

Criterion II
Teaching-Learning and Evaluation

**LIST OF E-CONTENT
DEVELOPED BY THE FACULTY MEMBERS**

You Tube Link: <https://www.youtube.com/@hindusthancollegeofenginee2921/videos>

S.No.	Topic of the E-Content	Description of the Content
1.	Drying and Types	This video clearly explains about drying operation, its types, and purpose of drying. Difference between drying and evaporation.
2.	Crystallizers and Types	This video clearly explains about crystallizers, how it's classified, construction and working of important crystallizers.
3.	Crystallization (How the Crystals forms)	This video clearly explains how the crystals forms, various stages involved & theory of crystallization - Mier's super saturation theory etc.,
4.	Absorption-Selection of solvent for absorption operation	This video clearly explains what absorption, Absorption column is, the properties are to be considered during selection of solvent for absorption in detail.
5.	Manufacturing Process of Ammonium Phosphate	Discussed about the grades, raw materials, reactions and manufacturing of ammonium phosphate
6.	Manufacturing Process of Phosphoric Acid	Discussed about the grades, raw materials, reactions and manufacturing of ammonium phosphate

**Criterion II
Teaching-Learning and Evaluation**

7.	PVT Behavior of pure fluids	Explained about pressure, volume and temperature behavior of pure fluids with graph explanation.
8.	Urea Manufacturing Process	Discussed about the raw materials, reactions, properties with a flow diagram
9.	Introduction to Thermodynamics	Discussed about the introduction to thermodynamics and its laws
10.	Hydro Power Plant	Discussed about the hydro power plant working principle with advantage and disadvantage
11.	Introduction to Chemical Engineering	Discussed about role of Chemical Engineers to the society, job opportunities for chemical engineers and scope of higher studies.
12.	Laws of Thermodynamics	Discussed about the Basics laws of Thermodynamics and its applications
13.	Modes of Heat Transfer	Discussed about the three different modes of heat transfer and its governing laws.
14.	Introduction to Size Reduction	Basic principles and laws of size reduction is explained with suitable examples.
15.	Ball Mill Operation	Experimental demonstration of ball mill operation and its principles.
16.	Jaw Crusher Operation	Experimental demonstration of jaw crusher operation and its principles.
17.	Introduction to Material Balance and Examples	Basic Principles of Law of conservation of Mass and Material Balance over the distillation column with example problems.
18.	Material Balance on Evaporation	Discussed about the principles and material balance over the Evaporation with example problems
19.	Types of Wastewater Treatment	Discussed about the types of waste water treatment and its process flow sheet with pictures.

Criterion II
Teaching-Learning and Evaluation

20.	Types of Extinguishers	Discussed about the different classes of fire and fire extinguishers available to control them.
21.	Patent Procedure	Explained on Patent procedure in India with actual timeline.
22.	Difference between Reverse Osmosis and Ultrafiltration	Explained about the differences between the RO and UF.
23.	Basic concepts of control system	This video includes basic idea about control system, its working, examples, advantages and disadvantages.
24.	Biofuels-Energy of the future	This video explained about biofuel, carbon cycle, different types, flow diagram of bioethanol production, advantages, applications, flow diagram of biodiesel production, advantages.
25.	Waste to Energy Conversion Method- Incineration	Discuss about Incineration process, different regions, reactions, incineration plant, incinerator, flow diagram of waste to energy conversion by using incineration, advantages, disadvantages, current scenario, difference between incineration and landfill.
26.	Heat Exchangers	This video explains about types of Heat Exchanger, working, construction application of heat exchangers.
27.	Energy Crisis	This video explains about types of energy and its crisis on India and Global Scene.
28.	Economics	This video explains about the time value of money, timeliness and notation, valuation concept.
29.	Instrumentation	This video explains about instrumentation and mercury thermometer.
30.	Personal Protective Equipment's	This video explains about personal protective equipment's used by workers in industries.

**Criterion II
Teaching-Learning and Evaluation**

31.	Analysis of test data in rubber lab	This video explains about analysis of test data from results of sampling in rubber lab.
32.	Chemical Kinetics and Rate equation	This video explains about the reaction rate on different reactors in CRE.
33.	Types of Biomass and Applications	This video explains energy conservation and alternative fuels.
34.	UV Spectroscopy	This video explains about instrumentation of UV spectroscopy.
35.	Types of Rubber	This video explains about usage of rubbers.
36.	Basics of Irrigation	This video explains the basic definition of Irrigation, need for Irrigation, present status of irrigation, developmental aspects of irrigation, and direct benefits of irrigation, indirect benefits of irrigation and disadvantages of irrigation.
37.	Precision farming - Its applications, advantages and disadvantages	This video explains the applications, advantages and disadvantages of Precision Farming.
38.	Sources and Types of Solid Waste	This presentation enables the learner to gain knowledge on the sources and types of municipal solid waste
39.	Centrifugal Pump	This presentation explains the working principle of centrifugal pump and efficiencies.
40.	Hydrologic Cycle	This presentation explains the working principle of Hydrologic Cycle and efficiencies.
41.	Earthquake and Causes	This presentation explains the working principle of earthquake and causes.
42.	Manufacturing Process of Concrete	This presentation explains the working principle of centrifugal pump and efficiencies.

**Criterion II
Teaching-Learning and Evaluation**

43.	Hydrology - Types of Precipitation & Forms of Precipitation	This presentation explains the different types and forms of precipitation available across the world.
44.	Wastewater Engineering - Unit Operations and Processes	This presentation explains on the differences of unit operations and processes and their applications
45.	Fluid and its Properties	This audio presentation clearly explains about the physical properties of fluids and its behaviour
46.	Pascal's law, Buoyancy, Classification of Fluid Flows	This audio presentation clearly explains about the principles of Pascal's law, buoyancy and its nature and the categorization on fluid flows
47.	Introduction to Engineering Mechanics	This video presentation contains importance of Engineering Mechanics. Discussions on Statics and different forces on member.
48.	Introduction to Structural Analysis	This video presentation clearly explains about structural Analysis concept and elements of structures like Beam, Column and Frames. Fundamental Concept and principles. Discussion on Three Equilibrium Equation. Necessity for Bending Moment Calculations.
49.	Design of Beam by Working Stress Method	This video explains how to design the beam section by working stress method and how to take the value of permissible stresses of concrete and steel, how to find the dimension of beam and area of tension reinforcement
50.	Standard Penetration test	This presentation explain about field penetration test (SPT) to determine the soil properties.
51.	Types of footing	This video explains different types of footing in shallow foundation.
52.	Building Planning	This presentation explains about principles of building planning.
53.	Elements of Design	The elements of design are the fundamental aspects of any visual design which include line, shape, form, colour, value, space, and texture.

