  |       |                                                                                                                                                                                                                         |                                                                                   |
|--|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | PLL 4 | <a href="https://www.youtube.com/watch?v=B4YKsBtk85w&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvrd8&amp;index=12">https://www.youtube.com/watch?v=B4YKsBtk85w&amp;list=PL1b9Ht9ISqIGlaDomHp1gfmRcJNBtvrd8&amp;index=12</a> |  |
|--|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|

# VERY LARGE SCALE INTERGRATION

| UNIT | TOPIC                   | URL                                                                                                                                                                                                                     | QR                                                                                  |
|------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|      | INTRO TO VLSI DESIGN    | <a href="https://www.youtube.com/watch?v=DxGYiNOI7Ts&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=9">https://www.youtube.com/watch?v=DxGYiNOI7Ts&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=9</a>   |    |
|      | OVERVIEW OF CMOS        | <a href="https://www.youtube.com/watch?v=Bzoe1JnlEnY&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=11">https://www.youtube.com/watch?v=Bzoe1JnlEnY&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=11</a> |    |
|      | DIGITAL LOGIC VARIABLES | <a href="https://www.youtube.com/watch?v=0v3n7hIPnmw&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=10">https://www.youtube.com/watch?v=0v3n7hIPnmw&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=10</a> |    |
|      | COMBINATIONAL CIRCUIT   | <a href="https://www.youtube.com/watch?v=4C25Yl-wJil&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=12">https://www.youtube.com/watch?v=4C25Yl-wJil&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=12</a> |    |
|      | DEMUX                   | <a href="https://www.youtube.com/watch?v=6Gt334KbtI8&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=13">https://www.youtube.com/watch?v=6Gt334KbtI8&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=13</a> |    |
|      | ARITHMETIC FUNCTIONS    | <a href="https://www.youtube.com/watch?v=aH_5IW65pgQ&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=14">https://www.youtube.com/watch?v=aH_5IW65pgQ&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=14</a> |  |
|      | DESIGN PROCESS          | <a href="https://www.youtube.com/watch?v=OggjRJ0jNW8&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=15">https://www.youtube.com/watch?v=OggjRJ0jNW8&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=15</a> |  |
|      | VHDL PROGRAMS           | <a href="https://www.youtube.com/watch?v=EYHVGuIxhr8&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=16">https://www.youtube.com/watch?v=EYHVGuIxhr8&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=16</a> |  |

|  |                                        |                                                                                                                                                                                                                         |                                                                                     |
|--|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | VHDL CODE<br>LOGIC GATES               | <a href="https://www.youtube.com/watch?v=yt1FVFOwopg&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=17">https://www.youtube.com/watch?v=yt1FVFOwopg&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=17</a> |    |
|  | ENCODER                                | <a href="https://www.youtube.com/watch?v=0LH-uVbZQbM&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=18">https://www.youtube.com/watch?v=0LH-uVbZQbM&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=18</a> |    |
|  | PLD AND FPGA                           | <a href="https://www.youtube.com/watch?v=TIgzbKAsltc&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=19">https://www.youtube.com/watch?v=TIgzbKAsltc&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=19</a> |    |
|  | SEQUENTIAL<br>CIRCUIT AND<br>FLIP FLOP | <a href="https://www.youtube.com/watch?v=ULI2-ugJF0A&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=1">https://www.youtube.com/watch?v=ULI2-ugJF0A&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=1</a>   |    |
|  | COUNTER INTRO                          | <a href="https://www.youtube.com/watch?v=qvnnY5bujBg&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=2">https://www.youtube.com/watch?v=qvnnY5bujBg&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=2</a>   |    |
|  | SYNCHRONOUS<br>COUNTER                 | <a href="https://www.youtube.com/watch?v=IxfbQmVQ0NI&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=3">https://www.youtube.com/watch?v=IxfbQmVQ0NI&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=3</a>   |   |
|  | SHIFT<br>REGISTERS                     | <a href="https://www.youtube.com/watch?v=1OsEkxQobgE&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=4">https://www.youtube.com/watch?v=1OsEkxQobgE&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=4</a>   |  |
|  | MOORE<br>MACHNINES                     | <a href="https://www.youtube.com/watch?v=lwo071lvC54&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=5">https://www.youtube.com/watch?v=lwo071lvC54&amp;list=PL1b9Ht9ISqIFebUrZ-M4HPXTzPQ1WCOsP&amp;index=5</a>   |  |

