

YENEPOYA INSTITUTE OF TECHNOLOGY, MOODBIDRI
Department of Engineering Chemistry
Details of Online Classes

Academic Year: 2019-2020

Semester: II

Course: Engineering Chemistry

Course Code: 18CHE22

Serial No:	Date	Module	Topics Covered	Material link (Video/ppt/Notes/ Question Bank)
1	26-03-2020	Module V	1) Nanomaterial introduction, Synthesis by Sol Gel method	https://drive.google.com/open?id=15YcM7FDzWREA4IFhs9QDtIG4a75pfpZ1
2	27-03-2020		2) Synthesis by Chemical Vapour Deposition Method, Fullerene	https://drive.google.com/open?id=1o-fREqJxhVz1WVUIBDiH1Zg8t9ON2Rm4
3	28-03-2020		3) Carbon Nanotubes, Graphenes, Size dependent properties of nanomaterials	https://drive.google.com/open?id=1OfO8L9j-0HRTvRef6Gmhg-KngLZDvqbt
4	30-03-2020	Module IV	1) Water Chemistry: Introduction, sources and impurities of water, Sources of water pollution	https://drive.google.com/open?id=1egV_xl5gPO5ooe3Zi3la6nlhVjiBQ2le
5	31-03-2020		2)boiler feed water, boiler troubles with disadvantages-scale and sludge formation. Boiler corrosion (due to dissolved O ₂ , CO ₂ and MgCl ₂), Sewage, Definitions of Biological oxygen demand (BOD) and Chemical Oxygen demand (COD), Determination of COD, Numerical problems on COD,	https://drive.google.com/open?id=1sHzuyIbkgS1eBEqnKkkwsrwgsmRsE2ZB
6	01-04-2020		3) Chemical analysis of water: Sulphates (Gravimetry) and Fluorides (Colorimetry).	https://drive.google.com/open?id=1MOUz7P2No1H015DgdsuQ88GxsOU4DUet
7	03-04-2020		4) Sewage treatment: Primary, secondary (activated sludge) and tertiary methods.	https://drive.google.com/open?id=1I7uUQawG9HRbqOlXZNQPdkqzZvNQ3Q1A

			Softening of water by ion exchange process. Desalination of sea water by reverse osmosis.	
8	06-04-2020		5) Environmental Pollution: Introduction, air pollutants, sources, effects and control of primary air pollutants-Carbon monoxide, Oxides of nitrogen, Hydrocarbons.	https://drive.google.com/open?id=1m6lAv--SxeejFNfqz8zWfGa1D7vkA4L8
9	08-04-2020		6) Sources, effects and control of Oxides of sulphur, particulate matter, Mercury and Lead	https://drive.google.com/open?id=1aKFuDlujmDrfOQLkQVbWVvXTwPgNJjWG
10	11-04-2020		7) Sources, effects and control of secondary air pollutant Ozone, Ozone depletion.	https://drive.google.com/open?id=1uqiKBUg5cBVnGZ9lQwvSXOIwMR1jLhnO
11	13-04-2020		8) Waste Management: Solid waste, e-waste, Biomedical waste: Sources, Characteristics and disposal methods (Scientific land filling, composting, recycling and reuse)	https://youtu.be/1RHDX-OrS-Q , https://youtu.be/UkxvOtNjJg , https://drive.google.com/open?id=1_eobrx0QhU-KONvvyxW-Nj68e-CC001DQ
12	15-04-2020	Module II	Corrosion, wet and dry corrosion, Electrochemical theory taking corrosion of iron as an example.	https://youtu.be/obiAafzFQmU , https://youtu.be/ft4ziYOvR9g
13	17-04-2020		Factors affecting the rate of corrosion: ratio of anodic to cathodic areas, nature of corrosion product, nature of medium-pH (greater than 10, between 3 and 10 and lower than 3), conductivity and temperature.	https://youtu.be/rF40O3emxDs , https://youtu.be/Hp2ZIq6HIkE
14	18-04-2020		Types of corrosion-Differential metal corrosion and differential aeration corrosion; Pitting and water line corrosion with diagrams, Corrosion control: Anodizing-Anodizing of aluminium	https://youtu.be/OIkumpmgh0M , https://youtu.be/twTrQU4i0yc
15	21-04-2020		Metal coatings- Galvanization. Cathodic protection: Definition, sacrificial anode and impressed current methods,	https://youtu.be/92Vi6M0fzGc , https://youtu.be/4soGhDTDAMI

16	23-04-2020		Definition and Technological importance of metal finishing, Principles governing metal finishing-Polarization, decomposition potential and overvoltage.	https://youtu.be/KbefwUU4vpI , https://youtu.be/3rCU9MjdydQ
17	24-04-2020		Electroplating: Introduction, Electroplating of chromium (hard and decorative), its applications	https://youtu.be/o_c2PXCZp6o
18	25-04-2020		Electroless Plating, Electroless plating of nickel and its applications.	https://youtu.be/mqsr061a1uo
19	27-04-2020		Electroless plating of copper and its applications, Distinction between electroplating and electroless plating processes.	https://youtu.be/0DekBTHMKvU
20	07-05-2020	Module V	4) Conductometry	https://youtu.be/gPwLoRuo3q8
21	10-05-2020		5) Colorimetry	https://youtu.be/LCi7EMmnwak
22	14-05-2020		6) Flame Photometry	https://youtu.be/kKE7PLpL1Jo
23	16-05-2020		7) Atomic Absorption Spectroscopy	https://youtu.be/e4QyH6CULA0