Criterion II
Teaching-Learning and Evaluation

54.	Basics of bricks	This presentation enables the viewers to learn about the least basic knowledge of bricks. The bricks are the most widely used building material and the knowledge of bricks will be very useful in common life.
55.	Rock Cycle	This presentation gives an insight on the rock cycle, how the rocks are formed, its occurrence and importance to the viewers.
56.	Food and Nutrition	Discuss about the importance of food and nutrition. Nutrition is the process by which body utilizes food for growth and maintenance and healthy living. A science of food and its relationship to health and concerned with the part played by food factor (nutrients) in body growth, development and maintenance.
57.	Food Preservation By Different Cooking Method	Discuss about the basic principles of cooking, different cooking methods, and methods of cooking process. Various dry heat methods like roasting, broiling, grilling, frying, panfrying etc, are explain in this video.
58.	Dry and Wet milling of corn	Discussion about dry and wet milling process. Detailed explanation of each step of dry and wet milling of corn. After milling process produce various value-added products from corn like corn syrup, corn starch etc.
59.	Food Microbiology Part I	Food microbiology is the study of the microorganisms that inhabit, create, or contaminate food. This includes the study of microorganisms causing food spoilage; pathogens that may cause disease; microbes. In this part 1 video give a brief explanation about the food spoilage and causes.
60.	Retort Processing Packing	Discussion on the processing with its advantages and disadvantages
61.	An overview of Food Science	An overview of Food Science with its basic touch on Food Chemistry

Criterion II
Teaching-Learning and Evaluation

62.	Cream - Classification, Properties, Principle, Types, Methods of separation, Quality, and Application.	This video clearly explains the basics of cream, different physic-chemical properties, and its principle. The video represents the types of cream and also different methods of separation with application in the food processing sector.
63.	Pasteurization, principles, objectives, and its methods.	This video clearly explains the basics of milk processing and pasteurization and also represents the principles, objectives, methods of pasteurization, and effect of pasteurization on milk concerning the quality and nutritional parameters.
64.	Introduction to Food Packaging	This video explains the definition and different levels of food packaging.
65.	Pulsed Electric Field Method - principle, working	This video explains the principle and working mechanism of Pulsed Electric field processing of food. It also covers the Basic component and systematic components required for working of PEF
66.	Irradiation - Principle, Working, Advantages	This video explains the principle, working mechanism of Irradiation.
67.	Radiofrequency Heating - Principle, Working	This video explains the principle, working mechanism of Radiofrequency. This video also covers the difference among Conventional heating and drying.
68.	Classification of Food Additives	The video explains about the classification of food additives, Roles and functions of Additives in the food products
69.	Chemical, Nutritional and Microbiological Changes in foods due to Irradiation	The video explains about the effect of irradiation in foods and changes in the structural component of the foods such as carbohydrates, proteins, vitamins and lipids based on the irradiation dose.
70.	Rectifiers	Discuss about the importance of a rectifier. It is a device that converts an oscillating two-directional alternating current (AC) into a single-directional

Criterion II
Teaching-Learning and Evaluation

		direct current (DC). Rectifiers can take a wide variety of physical forms, from vacuum tube diodes and crystal radio receivers to modern silicon-based designs.
71.	Piezo Electric Transducers	Explained about Piezoelectric transducers are a type of electroacoustic transducer that convert the electrical charges produced by some forms of solid materials into energy.
72.	Transformers	Explained about the transformer is an electrostatic device which is used to transfer electrical energy (voltage or current) from one circuit to another.
73.	Engineering Mechanics Laws	Explained about each body remains in its state of rest or motion uniform in direction until it is made to change this state by imposed forces.
74.	LVDT	Introduction about The LVDT converts a position or linear displacement from a mechanical reference (zero or null position) into a proportional electrical signal containing phase (for direction) and amplitude (for distance) information.
75.	Engineering Mechanics Laws	Explained about each body remains in its state of rest or motion uniform in direction until it is made to change this state by imposed forces.
76.	Graphical Methods	Discussion about the graphical method represents an optimization algorithm for solving linear programming problems containing two decision variables.
77.	System of Forces	Discussion about the force system is a collection of forces acting at specified locations (may also include couples). Thus, the set of forces shown on any free body diagram make up a force system. Force system is simply a term used to describe a group of forces.

Criterion II
Teaching-Learning and Evaluation

78.	Introduction to OR	This video discuss about Operations Research (OR) is a discipline that helps to make better decisions in complex scenarios by the application of a set of advanced analytical methods.
79.	Shell Moulding and Investment casting	The shell mould casting process is a metal casting process that is similar to sand casting. A thin sand hardened shell mild will be produced by applying a sand-resin mixture around a pattern. Investment casting is the process of making ceramic slurry getting layered over the wax pattern which again kept in oven to make the wax melt and bake the mild that forms the casting.
80.	Centrifugal casting processes	Centrifugal casting is a process that rotates at high speed which produces centrifugal force to distribute molten metal is thrown towards the periphery. Rotational axes can be horizontal or vertical. Finally, the cast part can be cooled and solidified from outside towards the outside which results in good solidification.
81.	Sample and Hold circuit	Sample and Hold circuit are the circuit that is proficient to do the sampling for the input signal that applied to its input terminal and also holds the sampled value up to the last amplitude level for a particular time interval which can be done by a resistor and a capacitor arrangement.
82.	Data acquisition	Data acquisition is the process of acquiring physical information such as temperature, humidity, etc., and converting it to electrical signals as analogy that again be transformed to digital signals which is fed to the computer
83.	Mechatronics Design Process	Explained about mechatronics system, traditional approach, and Mechatronics Approach and Design process of mechatronics systems. The mechatronic design process consists of three phases: modelling and simulation, prototyping and deployment.

**Criterion II
Teaching-Learning and Evaluation**

84.	Types of Loads	Types of loads and their impact on engineering structures were explained with appropriate examples. This video will impart basic knowledge on loads and their application in designing mechanical structures.
85.	Ethics, Morals and Values	This video discusses the importance of Ethics, Morals, Values aimed at ensuring proper work ethics
86.	Ergonomics	This video discusses the important facets of ergonomics like safety, comfort, ease of use, Productivity and aesthetics
87.	Fluroscopy	In this video lecture it clearly explains about the principles behind fluoroscopy, its types and uses of fluoroscopy and its applications in healthcare.
88.	erations of CT	CT is a very important imaging modality and it has revolutionized into different generations and this video will clearly explains about the different generations of CT machine.
89.	Flip-flop working principle	In this video flip flop basic information, types and working principle of S-R flip flop with its internal structure has been explained.
90.	Design of Synchronous Counter	In this video counter concept and its type's synchronous counter and asynchronous counter working principle have been explained.
91.	Design of Synchronous Sequential Circuit:	In this video synchronous Sequential Circuit basic concept has been explained and design procedure of synchronous Sequential Circuit design has been discussed.
92.	Optical Encoder	In this video optical encoder concept is explained.
93.	Scintillation Counter	In this video Scintillation counter working principle is explained.
94.	Virtual Instrumentation - Introduction	In this video introduction about virtual instrumentation has been explained.