|  |          |                                                                                                                                                                                                                       |                                                                                   |
|--|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | STROAGE  | <a href="https://www.youtube.com/watch?v=buuzZEXOzol&amp;list=PL1b9Ht9ISqIFebUrz-M4HPXTzPQ1WCOsP&amp;index=6">https://www.youtube.com/watch?v=buuzZEXOzol&amp;list=PL1b9Ht9ISqIFebUrz-M4HPXTzPQ1WCOsP&amp;index=6</a> |  |
|  | LATCHES  | <a href="https://www.youtube.com/watch?v=5ale5SJcJ9w&amp;list=PL1b9Ht9ISqIFebUrz-M4HPXTzPQ1WCOsP&amp;index=7">https://www.youtube.com/watch?v=5ale5SJcJ9w&amp;list=PL1b9Ht9ISqIFebUrz-M4HPXTzPQ1WCOsP&amp;index=7</a> |  |
|  | COUNTERS | <a href="https://www.youtube.com/watch?v=29Uio9kJB_g&amp;list=PL1b9Ht9ISqIFebUrz-M4HPXTzPQ1WCOsP&amp;index=8">https://www.youtube.com/watch?v=29Uio9kJB_g&amp;list=PL1b9Ht9ISqIFebUrz-M4HPXTzPQ1WCOsP&amp;index=8</a> |  |

| C PROGRAMMING ECE |                    |                                                                                                                                                                                                                       |                                                                                     |
|-------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT              | TOPIC              | URL                                                                                                                                                                                                                   | QR                                                                                  |
|                   | PROGRAM IN C 1     | <a href="https://www.youtube.com/watch?v=vkTvD48ezR0&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=1">https://www.youtube.com/watch?v=vkTvD48ezR0&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=1</a> |    |
|                   | C OPERATOR         | <a href="https://www.youtube.com/watch?v=_J9mPN8XQbQ&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=2">https://www.youtube.com/watch?v=_J9mPN8XQbQ&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=2</a> |    |
|                   | TYPE CONVERSION    | <a href="https://www.youtube.com/watch?v=Ladlu20rYhs&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=3">https://www.youtube.com/watch?v=Ladlu20rYhs&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=3</a> |    |
|                   | LOOPING STATE MENT | <a href="https://www.youtube.com/watch?v=_ngp1w0n2jc&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=4">https://www.youtube.com/watch?v=_ngp1w0n2jc&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=4</a> |    |
|                   | ARRAY & STRING 1   | <a href="https://www.youtube.com/watch?v=P-l6JV8xQb4&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=6">https://www.youtube.com/watch?v=P-l6JV8xQb4&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=6</a> |    |
|                   | ARRAY & STRING 2   | <a href="https://www.youtube.com/watch?v=env4gmr-KKg&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=5">https://www.youtube.com/watch?v=env4gmr-KKg&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=5</a> |  |
|                   | ARRAY & STRING 3   | <a href="https://www.youtube.com/watch?v=7k9x3_SP5Bk&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=7">https://www.youtube.com/watch?v=7k9x3_SP5Bk&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=7</a> |  |

