



Department of Sciences and Humanities
Subject: Mathematics-II
Web links of Lecture Videos

S.No	Lecture No.	Topic	URL
UNIT-III LINEAR DIFFERENTIAL EQUATIONS OF HIGHER ORDER			
1	Lecture No. 1	Int.to Differential equators of first and higher order basics	https://youtu.be/GmagPJ4-8ww
2	Lecture No.2	Evaluation methods to get complementary function	https://youtu.be/UW1QkLy-jsk
3	Lecture No.3	Evaluation of Particular integrals when exponential function	https://youtu.be/VLHiCmTJsic
4	Lecture No. 4	$Q(x) = \text{Sin}x$, $\text{cos}x$ particular integrals . Non linear functions , $x(v(X))$ all cases	https://youtu.be/YSmrgsf9brA
5	Lecture No.5	Variation of parameters & Cauchey's Homogeneous Linear equation	https://youtu.be/-iHsB_YjNfw
6	Lecture No.6	Method of Reduction of order	https://youtu.be/eXv9LAd30oc
UNIT-IV SPECIAL FUNCTIONS			
7	Lecture No.7	Special functions –properties and problems-1	https://youtu.be/v1jCWnFUO4g
8	Lecture No.8	Special functions -2 (Problems on them)	https://youtu.be/0lCv-6bTlxc
9	Lecture No.9	Special functions-3 Properties and problems	https://youtu.be/k0V1UshcHZw
10	Lecture No.10	Special functions-4 Power series Method	https://youtu.be/y59Tcd6sg78
11	Lecture No.11	Special functions-5 Legendre D.E- problems	https://youtu.be/zz_BlOleM2k
UNIT-V LAPLACE TRANSFORMS			
12	Lecture No.12	Laplace transforms introduction – First shift theorem	https://youtu.be/BBZ54hCViLk
13	Lecture No.13	Properties of Laplace –Theorems – Unit & periodic function	https://youtu.be/k_EYrB7Y7LI
14	Lecture No.14	Theorems and related problems	https://youtu.be/zesuQUokrql
15	Lecture No.15	Inverse Laplace Transforms	https://youtu.be/5tVov5YW-sw
16	Lecture No.16	Inverse Laplace –problems	https://YOUTU.BE/3YvurV2sUZk
17	Lecture No.17	Applications of Laplace Transforms	https://youtu.be/VaD8WOFgLyl



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Department of Sciences and Humanities

Subject: English

Web links of Lecture Videos

S.No.	Lecture No.	Topic	URL
UNIT-III			
1	Lecture1	Letter Writing	https://youtu.be/Di6h4I5hRoA
2	Lecture2	Voice	https://youtu.be/HvsHRqfprSQ
3	Lecture3	I have a dream	https://youtu.be/O6kN6tUeryk
UNIT-IV			
4	Lecture4	Report Writing	https://youtu.be/mXVO2ktpSlS
5	Lecture5	Speech	https://youtu.be/r6cXVwOOGs4
6	Lecture6	Road Not Taken	https://youtu.be/nshUXEv2Acs
UNIT-V			
7	Lecture7	Statement Of Purpose	https://youtu.be/22cqnF8z3hE
8	Lecture8	Tenses	https://youtu.be/4HKyBsKuxuY



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Department of Sciences and Humanities

Subject: Chemistry

Web links of Lecture Videos

S.No.	Lecture No.	Topic	URL
UNIT-II WATER CHEMISTRY and CORROSION			
1	Lecture1	Water softening by Ion exchange method	https://youtu.be/fWjn-niCSH8
2	Lecture2	Water softening by Reverse osmosis	https://youtu.be/Wf0j0Tdb9bM
3	Lecture3	Specifications of Potable water, Disinfection by Chlorination and Breakpoint chlorination	https://youtu.be/Bnf8Q-hgInI
UNIT-III MATERIAL CHEMISTRY			
4	Lecture4	Introduction to Polymers	https://youtu.be/jcsBp9y7s5Y
5	Lecture5	Preparation, Properties and Uses of PVC, Bakelite, Nylon-6,6 and Bakelite	https://youtu.be/FIFFLrap4HA
6	Lecture6	Preparation, Properties and Uses of Buna-S, Butyl rubber and Silicone rubber	https://youtu.be/mHls3st86Ck
7	Lecture7	Conducting Polymers	https://youtu.be/UglIiPTdu5c
8	Lecture8	Biodegradable Polymers	https://youtu.be/gqviXgspp6w
UNIT-IV CHEMICAL FUELS			
9	Lecture9	Introduction and Classification of Chemical fuels, Requirements of a good fuel	https://youtu.be/zxMmKWclp_U
10	Lecture10	Advantages and Disadvantages of Solid, Liquid and Gaseous fuels	https://youtu.be/uahC01m3f8I
11	Lecture11	HCV, LCV and Theoretical calculation using Dulong's formula – Numerical problems	https://youtu.be/7lx7ODeDWC4
12	Lecture12	Coal – Ranking, Proximate analysis and Ultimate analysis	https://youtu.be/TMCxY-MnI5Q
13	Lecture13	Fractional distillation of crude oil and important fractions – Gasoline, Diesel and Kerosene	https://youtu.be/zENa7fUZWIw
14	Lecture14	Cracking – its significance, Moving bed catalytic cracking method	https://youtu.be/EGAOMjyiSDw
15	Lecture15	Knocking, Octane number and Cetane number	https://youtu.be/ra-dKpWB1Fc
16	Lecture16	Gaseous fuels – LPG and CNG	https://youtu.be/moNfR0ZRWks
17	Lecture17	Combustion – Calculation of air quantities – Numerical problem	https://youtu.be/lAbS1BeawcA
UNIT-V			
18	Lecture18	Green Chemistry and example of clean technology	https://youtu.be/8hY5YYW6lGk
19	Lecture19	Biodiesel	https://youtu.be/uV2E8vr_GJ8
20	Lecture20	Carbon neutrality	https://youtu.be/CCVICUOhGEO
21	Lecture21	Composites	https://youtu.be/_Y5PIXSEZNw