Criterion II
Teaching-Learning and Evaluation

95.	Virtual Instrumentation - Architecture	In this video virtual instrumentation architecture has been explained.
96.	LabVIEW Software Introduction	In this video LabVIEW software basic operation has been explained.
97.	First Aid	In this video first aid objectives, dos and don'ts and first aider role has been explained.
98.	Shift Registers	In this video basics of shift register
99.	Memories	In this video basics of memories
100.	Blood Flow Meter	In this video operation of blood flow meter.
101.	Blood Cell Counter	In this video operations of blood cell counter.
102.	P N Junction Diode & Zener Diode	In this video the structure, working and characteristics of PN Junction diode and Zener diode is explained.
103.	Operating Systems - Overview	This video gives a detailed overview about the operating system concepts.
104.	Introduction to DBMS	This video gives an Introduction to Database concepts, Basics of DBMS and their real-world applications.
105.	History of TOC and Basic Notations	This video will give an overview about Theory of computing. Various basic terminology used in Theory of computing.
106.	Basics of Compiler	This video will give an overview about compiler. The basics of preprocessing.
107.	Phases of compiler	This video will give an overview about compiler. The basics of various phases of compiler. Language pre-processing.
108.	Java - Data Types	This video is prepared to brief about the primitive data types in java. The different data types that can be used in java programming language are detailed.

**Criterion II
Teaching-Learning and Evaluation**

109.	First Java Program	This video is prepared to brief about the simple java program to display the string. The keywords used in the program and main methods executions are detailed.
110.	Graphs	This video is prepared to brief about the non- linear data structure Graphs, directed graphs and undirected graphs, weighted graphs and Graph terminologies.
111.	UML Class Diagrams	This video presents brief about UML class diagrams, class attributes, class methods, comments and example of class diagram.
112.	Introduction to Trees	This video is brief about the non- linear data structure Tree, definitions, types of trees and tree traversal with an example.
113.	Data Structure - Stack	This video is brief about the linear data structure stack and various ADT like #PUSH, #POP.
114.	Layering and Protocols	#Protocol and protocol hierarchy, #A system of service hierarchy.
115.	The OSI Model	#Model that describes the functions of a networking system, #Describes the functions of a networking or telecommunications system.
116.	Application Layer Protocols	This video gives an idea about the application layer protocols.
117.	CPU Scheduling Algorithms	This video gives an idea about the CPU scheduling algorithms and its working principles with solved examples.
118.	Network Topologies	This video is prepared for the subject of computer networks to brief about different types of Network Topologies with example.
119.	Introduction about Big Data Analytics	This video will give an introduction about big data and its its insights for the subject of Big Data Analytics.

**Criterion II
Teaching-Learning and Evaluation**

120.	Getting started with python	Python is an object-oriented programming language. This video is developed with the notion to learn about the basics of Python.
121.	Structure in C	This video is prepared to brief about Structure in C.
122.	Dictionary in python	This video is prepared to brief about Dictionary using in Python and dictionary methods was explained.
123.	NLP Programming	This video will give an overview about Natural language processing. The basics of NLP coding.
124.	Introduction to Data Science	This video will give an introduction about data science.
125.	Introduction to Virtual Reality	This video will give an introduction about Virtual Reality, advantages and disadvantages.
126.	Introduction Software Architecture	This video lecture will brief on how software works with architecture design guidelines.
127.	Database and Data Models	This video lecture will enhance our idea on DB models and how well it is structured.
128.	Introduction to Machine Learning	This video lecture on Machine learning with classification of its types.
129.	Use of AI in Cyber Security	This video gives overview of use of AI in cyber security
130.	Ontologies in Cyber Security	This video gives what is ontologies in cybersecurity with examples and its uses
131.	Classifications of UAVs	This video lecture contains information's regarding Classification and Categories of UAVs with respect to aerial platform and also according to DGCA.

Criterion II
Teaching-Learning and Evaluation

132.	Applications of Drones	This video lecture contains detailed information's regarding different applications of UAVs.
133.	History of UAVs	This video lecture contains information's regarding History of UAVs from 1849 to 2010.
134.	Basic concepts of Thermodynamics-I	This video lecture contains Basic terminologies of Thermodynamics helpful for understanding of complex cycles and process.
135.	Basic concepts of Thermodynamics-II	This video lecture contains basic terminologies of Thermodynamics helpful for understanding of complex cycles and process.
136.	Gears and its classifications	Gear is rotating machine part with teeth, which is used to transmit torque. The classification of gears, advantages and disadvantages were explained in this video.
137.	Aircraft Piston Engines	Dismantled six-cylinder aircraft piston engines and component explanation
138.	Jet Engine Combustion Chambers	Aircraft jet engine combustion chambers - working - classification - design considerations.
139.	Gas Turbine Blade Cooling	Turbine blade cooling - methods - secondary air supply.
140.	MENDELEY - Citations and Bibliography	Citing and bibliography method in MENDELEY.
141.	Plane Truss	This video lecture contains detailed information's regarding truss are widely used in aircraft structures and civil industry. The types of trusses and stability of trusses are explained here.

**Criterion II
Teaching-Learning and Evaluation**

142.	Strain Energy	This video lecture contains detailed information's regarding Strain energy is used to find the deflection of the structures in energy method. Strain energy stored in the structures due to axial loading, shear load, torsion and bending are explained here.
143.	Stress & Strain	This video lecture contains detailed information's regarding Stress and Strain are basics terms used in the Aircraft Structures. This video explains stress, strain and types of stress and strain, relations between stress and strain and elastic constants.
144.	Unsymmetrical bending	This video lecture contains detailed information's regarding Unsymmetrical bending. In this video, bending, types of bending, bending stresses are explained in detail.
145.	Aircraft Performance-ISA	This video contains the atmospheric properties changes with respect to altitude.
146.	Aircraft Stability and Control-Degrees of Freedom	This video contains the basic components of aircraft and degrees of freedom of aircraft with respect to three different axes.
147.	Aircraft Stability-Introduction	This video contains the basic stability concepts of mechanical system. Static and dynamic modes are explained.
148.	Introduction to Scramjet Engine	This video contains the limitations in hypersonic propulsion. It also explains the operating principle and components of scramjet engine.
149.	Ramjet Engine	This video contains the operating principle and components of ramjet engine. It also contains the advantages, disadvantages and application of ramjet.
150.	Modes of Operation of Ramjet Engine	This video explains the various operating condition / various modes of operation of ramjet diffuser.