|  |                                                |                                                                                                                                                                                                                         |                                                                                     |
|--|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | SCOPE AND<br>LIFE TIME<br>VARISBLES            | <a href="https://www.youtube.com/watch?v=SMC0RiE8kug&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=8">https://www.youtube.com/watch?v=SMC0RiE8kug&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=8</a>   |    |
|  | STUCTURES                                      | <a href="https://www.youtube.com/watch?v=qDy3JUJ-qOo&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=26">https://www.youtube.com/watch?v=qDy3JUJ-qOo&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=26</a> |    |
|  | STUCTURES<br>UNIONS AND<br>DYNAMIC<br>MEMORY 1 | <a href="https://www.youtube.com/watch?v=F1_WQM-Uf2w&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=27">https://www.youtube.com/watch?v=F1_WQM-Uf2w&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=27</a> |    |
|  | STUCTURES<br>UNIONS AND<br>DYNAMIC<br>MEMORY 2 | <a href="https://www.youtube.com/watch?v=hqllVwKHgYA&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=28">https://www.youtube.com/watch?v=hqllVwKHgYA&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=28</a> |    |
|  | STUCTURES<br>UNIONS AND<br>DYNAMIC<br>MEMORY 3 | <a href="https://www.youtube.com/watch?v=zNtMiwOp5m0&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=29">https://www.youtube.com/watch?v=zNtMiwOp5m0&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=29</a> |    |
|  | C PROGRAMS<br>1                                | <a href="https://www.youtube.com/watch?v=J6dlPmUuL9E&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=32">https://www.youtube.com/watch?v=J6dlPmUuL9E&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=32</a> |   |
|  | C PROGRAMS<br>2                                | <a href="https://www.youtube.com/watch?v=Xh1m0eB4nyc&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=30">https://www.youtube.com/watch?v=Xh1m0eB4nyc&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=30</a> |  |
|  | C PROGRAMS<br>3                                | <a href="https://www.youtube.com/watch?v=Sc-B713mTyY&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=31">https://www.youtube.com/watch?v=Sc-B713mTyY&amp;list=PL1b9Ht9ISqIH8jyLwM2cDGhbYvljrfr8w&amp;index=31</a> |  |

| PROGRAMMING IN C |                    |                                                                                                                                                                                                                       |                                                                                     |
|------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT             | TOPIC              | URL                                                                                                                                                                                                                   | QR                                                                                  |
| 1                | C LANGUAGE 1       | <a href="https://www.youtube.com/watch?v=dlbsTnKojPI&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=1">https://www.youtube.com/watch?v=dlbsTnKojPI&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=1</a> |    |
|                  | C LANGUAGE 2       | <a href="https://www.youtube.com/watch?v=K1yJVbCfCx8&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=2">https://www.youtube.com/watch?v=K1yJVbCfCx8&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=2</a> |    |
| 2                | ALGORITHM          | <a href="https://www.youtube.com/watch?v=RZVxrOLJ3o&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=3">https://www.youtube.com/watch?v=RZVxrOLJ3o&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=3</a>   |    |
|                  | FEATURES OF C      | <a href="https://www.youtube.com/watch?v=EEaTjIMjKRw&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=4">https://www.youtube.com/watch?v=EEaTjIMjKRw&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=4</a> |    |
|                  | INPUT AND OUTPUT 1 | <a href="https://www.youtube.com/watch?v=Tx9XiRww_pw&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=5">https://www.youtube.com/watch?v=Tx9XiRww_pw&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=5</a> |    |
|                  | INPUT AND OUTPUT 2 | <a href="https://www.youtube.com/watch?v=7waVj-x54P4&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=6">https://www.youtube.com/watch?v=7waVj-x54P4&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=6</a> |   |
|                  | INPUT AND OUTPUT 3 | <a href="https://www.youtube.com/watch?v=zaruxWvA6W0&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=7">https://www.youtube.com/watch?v=zaruxWvA6W0&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=7</a> |  |
|                  | BRANCHING          | <a href="https://www.youtube.com/watch?v=ST365wNidMU&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=8">https://www.youtube.com/watch?v=ST365wNidMU&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=8</a> |  |
|                  | LOOPING STATEMENT  | <a href="https://www.youtube.com/watch?v=XRSIz3zHVv8&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=9">https://www.youtube.com/watch?v=XRSIz3zHVv8&amp;list=PL1b9Ht9ISqIE_QjboorJEhsoVOSCioFOE&amp;index=9</a> |  |