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Subject: Physics

YouTube links of Lecture Videos

S.No	Lecture No.	Topic	URL
Unit-3: Band Theory of Solids and Dielectrics			
1	Lecture 1	Free Electron Theory and Kronig-Penny Model	https://youtu.be/EfOJ3Vqf8Xw
2	Lecture 2	Different energy bands, concept of hole	https://youtu.be/SYiICfzKLhQ
3	Lecture 3	Semiconductors and P-N junction diode	https://youtu.be/gQKuUMqjpZU
4	Lecture 4	Thermistor and its characteristics	https://youtu.be/sNrFN-iRSyU
5	Lecture 5	Hall Effect and its applications	https://youtu.be/orjQpBzLd3k
6	Lecture 6	Dielectrics, types of polarizations, Electronic, ionic, orientational and Space charge polarizations, expression for electronic polarizability	https://youtu.be/660GZ42r0fs
7	Lecture 7	Frequency and temperature dependence of dielectric polarizations, determination of dielectric constant by capacitance bridge method	https://youtu.be/qHlczHe05eo
8	Lecture 8	Ferroelectricity, Barium Titanate and applications of ferroelectrics	https://youtu.be/0zFBIf1GVc8
Unit-4: Magnetic Materials and Super conductivity			
9	Lecture 9	Introduction to magnetism, Classification of Magnetic materials	https://youtu.be/qWf19jruu2s
10	Lecture 10	Antiferro, ferromagnetic materials, Weiss internal molecular field theory and Curie-wiess law.	https://youtu.be/3fomDjJjAI4
11	Lecture 11	BH curve, soft and hard Magnetic materials	https://youtu.be/DB73mcDFjRc
12	Lecture 12	Introduction to Superconductivity	https://youtu.be/eygnXaIbbzc
13	Lecture 13	Effect of magnetic field, temperature and current on superconductors	https://youtu.be/WUBzJveWauU
14	Lecture 14	Meissner effect in super conductors	https://youtu.be/Zesgr7ZBGrY
15	Lecture 15	Types of Super conductors and Isotope effect in super conductors	https://youtu.be/E5UQBRVzsvc
16	Lecture 16	BCS Theory	https://youtu.be/cQMy17C7rJ8
17	Lecture 17	High Temperature Superconductors and applications of super conductors	https://youtu.be/7fbXBR-EDXQ
Unit-5: Lasers and Fiber Optics			
18	Lecture 18	Characteristics of LASERS, Spontaneous and stimulated emissions	https://youtu.be/dO430nefEYg
19	Lecture 19	Pumping, Population Inversion, Important parts of LASER	https://youtu.be/HPNoMtT3CPk
20	Lecture 20	Ruby LASER	https://youtu.be/T-BzfRIO1oA
21	Lecture 21	He-Ne LASER	https://youtu.be/jSDQDW3ITQo
22	Lecture 22	Semiconductor LASER and Applications of LASERS	https://youtu.be/z2yZgLIWULk
23	Lecture 23	Introduction to Optical fibers, Propagation of light through optical fibers, acceptance and numerical aperture	https://youtu.be/0fm8msEdD0A
24	Lecture 24	Different types of optical fibers	https://youtu.be/iDtN1mdg9Q8
25	Lecture 25	Fiber drawing method(Double crucible method), Losses in optical fibers, Applications of optical fibers	https://youtu.be/uypqN_m5Yr0



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B.E. II - Semester
Subject: Programming for Problem Solving
Web links of Lecture Videos