Criterion II
Teaching-Learning and Evaluation

151.	Cams and its Types	This video explains about cam and its types as a mechanical element which is used to deliver the reciprocating or oscillating motion to another machine element known as follower. Cam and follower are a type of assembly, both works together in any machine element.
152.	Combustion in Ramjet Engine	This video lecture explains about the combustion that produces thrust in the ramjet occurs at a subsonic speed in the combustor.
153.	Introduction to FEM	In this video lecture about the Introduction about FEM, a general numerical method for solving partial differential equations in two or three space variables with step-by-step procedure.
154.	Landing Gears used in an Aircraft	In this video, the discussion about landing gear which provides the principal support of the airplane during landing, mainly consists of the shock absorber, wheel, brake system, turning system, undercarriage retractile system, etc.
155.	Classifications of Wind tunnel	Wind tunnel is an apparatus used to study the flow behaviour and effects of air over the test solid object. In the tunnel, one can control the flow conditions which affect forces on the test object. Through the measurements of the forces on the model, one can predict the forces on the full-scale test object. In early days the wind tunnels were used to understand and improve the performance of an aircraft only, but later several things such as, car body, buildings, bridges etc. are also being tested in the wind tunnel. The classification of a typical wind tunnel is done on the basis of working speed.
156.	Calibration and Measurements in Wind tunnel	The calibration of a wind tunnel consists in determining the mean values and unit- format of various flow parameters in the region to be used for model testing. A calibration defines the relationship between the pressure at the probe head holes and the measured velocity and flow angle. To perform

Criterion II
Teaching-Learning and Evaluation

		this task, the probe is held in a known flow field generated by our calibration wind tunnel.
157.	Cruise Flight performance	The cruise performance of an aircraft is one of the fundamental building blocks of the overall mission.
158.	Introduction about Theory of elasticity	This video lecture gives an overview about the subject Theory of Elasticity in a simple way.
159.	Saint tenant's principle	This video lecture explains the effect of the load type and point of application on the stress developed in the material.
160.	Two-dimensional elasticity	Gives clarity about plane stress and plane strain condition with suitable examples.
161.	Aircraft fuselage and wing structure	Aircraft is a flying vehicle which consists of various structural parts and components. To study functions and applications of component of an aircraft.
162.	IC engines components and functions	Piston engines and Gas turbine engines are widely used in the market today. The basic components of these engines are explained here.
163.	5'S Principles	5S is a systematic way of organizing workplaces by eliminating waste, improving flow, and reducing the number of processes where possible.
164.	Deming's Philosophy	The Deming Philosophy, known as Dr. Deming's "theory of management" and later his "System of Profound Knowledge," represents a holistic approach to leadership and management. The philosophy brings together an understanding of variation, theory of knowledge, psychology and appreciation for a system.

Criterion II
Teaching-Learning and Evaluation

165.	Henry Fayol's 14 Principles	Henry Fayol's 14 Principles helped to form what became known as Administrative Theory. It looks at the organization from the top down, and sets out steps for managers to get the best from employees and to run a business efficiently.
166.	Characteristics of Fatigue	The fluctuations in magnitude and direction of the load adversely affect the life and performance of a mechanical component compared to that under static loading condition.
167.	Problems Associated with Supersonic Combustion	Usually at hypersonic speed we won't use ramjet Engine. The Problems encountered at that condition; challenges faced were explained in this video.
168.	Helicopter Introduction	Basics of Helicopter.
169.	Crystallographic Terms	Discussed about the Classification of Solids, Lattice, Lattice points, Space Lattice, Unit cell and its types.
170.	Crystal Parameter and Crystal Structure	Discussed about the Lattice parameter, 7 types of crystal structure, types of lattices, Bravais lattices.
171.	Miller Indices	Discussed about the Definition of Miller Indices, Rules to determine Miller indices, Structural explanation, Example problems.
172.	Magnetism and Magnetic Field	Definition for Magnet, Historical background of magnet, Types of magnets, Magnetic Poles, Magnetism and Magnetic Field.
173.	Basic Definitions in Magnetism	Definitions for magnetic Flux, Magnetic Flux Density, Magnetic Field Intensity
174.	Magnetic Dipole Moment and Origin of Magnetic Moment	Definition for Magnetic dipole moment, Origin of magnetic moment and Application of Hard and soft magnetic Material.

Criterion II
Teaching-Learning and Evaluation

175.	Classification of Magnetic Materials	Definition and properties of dia and para magnetic materials, Ferro & Antiferromagnetic materials and properties of Ferrites.
176.	Adverb	An adverb-definition, kinds, and instances of adverbs in order to really comprehend them. As a result, below is a quick overview as well as a more in-depth look into adverbs, their kinds, and examples.
177.	Adjective	An adjective-definition, kinds, and instances of adjective in order to really comprehend them. As a result, below is a quick overview as well as a more in-depth look into their kinds, and examples.
178.	Green Chemistry	Green Chemistry - definition, objectives, goals, 12 principles of green chemistry & uses of green chemistry
179.	Noise Pollution	Noise Pollution- Definition, Objectives, Goals and Prevention of Noise Pollution
180.	Human Rights	Human Rights-Definition, Universal Declaration of Huma Rights and European Convention on the rights of a child.
181.	Estimation of Chloride in water Sample	Aim, Huma Rights Results of Estimation of Chloride in water Sample
182.	Environment and Human Health	Environment and Human Health- Principle, Causes, Effects and Control Measures
183.	Ozone layer Depletion	Ozone layer Depletion- Definition, Causes, Effects and Control Measures
184.	Prevention of Pollution	Preventive measures of Air Pollution, Water Pollution, Noise Pollution, Thermal Pollution, Soil Pollution and Nuclear hazards
185.	Environmental Ethics	Definition, Values, Impacts of Environmental studies
186.	Taylor method	Taylor Series - Definition, Formula and Example problem

Criterion II
Teaching-Learning and Evaluation

187.	Euler and Modified Euler method.	Euler and Modified Euler method Definition, Formula and Example problem.
188.	Preposition of Time and Place	Prepositions are important parts of a sentence. They help to relate subject, object and verb sometimes to provide more information. This video focusses on certain errors made in preposition.
189.	Direct and Indirect speech	This video relies on certain rules to be followed while using reported speech.
190.	Collocations	What is Collocation? Definition and Examples of Collocation
191.	Active and passive voice	Concept of Active and Passive Voice. Usage of Active and passive voice in English
192.	Introduction to Ordinary Differential Equation	Types of Differential Equations, order, degree and few types of first order differential equations
193.	Solution of First order Linear Differential Equations	Finding the solution of Linear differential equations
194.	Variable Separable Equations	Finding the solution of Variable Separable equations
195.	Exact Differential Equations	Finding the solution of Exact Differential equations
196.	Role of Communication	Importance of Communication, Advantages and Disadvantages of Communication, Types of Communication
197.	Linear Partial Differential Equations	This video explains the different types of Linear partial differential equation. Also explained the solution of PDE by method of grouping and multipliers
198.	Formation of Partial Differential Equations	This video explains the different types of formation in partial differential equation. This video covers the formation of PDE by eliminating arbitrary constants and functions