|   |                   |                                                                                                                                                                                                                         |                                                                                     |
|---|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 4 | ARRAYS            | <a href="https://www.youtube.com/watch?v=6MrV50NCmag&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=10">https://www.youtube.com/watch?v=6MrV50NCmag&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=10</a> |    |
|   | STRING            | <a href="https://www.youtube.com/watch?v=kqsaIG3bnHo&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=11">https://www.youtube.com/watch?v=kqsaIG3bnHo&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=11</a> |    |
|   | SIMPLE PROGRAMS 1 | <a href="https://www.youtube.com/watch?v=6ze_gU42aA&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=12">https://www.youtube.com/watch?v=6ze_gU42aA&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=12</a>   |    |
|   | SIMPLE PROGRAMS 2 | <a href="https://www.youtube.com/watch?v=cV8sPmzF3F0&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=13">https://www.youtube.com/watch?v=cV8sPmzF3F0&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=13</a> |    |
|   | SIMPLE PROGRAMS 3 | <a href="https://www.youtube.com/watch?v=oNT--K36BmE&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=14">https://www.youtube.com/watch?v=oNT--K36BmE&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=14</a> |    |
| 5 | FUNCTIONS         | <a href="https://www.youtube.com/watch?v=RFQp7MV2Brg&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=15">https://www.youtube.com/watch?v=RFQp7MV2Brg&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=15</a> |    |
|   | ARRAY FUNCNTION 1 | <a href="https://www.youtube.com/watch?v=htHe2hlpz-Y&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=16">https://www.youtube.com/watch?v=htHe2hlpz-Y&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=16</a> |   |
|   | ARRAY FUNCNTION 2 | <a href="https://www.youtube.com/watch?v=D_uxAyaYNy8&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=17">https://www.youtube.com/watch?v=D_uxAyaYNy8&amp;list=PL1b9Ht9ISqIE_QjboorJEhsOVOSCiOFOE&amp;index=17</a> |  |
|   | ARRAY FUNCNTION 3 | <a href="https://www.youtube.com/watch?v=TuE9_ewcfoQ&amp;list">https://www.youtube.com/watch?v=TuE9_ewcfoQ&amp;list</a>                                                                                                 |  |

|  |                          |                                                                                                                             |                                                                                     |  |
|--|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  | ARRAY<br>FUNCNTION 4     | <a href="https://www.youtube.com/watch?v=BN4lzk7II4&amp;list=F">https://www.youtube.com/watch?v=BN4lzk7II4&amp;list=F</a>   |    |  |
|  | ARRAY<br>FUNCNTION 5     | <a href="https://www.youtube.com/watch?v=qb7-4yj4AjY&amp;list=F">https://www.youtube.com/watch?v=qb7-4yj4AjY&amp;list=F</a> |    |  |
|  | ARRAY<br>FUNCNTION 6     | <a href="https://www.youtube.com/watch?v=cBi1UQ77IjY&amp;list=F">https://www.youtube.com/watch?v=cBi1UQ77IjY&amp;list=F</a> |    |  |
|  | ARRAY<br>FUNCNTION 7     | <a href="https://www.youtube.com/watch?v=rc6Knsk6mNo&amp;list=F">https://www.youtube.com/watch?v=rc6Knsk6mNo&amp;list=F</a> |    |  |
|  | ARRAY<br>FUNCNTION 8     | <a href="https://www.youtube.com/watch?v=bPMIzo6Lq-0&amp;list=F">https://www.youtube.com/watch?v=bPMIzo6Lq-0&amp;list=F</a> |    |  |
|  | ARRAY<br>FUNCNTION 9     | <a href="https://www.youtube.com/watch?v=KmbSLd94YVw&amp;list=F">https://www.youtube.com/watch?v=KmbSLd94YVw&amp;list=F</a> |    |  |
|  | ARRAY<br>FUNCNTION<br>10 | <a href="https://www.youtube.com/watch?v=tdWVF3DTTaw&amp;list=F">https://www.youtube.com/watch?v=tdWVF3DTTaw&amp;list=F</a> |   |  |
|  | ARRAY<br>FUNCNTION<br>11 | <a href="https://www.youtube.com/watch?v=AzJSiURSvm4&amp;list=F">https://www.youtube.com/watch?v=AzJSiURSvm4&amp;list=F</a> |  |  |
|  | ARRAY<br>FUNCNTION<br>12 | <a href="https://www.youtube.com/watch?v=hPOAQcHZDc8&amp;list=F">https://www.youtube.com/watch?v=hPOAQcHZDc8&amp;list=F</a> |  |  |