S.No	Lecture No.	Topic	URL
<u>UNIT- 3</u>			
1.	Lecture No. 1	Functions-part1	https://youtu.be/tcnUa0OH3I0
2.	Lecture No.2	Functions—part2	https://youtu.be/WCTGas2Sbyc
3.	Lecture No.3	Functions—part2	https://youtu.be/hrGGpzBa0_A
4.	Lecture No. 4	Functions-part4	https://youtu.be/W38yBasQw9s
5.	Lecture No.5	Functions—part5	https://youtu.be/jNa7BCUbjc https://youtu.be/uGNQ8iGKTxc
<u>UNIT-4</u>			
6.	Lecture No. 6	Structures-part1	https://youtu.be/Ipt2Ldv3coM
7.	Lecture No.7	Structures-part2	https://youtu.be/0NSjfhmM47g
8.	Lecture No.8	Structures-part3	https://youtu.be/7OBsZD-J_IU
<u>UNIT-5</u>			
9.	Lecture No.9	Pointers-part1	https://youtu.be/UoK1fsGwMDw
10.	Lecture No.10	Pointers-part2	https://youtu.be/Pc47dG327nY
11.	Lecture No.11	Pointers-part3	https://youtu.be/bYLGpAdOWIs
12.	Lecture No.12	Files	https://youtu.be/TGuLESwaSWI https://youtu.be/k-NhnSOHbJA https://youtu.be/k-NhnSOHbJA
13.	Lecture No.13	Arrays	https://youtu.be/jNa7BCUbjc https://youtu.be/uGNQ8iGKTxc



B.E. II - Semester
Subject: Basic Electrical Engineering
Web links of Lecture Videos

S.No	Lecture No.	Topic	URL
1.	Lecture No. 1	Faraday's law of electro magnetic induction	https://youtu.be/LSE1BmN4JJo
2.	Lecture No.2	Ideal & Practical Transformer operation at No-load & load condition & Efficiency	https://youtu.be/9O8zvDdoy34 https://youtu.be/GEm-1-QEctI https://youtu.be/eQ5qXnFumYU
3.	Lecture No.3	O.C & S.C test on transformer , Auto transformer & poly phase transformer	https://youtu.be/DT-wyOURX2g https://youtu.be/jlilZW6hOj4
4.	Lecture No. 4	Three phase induction motor	https://youtu.be/Oh8DoYUBiMA
5.	Lecture No.5	Single phase induction motor-Construction & Principle of operation	https://youtu.be/f3qURYjByoE
6.	Lecture No. 6	Capacitor start & Capacitor run induction motors and their application	https://youtu.be/g5ts9z5lzCU
7.	Lecture No.7	DC Generators-Dynamically induced emf, Fleming's right hand and left hand rules	https://youtu.be/yHuHJIXQoRo
8.	Lecture No.8	DC Generators-Construction, Principle of operation and EMF equation	https://youtu.be/wZPOeHEAAew
9.	Lecture No. 9	DC Generators-Types of DC generators	https://youtu.be/3eeSb_rpB-o
10.	Lecture No.10	DC Generators-OC characteristics and applications	https://youtu.be/p-zOozcQd8I
11.	Lecture No.11	DC Motors-Principle of operation	https://youtu.be/hLYnX9UXD2E
12.	Lecture No.12	DC Motors-Types of DC motors and applications	https://youtu.be/JDZB9iN0fTI
13.	Lecture No.13	Switchgear, Components of switchgear, switch fuse unit, MCB,MCB Construction & working,	https://youtu.be/MRy8PEtN9mk
14.	Lecture No.14	ELCB & MCCB Wires and Cables, Types of wires and cables and Earthing	https://youtu.be/KGL4Iic30Co
15.	Lecture No.15	Battery,Working,Types of Batteries, Characteristics of battery, Elementary calculations for energy consumption, power factor improvement and battery backup	https://youtu.be/k0MDpBqTlz0



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Department of Sciences and Humanities
Subject: Indian Constitution
Web links of Lecture Videos

S.No	Lecture No	Topic	URL
<u>Unit-4</u>			
1.	Lecture No. 1	Central State Relations	https://youtu.be/VAgFe2MY5ec
2.	Lecture No. 2	Interstate Council	https://youtu.be/bHbtmml_tHQ
3.	Lecture No. 3	NITI Ayog	https://youtu.be/Ka-KwOa9Lrk
4.	Lecture No. 4	Finance Commission of India	https://youtu.be/fvkb7sflKXg
<u>Unit-5</u>			
5.	Lecture No.5	Election commission India,	https://youtu.be/VJ_69E9AB60
6.	Lecture No.6	National Human Rights Commission, National Commission for Women	https://youtu.be/DMXhkj6yyhE



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B.E. II - Semester
Subject: Environmental Science
Web links of Lecture Videos

S.No	Lecture No	Topic	URL
1.	Lecture No. 1	Biodiversity	https://youtu.be/p_JVvo3QoJM
2.	Lecture No. 2	Values of Biodiversity	https://youtu.be/iRxRorErrOg
3.	Lecture No. 3	Conservation of Biodiversity	https://youtu.be/iMc70fp9OqQ
4.	Lecture No. 4	Hotspots of Biodiversity in India	https://youtu.be/X81eOwaUXUg
5.	Lecture No. 5	Threats to Biodiversity	https://youtu.be/DPDZ00OpwEg
6.	Lecture No. 6	Introduction to Environmental Pollution	https://youtu.be/odWGBqU6LHA