**Criterion II
Teaching-Learning and Evaluation**

199.	Non-Linear Partial Differential Equations	Explained the solution of nonlinear partial differential equation
200.	Non-Homogeneous partial differential equation	Discussed the Solution of Non-Homogeneous partial differential equation
201.	Analytic functions	This video explains the analytic functions, necessary and sufficient conditions for analytic functions
202.	Harmonic functions	This video explains the harmonic functions, properties of analytic functions, conjugate harmonic functions
203.	Conformal Mapping	Explained the conformal mapping and various standard transformations
204.	Conformal Mapping-Inversion	Discussed the transformation-Inversion and various types of problems
205.	Application of double integrals	A lecture on applications of double integrals including: mass; moments and centre of mass of thin plates. Plenty of examples are presented to illustrate the ideas. Application of Double integrals. Average Value of a Function Properties of Double integral, Problems on Double integral
206.	Change of order of double integration	Double Integrals - Changing Order of Integration - Full Example. In this video, I show an example of how to switch the order of integration. I also integrate the function to get the final answer. Area in Cartesian Coordinates, Change of Order of Integration, Double integrals over Rectangles, Area by use double integration.
207.	Double Integrals	Double Integrals-Realizing that the iterated integral is a double integral over some region DD.Expressing DD as the other type of region (Type II if it was originally setup as Type I, and Type I if it was originally set up as Type II).Re-writing the integral over DD as an integrated integral in a new way. Ifhad originally been daddy, it should now be daddy, and vice-versa.4. Doing the

Criterion II
Teaching-Learning and Evaluation

		new iterated integral.} Introduction to Double Integral} Evaluation of Double integral} TYPE I REGION} TYPE II REGION
208.	Problems on Double Integrals	Problems on Double Integrals Steps on how to solve double integrals using the example: $(x^2y^2) dx dy$. Begin the problem by evaluating the inner integral and substituting this result into the outer integral. Most double integrals have intervals to substitute, so make sure to evaluate the inner part completely before proceeding to the outer section. Integration formula. Solved problems on Double integrals. Evaluate the iterated integral Problems based on double integrals.
209.	Runge Kutta Method	Runge Kutta Method Definition, Formula an Example problem.
210.	Milne's Method	Milne's method Definition, Formula and Example problem.
211.	Properties of Superconductor	Discussed about the properties Superconducting materials -Electrical and Example effect, effect of magnetic field, effect of current and isotope effects.
212.	BCS theory of Superconductivity	Discussed about the BCS theory of Superconductivity
213.	Sampling Technique	Explained various sampling techniques
214.	Application of Matrices	Introduction random variables
215.	LaGrange's Interpolation	Explained a problem using LaGrange's Interpolation Formula
216.	Newtons Divided Difference Formula	Explained a problem using Newtons Divided Difference Formula
217.	Newtons Forward Formula	Explained a problem using Newtons Forward Formula
218.	Laplace Transform of simple functions	Definitions, Basic concepts of Laplace Transform are explained
219.	Inverse Laplace transform	Discussed about inverse transform of simple functions

Criterion II
Teaching-Learning and Evaluation

220.	Application of Laplace Transform	Explained the problems on convolution theorem
221.	Cauchy's Integral formula for derivatives	Definitions & explained the problems on Cauchy's derivatives
222.	Cauchy's Integral Theorem	Definitions, Properties & Explained the problems on Cauchy's Integral theorem
223.	Cauchy's Residue Theorem	Definitions, Properties & Explained the problems on Cauchy's Residue theorem
224.	Ultrasonic	Introduction about ultrasonic
225.	Magnetostriction method	Production of ultrasonic -Magnetostriction method
226.	Piezo Electric Method	Production of ultrasonic - Piezo Electric Method
227.	Acoustic grating	Find velocity, wavelength of ultrasonic using Acoustic grating method
228.	Environmental Sustainability	Role in Forest Conservation, Water Economy, Food Security, Sustainable Agriculture and Soil Protection.
229.	Energy Resources	Energy Resources - Definition, Objectives, Renewable and Non-renewable Energy Resources
230.	Food Resources	Food resources -Definition, Objectives, Undernutrition, Malnutrition
231.	Overgrazing and Agriculture	Overgrazing and Agriculture - Impacts, Effects of Modern agriculture
232.	Values of Biodiversity	Values of Biodiversity - Importance, Direct and Indirect Use
233.	Control measures of Water pollution	Control measures of Water pollution: discussing the methods to save water from pollution
234.	Causes of Water Pollution	Causes of Water Pollution: discussing what are the way water get polluted

**Criterion II
Teaching-Learning and Evaluation**

235.	Water pollution	Water pollution: importance of water
236.	Hard and Soft magnetic material	Types of magnetic materials
237.	Domain Theory of Ferromagnetism	Domain theory, wall rotation
238.	Hysteresis	Hysteresis loop and domain wall rotation
239.	Anti-ferro and Ferry magnetic material	Application of anti-ferro and ferry materials
240.	Ultrasonic-NDT	pulse echo system construction, working and applications
241.	Ultrasonic testing	A scan and BScN construction, working and applications
242.	Ultrasonic-Industrial application	Drilling and welding construction, working and applications
243.	Complex Matrices- Definitions	Complex matrices- Definition, Types and problems
244.	Complex Matrices -Problems	Discussed problems on properties of complex matrices
245.	Vector spaces-Definitions	Definition and axioms on vector spaces given. Problems using the properties discussed. Finding angle between two vectors done.
246.	Gram Schmidt orthogonalization process	This method is used to find orthonormal basis from the given basis of vector spaces. Also, it issued to find the projection of vectors.
247.	Lagrange's mean value theorem	Verification of Lagrange's Mean value theorem with some examples
248.	Applications of Statistics	Application of Statistics in various fields
249.	Two Dimensional Random Variables continuous case	Discuss about the Two-Dimensional Random Variables continuous case
250.	Two Dimensional Random Variables - example	Discuss about the Two-Dimensional Random Variables examples
251.	Tenses-Present Tense	Brief discussion about the topic Tenses, and its type with examples