|  |                          |                                                                                                                                                                 |                                                                                     |
|--|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | ARRAY<br>FUNCNTION<br>13 | <a href="https://www.youtube.com/watch?v=yaB2uwD-jX0&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=yaB2uwD-jX0&amp;list=PL896C7E9A5F538888</a>   |    |
|  | ARRAY<br>FUNCNTION<br>14 | <a href="https://www.youtube.com/watch?v=4O3mybv_Vzc0&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=4O3mybv_Vzc0&amp;list=PL896C7E9A5F538888</a> |    |
|  | ARRAY<br>FUNCNTION<br>15 | <a href="https://www.youtube.com/watch?v=m1zBXO96KB4&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=m1zBXO96KB4&amp;list=PL896C7E9A5F538888</a>   |    |
|  | ARRAY<br>FUNCNTION<br>16 | <a href="https://www.youtube.com/watch?v=NPaKw3ZMkz4&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=NPaKw3ZMkz4&amp;list=PL896C7E9A5F538888</a>   |    |
|  | ARRAY<br>FUNCNTION<br>17 | <a href="https://www.youtube.com/watch?v=bf62NgzDheU&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=bf62NgzDheU&amp;list=PL896C7E9A5F538888</a>   |    |
|  | ARRAY<br>FUNCNTION<br>18 | <a href="https://www.youtube.com/watch?v=asQWt3gNYY0&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=asQWt3gNYY0&amp;list=PL896C7E9A5F538888</a>   |    |
|  | ARRAY<br>FUNCNTION<br>19 | <a href="https://www.youtube.com/watch?v=DRhWiU3zKrc&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=DRhWiU3zKrc&amp;list=PL896C7E9A5F538888</a>   |   |
|  | ARRAY<br>FUNCNTION<br>20 | <a href="https://www.youtube.com/watch?v=9LehMag-Ck4&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=9LehMag-Ck4&amp;list=PL896C7E9A5F538888</a>   |  |
|  | ARRAY<br>FUNCNTION<br>21 | <a href="https://www.youtube.com/watch?v=mpc9CGDIGew&amp;list=PL896C7E9A5F538888">https://www.youtube.com/watch?v=mpc9CGDIGew&amp;list=PL896C7E9A5F538888</a>   |  |

|  |                          |                                                                                                                           |                                                                                   |
|--|--------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | ARRAY<br>FUNCNTION<br>22 | <a href="https://www.youtube.com/watch?v=AwRU7uhJz4o&amp;list=">https://www.youtube.com/watch?v=AwRU7uhJz4o&amp;list=</a> |  |
|  | ARRAY<br>FUNCNTION<br>23 | <a href="https://www.youtube.com/watch?v=7mkieLqmj2l&amp;list=">https://www.youtube.com/watch?v=7mkieLqmj2l&amp;list=</a> |  |
|  | ARRAY<br>FUNCNTION<br>24 | <a href="https://www.youtube.com/watch?v=u9WDLnUe-W4&amp;list=">https://www.youtube.com/watch?v=u9WDLnUe-W4&amp;list=</a> |  |
|  | ARRAY<br>FUNCNTION<br>25 | <a href="https://www.youtube.com/watch?v=hBBp8N3Pza0&amp;list=">https://www.youtube.com/watch?v=hBBp8N3Pza0&amp;list=</a> |  |
|  | ARRAY<br>FUNCNTION<br>26 | <a href="https://www.youtube.com/watch?v=bXruT-QUC6Y&amp;list=">https://www.youtube.com/watch?v=bXruT-QUC6Y&amp;list=</a> |  |
|  | ARRAY<br>FUNCNTION<br>27 | <a href="https://www.youtube.com/watch?v=qikImRLwr3M&amp;list=">https://www.youtube.com/watch?v=qikImRLwr3M&amp;list=</a> |  |

