

**AUTONOMOUS**

**I B. Tech Semester-II Mid- II (AY 2019-20)**

**Video Lectures BEEE- Part-A (CSE, IT)**

| **S No** | **Topic Name** | **Links/Video Files** |
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| **Part-A**  **UNIT-I** | | |
| **1** | Basic Definitions | <https://youtu.be/q2V0ExApZRY> |
| **2** | Classification of Electrical Circuit Elements | <https://youtu.be/uQQ4ETkEca0> |
| **3** | Electrical Sources | <https://youtu.be/uO-GiHXkRqY> |
| **4** | KVL and KCL | <https://youtu.be/nXIGYO1U-tU> |
| **5** | Series and Parallel Circuits | <https://youtu.be/5nVVXF-yhcc> |
| **6** | Star-Delta transformation | <https://youtu.be/yrEJxIRVQg8> |
| **7** | AC Circuits basics | <https://youtu.be/5CgfwcUeuyU> |
| **8** | AC Circuits Power Active power and Reactive power | <https://youtu.be/0yfnPlFroh8> |
| **9** | AC Circuits Average and RMS value | <https://youtu.be/I6-LwGbdFGU> |
| **UNIT-II** | |  |
| **1** | Constructional details of DC Machines | <https://youtu.be/QBFnIGXCL58> |
| **2** | EMF equation of DC Generator | <https://youtu.be/NDJsPrLF0lo> |
| **3** | Classification of DC Generator | <https://youtu.be/mTKhp4aEMYU> |
| **4** | Applications of DC Generator | <https://youtu.be/i6aTWttoVPA> |
| **5** | Principle operation of DC Motor | <https://youtu.be/d8zXyZPes-I> |
| **6** | Torque expression of DC Motor | <https://youtu.be/n2vjqoPmKII> |
| **7** | Speed control ofDC Motor | <https://youtu.be/HQqIcOgZkIg> |
| **8** | Brake test on DCMotor | <https://youtu.be/qzs_7qbZBpg> |
| **UNIT-III** | |  |
| **1** | Construction and Principle operation of 1-phase T/F | <https://youtu.be/f5bc0ICkcGE> |
| **2** | EMF equation of Transformer | <https://youtu.be/FMx9ZfQPCgA> |
| **3** | Ideal Transformer on No-Load and its Phasor diagrams | <https://youtu.be/i9AIebYhsjw> |
| **4** | Construction and types of Three Phase Induction Motor | <https://youtu.be/iEko_LuwdVA> |
| **5** | Principle operation of Three Phase Induction Motor | <https://youtu.be/m0d0ljAnfZ0> |

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| **Part-B**  **UNIT-IV** | | |
| **1** | Classification of materials based on energy band diagram | https://youtu.be/pBOB6CPNVz4 |
| **2** | Current Density in Semiconductors | <https://youtu.be/qX30gLaZNIU> , <https://youtu.be/XJvdlTy9Qmc> |
| **3** | Intrinsic semiconductors | <https://youtu.be/Qdtu5_Y2j18> |
| **4** | Intrinsic semiconductors and properties of Si and Ge | https://youtu.be/VbTJ31UC\_Cw |
| **5** | Extrinsic semiconductor and n-type | https://youtu.be/r1j\_0EF0Pd4 |
| **6.** | p-type semiconductor | https://youtu.be/4sb9xq6s0rA |
| **7.** | Law of Mass action law | <https://youtu.be/H0bJrMw4KW0> |
| **8.** | Drift and Diffusion currents, formation of P-N- Junction (zero bias) | https://youtu.be/VD8glBLY1ik |
| **9.** | p-n junction diode | https://youtu.be/9ZBAE2dSVQA |
| **10.** | Breakdown mechanism and rectifier technique | https://youtu.be/cGrr-lCktV4 |
| **11.** | Bridge rectifier and clippers | https://youtu.be/xIW2H-EC2Qw |
| **UNIT-V** | | |
| **1** | Basics of Transistors | <https://youtu.be/mTB4BevMSk0> |
| **2** | Working of NPN and PNP Transistor | <https://youtu.be/DQAi5L1nBqE> |
| **3** | Common Base Configuration | <https://youtu.be/oW1AJBcds54> |
| **4** | Common Emitter Configuration | <https://youtu.be/ePyf2iX2dIE> |
| **5** | Basics of Operational Amplifier | <https://youtu.be/t9CrDQmy21c> |