Criterion II
Teaching-Learning and Evaluation

252.	Tenses-Past Tense	Brief discussion about the topic Tenses, and its type with examples
253.	Principle of Mathematical Induction	Discussed about the principle of mathematical induction with example and applications
254.	One dimensional heat equation	Discussed about the one-dimensional heat equation, nature of the equation, solution of the heat equation with examples
255.	Numerical differentiation & Integration	Discussed about the numerical differentiation and Integration with formulas
256.	Ordinary Differential Equations	Explained about linear first order ODE
257.	Rolle's Theorem	Explained the verification of Rolle's theorem
258.	Fourier Series problem in $(0, 2\pi)$	Discussed about Fourier's Series Problem in $(0, 2\pi)$
259.	Acid Rain	Discussed about the causes and effects of acid rain
260.	Environmental Impact Assessment	Procedure involved in EIA
261.	Nuclear Hazards	Discussed about the causes and effects of nuclear hazards
262.	Soil pollution	Discussed about the causes and effects of soil pollution
263.	Artificial Intelligence Vs Machine Learning Vs Deep Learning	This video explains about the basic explanation of Artificial Intelligence, Machine Learning and Deep Learning. Through this video the audience can clearly understand the differences among these three keywords with appropriate example. AI is an umbrella discipline that covers everything related to making machines smarter. Machine Learning (ML) is commonly used along with AI but it is a subset of AI. ML refers to an AI system that can self-learn based on the algorithm. Systems that get smarter and smarter over time without human intervention is ML. Deep Learning (DL) is a

**Criterion II
Teaching-Learning and Evaluation**

		machine learning (ML) applied to large data sets. Most AI work involves ML because intelligent behaviour requires considerable knowledge.
264.	Types Of Machine Learning	This video explains about the basic concept of Machine Learning. It covers the types of ML Algorithms like Supervised, Semi Supervised and Reinforcement Algorithms with suitable examples
265.	Naïve Bayes Classification - Numerical Example	This video explains about Naive Bayes classifiers It is a collection of classification algorithms based on Bayes' Theorem. This video gives the audience a Perfect Example and Explanation of how to solve Naive Bates Algorithm
266.	Introduction to Machine Learning	This video explains about the basic concept of Machine Learning. It covers the common idea behind the use of Machine Learning.
267.	OSI Reference Model	This video is about Introduction to OSI Model. In this video Basic of Networking, Reference Model and Types are discussed. OSI model is a concept-based model that defines, and sets standards for, the way in which a computing or telecommunication system functions. The goal of the OSI model is to achieve interoperability, through the use of standards, amongst a diverse set of communications. The video describes the basic definition and Operations involved in OSI Model. It further narrates Importance and benefits of OSI Model and its functions.
268.	Search Engine Optimization	This video is about Introduction to SEO. In this video we have seen about Fundamentals of SEO and its functions, different types of Placements, Ranking and its applications. The video describes the basic definition and Operations involved in Search Engine Optimization. It further narrates Importance and benefits of SEO and its Strategy.

**Criterion II
Teaching-Learning and Evaluation**

269.	Dynamic Host Configuration Protocol	This video is about Introduction to DHCP. In this video we have seen about Fundamentals of DHCP and its functions, different types of IP Address, Address Pool and its applications. The video describes the basic definition and Operations involved in allocating IP to System. It further narrates Importance and benefits of DHCP.
270.	Data Warehousing and Data Mining	This video is about Introduction to Data Warehousing and Data Mining. In this video we have seen about Basic of Data, Database and Information, Data Warehouse its functions and its applications. The video describes the basic definition and Operations involved in Data Warehouse. It further narrates Importance and benefits of Warehouse.
271.	RFID Technology	RFID Technology –Includes Introduction, Applications of RFID, RFID Reader and RFID Tag, Working principles of RFID Technology
272.	IoT Introduction	IOT Introduction - Includes Definition, Characteristics of IoT, Physical Design of IoT, IoT Devices, IoT Protocols
273.	Implementation of Classes and Objects	In this video, basic oops concepts such as class and object were discussed with practical implementation in eclipse IDE.
274.	Thread	In this video, concepts of Thread creation were discussed. Two ways of creating Thread such as Thread class and Runnable interface was illustrated in a program.
275.	Types of Analytics	This video is about the data analytics and its types Data analytics helps individuals and organizations make sense of data. Data analysts typically analyse raw data for insights and trends. The video describes the importance in Data Analytics and its types such as descriptive analytics, diagnostic analytics, predictive analytics and prescriptive analytics.

Criterion II
Teaching-Learning and Evaluation

276.	Data Analytics - Types of Digital Data	This video is about the Big Data and the types of Digital Data. Big data is a term that describes the large volume of data. The video describes the basic definition of Big Data. It further narrates the several of Digital Data such as structured, unstructured and semi-structured data and its sources.
277.	Need For Network Security	The discussion topic for this video is “Need for Network Security”. This video gives a brief introduction about importance of Network Security for top organizations and discussed about real time cybercrime incidents happened during covid-19 pandemic situation and NCSC guidance for Work from home for employees.
278.	Characteristics of DBMS	The discussion topic for this video is “difference between DBMS approach and File Based approach”. This video gives a brief introduction about five important characteristics of DBMS with example.
279.	Introduction to SQL	The discussion topic for this video is “Structured Query Language”. This video gives a brief introduction about DDL, DML, DCL and TCL and its various commands to interact with database.
280.	Analysis of Algorithm	This video is about Analysis of algorithm. In this video Analysis Framework, Asymptotic Notations, Properties of Asymptotic Notations, Using Limits for Comparing Orders of Growth are discussed. In Analysis Framework - Measuring an Input’s Size, Units for Measuring Running Time, Orders of Growth, Worst-Case, Best-Case, and Average-Case Efficiencies is explained with sequential search algorithm. The various asymptotic notations and its properties are also elaborated.
281.	Backtracking	This video is about one of the algorithm design techniques – Backtracking. In these basics and idea behind construction of solution for a problem using Backtracking are discussed.