| OOPS WITH JAVA |                                        |                                                                                                                                                                                                                         |                                                                                     |
|----------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT           | TOPIC                                  | URL                                                                                                                                                                                                                     | QR                                                                                  |
|                | INTRODUCTION TO OOPS AND JAVA          | <a href="https://www.youtube.com/watch?v=tC5KdXPN2el&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=14">https://www.youtube.com/watch?v=tC5KdXPN2el&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=14</a> |    |
|                | INTRODUCTION TO OOPS AND JAVA          | <a href="https://www.youtube.com/watch?v=9ZHpWtrtNyg&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8">https://www.youtube.com/watch?v=9ZHpWtrtNyg&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8</a>                           |    |
|                | INTRODUCTION TO OOPS AND JAVA          | <a href="https://www.youtube.com/watch?v=fipxcMPhAzM&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=2">https://www.youtube.com/watch?v=fipxcMPhAzM&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=2</a>   |    |
|                | HISTORY AND FEATURES OF JAVA           | <a href="https://www.youtube.com/watch?v=VYIWQxci-pl&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=3">https://www.youtube.com/watch?v=VYIWQxci-pl&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=3</a>   |    |
|                | CONSTANTS AND VARIABLE AND DATA TYPES  | <a href="https://www.youtube.com/watch?v=gYW43NY6o8c&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=4">https://www.youtube.com/watch?v=gYW43NY6o8c&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=4</a>   |    |
|                | DECESION MAKING AND BRANCHING          | <a href="https://www.youtube.com/watch?v=QiugQnyRwOw&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=5">https://www.youtube.com/watch?v=QiugQnyRwOw&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=5</a>   |   |
|                | ARRAYS AND VECTROS                     | <a href="https://www.youtube.com/watch?v=tNUrlutRCHk&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=6">https://www.youtube.com/watch?v=tNUrlutRCHk&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=6</a>   |  |
|                | TYPE CASTING OPERATORS AND EXPRESSIONS | <a href="https://www.youtube.com/watch?v=gOChN_coLno&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=7">https://www.youtube.com/watch?v=gOChN_coLno&amp;list=PL1b9Ht9ISqIEpq_MYpHz-dZjUy-o2skB8&amp;index=7</a>   |  |

|  |                                             |                                                                                                                                                                                                                         |                                                                                    |
|--|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  | STRING CLASSES<br>AND INTERFACES            | <a href="https://www.youtube.com/watch?v=6R7Den1_Ons&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=8">https://www.youtube.com/watch?v=6R7Den1_Ons&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=8</a>   |   |
|  | STRING CLASSES<br>AND INTERFACES            | <a href="https://www.youtube.com/watch?v=6NltFId6hHU&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=9">https://www.youtube.com/watch?v=6NltFId6hHU&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=9</a>   |   |
|  | STRING CLASSES<br>AND INTERFACES            | <a href="https://www.youtube.com/watch?v=9rs04irhz4M&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=10">https://www.youtube.com/watch?v=9rs04irhz4M&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=10</a> |   |
|  | PACKAGES<br>APPLETS,AWT<br>CONTROLS         | <a href="https://www.youtube.com/watch?v=Wq60H_7ikNo&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=11">https://www.youtube.com/watch?v=Wq60H_7ikNo&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=11</a> |   |
|  | PACKAGES<br>APPLETS,AWT<br>CONTROLS         | <a href="https://www.youtube.com/watch?v=s9phlhNqHHU&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=12">https://www.youtube.com/watch?v=s9phlhNqHHU&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=12</a> |   |
|  | EXCEPTIONS<br>MULTITHREADING<br>AND STREAMS | <a href="https://www.youtube.com/watch?v=4RwWQsFyKGS&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=13">https://www.youtube.com/watch?v=4RwWQsFyKGS&amp;list=PL1b9Ht9lSqlEpg_MYpHz-dZjUy-o2skB8&amp;index=13</a> |  |

| DATA STRUCTURE USING C |                              |                                                                                                                                                                                                                       |                                                                                     |
|------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT                   | TOPIC                        | URL                                                                                                                                                                                                                   | QR                                                                                  |
|                        | DATA<br>STRUCTURE<br>INTRO   | <a href="https://www.youtube.com/watch?v=h1EXpL7Gh_M&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=56">https://www.youtube.com/watch?v=h1EXpL7Gh_M&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=56</a> |    |
|                        | MEMORY<br>REPRESENTA<br>TION | <a href="https://www.youtube.com/watch?v=YPz72p9OYIA&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=57">https://www.youtube.com/watch?v=YPz72p9OYIA&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=57</a> |    |
|                        | INFIX TO<br>POSTFIX          | <a href="https://www.youtube.com/watch?v=jfl_UKe0hIY&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=58">https://www.youtube.com/watch?v=jfl_UKe0hIY&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=58</a> |    |
|                        | COMPLEXITY                   | <a href="https://www.youtube.com/watch?v=-TUWmAWIac&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=59">https://www.youtube.com/watch?v=-TUWmAWIac&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=59</a>   |    |
|                        | POINTERS<br>AND STRINGS      | <a href="https://www.youtube.com/watch?v=bYaYbKe32bo&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=60">https://www.youtube.com/watch?v=bYaYbKe32bo&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=60</a> |    |
|                        | QUEUE                        | <a href="https://www.youtube.com/watch?v=nP33i2jJVbU&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=61">https://www.youtube.com/watch?v=nP33i2jJVbU&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=61</a> |   |
|                        | QUEUE<br>PROGRAM             | <a href="https://www.youtube.com/watch?v=0zMhunjpP1U&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=62">https://www.youtube.com/watch?v=0zMhunjpP1U&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=62</a> |  |
|                        | SINGLE<br>LINKED LIST        | <a href="https://www.youtube.com/watch?v=lyCWcSGrhIk&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=63">https://www.youtube.com/watch?v=lyCWcSGrhIk&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=63</a> |  |