Criterion II
Teaching-Learning and Evaluation

282.	Greedy Technique	This video is about one of the algorithm design techniques – Greedy technique. In this basic idea and application of greedy techniques are discussed. One of the classical examples of greedy technique is construction of Minimum Spanning Tree. The construction of Minimum Spanning Tree using Prim’s Algorithm which employs Greedy Approach is explained with an example. The algorithm for constructing Minimum Spanning Tree is also elaborated.
283.	Introduction to algorithm	This video is about Introduction to algorithm design. In this video Basic of algorithm, Notion of an algorithm, Fundamentals of Algorithmic Problem Solving and Important Problem Types are discussed. GCD of finding two numbers using different algorithms is explained with an example. The steps involved in algorithmic problem solving are discussed in detail. Further the important problem types of algorithms are also elaborated.
284.	Dictionaries in Python	This video explains about introduction to dictionaries and various operations, methods. It also explains about various methods as well as benefits of using dictionaries, difference between dictionaries.
285.	Recursion in Python	This video explains about concepts of recursion, various applications of recursion. This video helps students to learn how recursion works.
286.	Software Development Life Cycle	This presentation explains the concepts of software project management, its principle and characteristics. This helps students to learn the software life cycle phases of ISO.
287.	Amplitude Modulation	The video gives the details on the elements involved in the communication process, need for modulation and the process of amplitude modulation where amplitude of the carrier signal varies with the instantaneous value of

Criterion II
Teaching-Learning and Evaluation

		the message signal. The video also highlights the advantages, disadvantages and applications of AM systems.
288.	Angle Modulation	The video explains about the types of generation of angle modulation signals and provides the detailed discussion on the expression of frequency modulated signal and phase modulated signals with their Bandwidth analysis.
289.	Image Enhancement in Spatial Domain- Gray Level Transformation	The video explains about the concepts behind image enhancement discussing on the need for image enhancement and the various spatial image enhancement techniques which helps to improve the visual appearance of the image.
290.	Introduction and key stages in Digital Image processing	This video introduces about the basics of digital Image processing and provides the detailed discussion about the fundamental steps involved in Digital Image Processing.
291.	Spatial Filtering	This video explains the various techniques involved in image enhancement with spatial filtering.
292.	Representation and description	This video explains about the techniques of Chain codes, Polygonal approximations and signatures under Image representation. The concepts of Boundary descriptors and shape numbers are also discussed under image description.
293.	Introduction to Wireless Sensor Network	This video explains about the Wireless Sensor network articulation and its characteristics. The design issues and challenges related with sensor components
294.	Signal Propagation Modes	This video explains Signal representation, three types of modes of propagation and Multiplexing techniques

**Criterion II
Teaching-Learning and Evaluation**

295.	8086 Maximum and Minimum modes	This video explain about 8086 Configurations- Minimum and maximum modes with timing diagram.
296.	Overview of 8051 Micro Controller Family	This video explains about Overview of 8051 Microcontroller Family- Comparing Microprocessor and Microcontroller, MCS 51 family features, Block diagram of 8051, CISC and RISC, Applications
297.	Boundary Conditions	This video explains about the boundary conditions of Electric Fields with Derivations
298.	Communication and its importance	It helps to understand the importance, function so organization, differentiates between formal and informal communication and describes about the pattern of communication.
299.	Grand Challenges in Wireless Communications	This video explains the challenges that exist in the enabling techniques of wireless communications as well as recent advancements are discussed,
300.	Key Performance Indicators	In this video the key performance indicators (KPIs) of 6G that are expected to guide the design of 6G systems are discussed.
301.	Propagation Mechanisms	In this video the propagation mechanisms of Radio Wave propagation in a Non-Line of Propagation are discussed along with merits of Propagation model
302.	Error Correcting Codes	In this video Error Correcting Code Technique discussed with Linear block code development
303.	Modulation	In this video, the concept of modulation and its types in analogy modulation has been discussed
304.	Color models	In this video, the different color models used in digital image processing has been discussed.

**Criterion II
Teaching-Learning and Evaluation**

305.	Quine McCluskey Minimization	In this video, the Quine McCluskey Minimization of Boolean functions has been discussed.
306.	Digital Circuit Simulator	In this video, the method to simulate digital circuits using the mobile app 'logic circuit sim' has been discussed.
307.	Elements of Visual Perception	In this video, elements of visual perception along with image formation in the eye has been discussed.
308.	RGB Color Model	This video explains the RGB colour model with color cube and chromaticity diagram in digital image processing.
309.	Divergence Theorem	This video explains concept of divergence and divergence theorem along with its proof.
310.	Review of Number Systems	This video shows the review various number systems and the conversions
311.	Transmission line theory	This video explains the key concepts of transmission lines
312.	Bipolar Junction Transistor	This video briefly explains the construction and working of BJT
313.	PN Junction diode	In this video, working and construction of PN junction is briefly discussed
314.	Bridge measurements	In this video working and construction of measurement bridges are discussed for the measurement of frequency, capacitance and Inductance
315.	Construction and Working Principle of Four Stroke Petrol Engine	To gain knowledge in the concept of 'Working of Four Stroke Petrol Engine' which comes under Theory of Automotive Engines.
316.	Steering Geometry	To gain knowledge in the 'Vehicle Steering Geometry' which comes under Theory of Automotive Engines.
317.	Laws of Thermodynamics	To gain knowledge in the laws of Thermodynamics which comes under Engineering Thermodynamics.

**Criterion II
Teaching-Learning and Evaluation**

318.	HVAC	To gain knowledge in the concept of 'Heating, Ventilation and Air conditioning' which comes under Automotive Air conditioning.
319.	Engine Management System	To enlightening you about the role of electrical and electronics in the automotive systems, which includes the sensors, ECU, VCU, CAN, artificial intelligence, fuzzy logic, lookup tables, PID controllers, open and closed loop control systems and the advances electronic systems in automobile.
320.	Vehicle Management System	To enlightening you about the role of electrical and electronics in the automotive systems, which includes the sensors, ECU, VCU, CAN, artificial intelligence, fuzzy logic, lookup tables, PID controllers, open and closed loop control systems and the advances electronic systems in automobile.
321.	Engineering design and engineering materials	To gain knowledge about the engineering design of automotive engine components. This includes the engineering materials, selection of materials and their properties.it will help you to know about the engineering design and its concepts.
322.	Basics of Automobile Engineering	To gain knowledge outline of basic automobile engineering includes the engine nomenclature, engine power, torque, four stroke SI & CI engine working principle and their construction parts with simple animations.
323.	Safety in Workplace	To gain knowledge in the concept of 'Safety in workplace' which comes under Professional Ethics.
324.	Digital Twin Technology	To gain knowledge in the new era 'Digital Twin technology'. It comprises of an Introduction, technologies used, types and case studies of the same.
325.	Digital Twin Technology – Demonstration	To gain knowledge in the new era 'Digital Twin technology'. It is the demonstration part of Digital twin technology in Ford EcoSport SES (US Export) model.

**Criterion II
Teaching-Learning and Evaluation**

326.	Hydraulic Machines - Turbines	To gain knowledge in 'Hydraulic Machines - Turbines' which comes under Fluid mechanics and machines.
327.	Automotive Airbag System	To gain knowledge in the concept of 'Airbag System' which comes under Automotive Safety
328.	Antilock Braking System	To gain knowledge in the concept of 'Antilock Braking System' which comes under Automotive Safety.
329.	CRDI	To gain knowledge in the concept of 'CRDI' which comes under Automotive Electrical and Electronics.
330.	Types Of Car Bodies	To gain knowledge in the concept of 'Types of Car Bodies' which comes under Vehicle Body Engineering.
331.	Engine cooling systems	The engine cooling systems are explained with examples in this content
332.	Pressure measurement	The pressure measurement systems are explained in this content
333.	Types of two wheelers	The types of two wheelers are explained with examples in this content
334.	Braking system	The concept of braking system is explained with examples in this content
335.	Exhaust emission from CI engine	This video explains the formation and chemistry of exhaust gas emissions from a CI engine, as well as exhaust emission control techniques.
336.	Formation of smoke and its types	This video focuses on the formation and types of smoke in an IC engine. The latter clip will instruct you how to identify exhaust smoke and its associated problems in the vehicle, as well as the appropriate remedial actions.
337.	Combustion Theory	This video will teach you about combustion theory, stages of the combustion process, and factors influencing the combustion process.