|  |                                   |                                                                                                                                                                                                                       |                                                                                     |
|--|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | NODE<br>INSERTION                 | <a href="https://www.youtube.com/watch?v=ftsZBvXUTSI&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=64">https://www.youtube.com/watch?v=ftsZBvXUTSI&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=64</a> |    |
|  | NODE<br>DELETION                  | <a href="https://www.youtube.com/watch?v=trLuM7ih-w&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=65">https://www.youtube.com/watch?v=trLuM7ih-w&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=65</a>   |    |
|  | SINGLE<br>LINKED LIST<br>PROGRAMS | <a href="https://www.youtube.com/watch?v=1zYQgOFNM9w&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=66">https://www.youtube.com/watch?v=1zYQgOFNM9w&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=66</a> |    |
|  | TREE                              | <a href="https://www.youtube.com/watch?v=FhdK-xHsuKs&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=67">https://www.youtube.com/watch?v=FhdK-xHsuKs&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=67</a> |    |
|  | BINARY TREE                       | <a href="https://www.youtube.com/watch?v=MRhVvHr6gw&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=68">https://www.youtube.com/watch?v=MRhVvHr6gw&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=68</a>   |    |
|  | PREORDER<br>TRAVERSAL             | <a href="https://www.youtube.com/watch?v=b93UeVKf6_Q&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=69">https://www.youtube.com/watch?v=b93UeVKf6_Q&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=69</a> |   |
|  | BINARY<br>SEARCH                  | <a href="https://www.youtube.com/watch?v=ilvQWcB_2yg&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=70">https://www.youtube.com/watch?v=ilvQWcB_2yg&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=70</a> |  |
|  | PATHS                             | <a href="https://www.youtube.com/watch?v=azZ_pzvBIW4&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=71">https://www.youtube.com/watch?v=azZ_pzvBIW4&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=71</a> |  |

|  |                     |                                                                                                                                                                                                                       |                                                                                   |
|--|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | GRAPH TRAVERSAL     | <a href="https://www.youtube.com/watch?v=ubAg4jT3zQ&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=72">https://www.youtube.com/watch?v=ubAg4jT3zQ&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=72</a>   |  |
|  | BUBBLE SORT         | <a href="https://www.youtube.com/watch?v=OAhuHuKZUNo&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=73">https://www.youtube.com/watch?v=OAhuHuKZUNo&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=73</a> |  |
|  | BUBBLE SORT PROGRAM | <a href="https://www.youtube.com/watch?v=fx1UXvjlgs&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=74">https://www.youtube.com/watch?v=fx1UXvjlgs&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=74</a>   |  |
|  | COLLISION           | <a href="https://www.youtube.com/watch?v=tPwUn8tVN8E&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=75">https://www.youtube.com/watch?v=tPwUn8tVN8E&amp;list=PL1b9Ht9ISqIGj_iF2BjQj5DF_yOEI1hg&amp;index=75</a> |  |

| WEB PROGRAMMING |                       |                                                                                                                                                                                                                         |                                                                                     |
|-----------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| UNIT            | TOPIC                 | URL                                                                                                                                                                                                                     | QR                                                                                  |
|                 |                       |                                                                                                                                                                                                                         |                                                                                     |
|                 | WEB<br>1 PROGRAMING 1 | <a href="https://www.youtube.com/watch?v=oZ7jv4z8VKY&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=5">https://www.youtube.com/watch?v=oZ7jv4z8VKY&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=5</a>   |    |
|                 | INTERNET TOOLS<br>1   | <a href="https://www.youtube.com/watch?v=0GhBWM5-vyk&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=6">https://www.youtube.com/watch?v=0GhBWM5-vyk&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=6</a>   |    |
|                 | INTERNET TOOLS<br>2 2 | <a href="https://www.youtube.com/watch?v=WKDMBTC8w9E&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=7">https://www.youtube.com/watch?v=WKDMBTC8w9E&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=7</a>   |    |
|                 | HTML 1                | <a href="https://www.youtube.com/watch?v=gpz61ge3xiM&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=8">https://www.youtube.com/watch?v=gpz61ge3xiM&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=8</a>   |    |
|                 | HTML 2                | <a href="https://www.youtube.com/watch?v=SIRCvKZc6wk&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=9">https://www.youtube.com/watch?v=SIRCvKZc6wk&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=9</a>   |   |
|                 | HTML 3                | <a href="https://www.youtube.com/watch?v=pY5_vfQ284&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=10">https://www.youtube.com/watch?v=pY5_vfQ284&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=10</a>   |  |
|                 | ADVANCED HTML         | <a href="https://www.youtube.com/watch?v=qHw-T8KRfgU&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=11">https://www.youtube.com/watch?v=qHw-T8KRfgU&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=11</a> |  |

|  |                             |                                                                                                                                                                                                                         |                                                                                     |
|--|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | FRAMES                      | <a href="https://www.youtube.com/watch?v=780E7qLaH-I&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=12">https://www.youtube.com/watch?v=780E7qLaH-I&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=12</a> |    |
|  | FORMATTING TEXT AND FORMATS | <a href="https://www.youtube.com/watch?v=wih578ZdWZU&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=13">https://www.youtube.com/watch?v=wih578ZdWZU&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=13</a> |    |
|  | JAVASCRIPT                  | <a href="https://www.youtube.com/watch?v=NMkoQeeal2g&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=14">https://www.youtube.com/watch?v=NMkoQeeal2g&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=14</a> |    |
|  | BREAK STATEMENT             | <a href="https://www.youtube.com/watch?v=epHeyZRPxbw&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=15">https://www.youtube.com/watch?v=epHeyZRPxbw&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=15</a> |    |
|  | DIALOG BOX                  | <a href="https://www.youtube.com/watch?v=iZ90NNtMryY&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=16">https://www.youtube.com/watch?v=iZ90NNtMryY&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=16</a> |    |
|  | IMAGE MAPS                  | <a href="https://www.youtube.com/watch?v=LJMsVIAcL6s&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=17">https://www.youtube.com/watch?v=LJMsVIAcL6s&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=17</a> |   |
|  | SERVER SIDE SCRIPTING 1     | <a href="https://www.youtube.com/watch?v=zlsmY4XiW3g&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=18">https://www.youtube.com/watch?v=zlsmY4XiW3g&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=18</a> |  |
|  | SERVER SIDE SCRIPTING 2     | <a href="https://www.youtube.com/watch?v=aMNHajXhhlU&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=19">https://www.youtube.com/watch?v=aMNHajXhhlU&amp;list=PL1b9Ht9ISqIHQ28v-RQQbySmO4YholhOk&amp;index=19</a> |  |

|  |                            |                                                                                                       |                                                                                   |
|--|----------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | SERVER SIDE<br>SCRIPTING 3 | <a href="https://www.youtube.com/watch?v=zlsmY4XiW3g">https://www.youtube.com/watch?v=zlsmY4XiW3g</a> |  |
|  | SERVER SIDE<br>SCRIPTING 4 | <a href="https://www.youtube.com/watch?v=aMNHajXhhIU">https://www.youtube.com/watch?v=aMNHajXhhIU</a> |  |
|  | SERVER SIDE<br>SCRIPTING 5 | <a href="https://www.youtube.com/watch?v=qdl91J80wtk">https://www.youtube.com/watch?v=qdl91J80wtk</a> |  |
|  | SERVER SIDE<br>SCRIPTING 6 | <a href="https://www.youtube.com/watch?v=dHf-RzdKNEU">https://www.youtube.com/watch?v=dHf-RzdKNEU</a> |  |