**Criterion II
Teaching-Learning and Evaluation**

338.	Metrology and Measurement	Learners can gain knowledge of metrology and scientific measuring principles, calibration, accuracy, precision, and methods of measuring unit systems followed, as well as related terminologies, by watching this video lecture.
339.	Fuels and Its Properties	This video will give a brief introduction of fuels and its types with various properties which is used in an Internal combustion Engine
340.	Chemical Structure of Petroleum	This video discusses the chemical structures of petroleum products obtained from fractional distillation of crude oil.
341.	Petroleum Refining Process	This video will showcase the fractional distillation process of crude oil and various chemical process involved to convert intermediate products to final products
342.	Products of Petroleum Refining Process	This video will give the students an insight to the different products obtained from the Petroleum refining process.
343.	Basics of Vehicle Maintenance Service Station	The video explains about the types of maintenance, new setup of workshop service station and various activity and policy followed in workshop
344.	Importance of Motor Insurance	The video explains about the concepts behind the motor insurance and its claim procedure
345.	Tips For Car Maintenance	This video introduces about the basics of car maintenance types, different tools and procedures followed in workshop
346.	Basics of Car Body	This video explains the various techniques of car body and repair techniques
347.	Types of Braking	The video explains about the various types of braking system in vehicles
348.	Types of Electrical Vehicle	This video will give a brief introduction of electrical vehicle and its types
349.	Types of Steering System	The video explains about the various types of Steering system in vehicles

Criterion II
Teaching-Learning and Evaluation

350.	NDT	This video will give a brief introduction of Non-Destructive Testing and its types
351.	Two Stroke Engine	This video will give a brief introduction about the construction and working of four stroke petrol engines
352.	Four Stroke Engine	This video will give a brief introduction about the construction and working of two stroke diesel engines
353.	Tire Road Friction	This video explains various factors of tire road friction and how it should be lowered to improve the vehicle performance
354.	Basics of Vehicle Design	This video explains various factors to be considered while designing vehicle - By satisfying them we can get high performance vehicle with long life and better safety aspects
355.	Four Stroke Ci Engine Cut Section	Four stroke diesel engine it consists of four strokes namely suction, compression, working and exhaust. In this video four stroke compression ignition engine components details are explained.
356.	Four Stroke Si Engine Working Principle	In four stroke cycle engines the four events namely suction, compression, power and exhaust take place inside the engine cylinder. The four events are completed in four strokes of the piston (two revolutions of the crank shaft)
357.	Two Stroke Si Engine Working Principle	In two stroke cycle engines, the whole sequence of events i.e., suction, compression, power and exhaust are completed in two strokes of the piston i.e., one revolution of the crankshaft
358.	Single Plate Clutch	A clutch is a mechanical device which engages and disengages the driving shaft and driven shaft thus allow and interrupt the power transmission between the two-shaft said above.

**Criterion II
Teaching-Learning and Evaluation**

359.	Introduction to Finite Element Analysis	The finite element method is a mathematical procedure used to calculate approximate solutions to differential equations.
360.	Projection of plane	A type of view in which graphical projections from an object intersect. Projection planes are used often in descriptive geometry and graphical representation.
361.	Vertical Milling Machine	Milling machines are very versatile. They are usually used to machine flat surfaces, but can also produce irregular surfaces. They can also be used to drill, bore, cut gears, and produce slots. The type of milling machine most commonly found in workshops is a vertical spindle machine with a swivelling head. Although there are several other types of milling machines, this Video will focus only on the vertical milling machine.
362.	Shaper Machine Process types applications and advantages	A shaping machine is used to machine surfaces. It can cut curves, angles and many other shapes. It is a popular machine in a workshop because its movement is very simple although it can produce a variety of work. Shaping machines come in a range of sizes but the most common size is seen in the video.
363.	Gear Trains Problems	This video solves a numerical problem related to the individual gear speeds in the epicyclic gear trains.
364.	CAM and Follower	This Video gives a detailed overview about CAM and Follower types and working principles.
365.	Friction	This video gives a detailed overview about the friction concepts
366.	Support reactions of the beam	This video gives a detailed overview about the support reactions of the beam.
367.	Parallel force system	This video gives a detailed overview about the parallel force system

**Criterion II
Teaching-Learning and Evaluation**

368.	Concept and Types of IPR	This video gives a detailed overview about the Intellectual Property Rights (IPR)
369.	Gear Hibbing machine working principle	This video gives an idea in Gear hobbling machine
370.	Horizontal Milling Machine	This video gives a working principle of Horizontal Milling Machine
371.	Lathe working principle	This video gives a knowledge on lathe working principle
372.	Turret lathe working principle	This video gives a knowledge on semi-automatic lathe working principle
373.	Basics of Shaping Machine and its types	This video gives an overview about the shaping machine and types.
374.	Basics of Broaches and Broaching Machines and its types	This video gives a basic knowledge about broaching machine.
375.	CNC Machine Technology Concept	This video gives a CNC machine technology concept and their parts.
376.	Power Transmission Principles	This video gives design of Power Transmission Systems
377.	Just in Time	This video explain about Just in Time
378.	Construction of Ellipse	This video is a Conic Section where the Ellipse is drawn by my tricks to make you easily and how to draw with the mini drafter. As wise, to the subject, Engineering and diploma students having difficulty in drawing subject so I have made subject related videos for them to understand easily by tricks and skills.
379.	Turning Moment Diagram	This video solves a numerical problem related to the flywheel-- maximum Fluctuation of energy, co-efficient of Fluctuation of energy etc. In this example, I have given step by step procedure for finding the mass of the flywheel.

**Criterion II
Teaching-Learning and Evaluation**

380.	Introduction to Turning Moment Diagram	Turning Moment Diagram (TMD) for 4-stroke engines Video Lecture from Chapter Flywheel and Governors in Theory of Machine for Mechanical Engineering Students.
381.	Construction of Parabola	This video is a Conic Section where the parabola is drawn by my tricks to make you easily and how to draw with the mini drafter. As wise, to the subject, Engineering and diploma students having difficulty in drawing subject so I have made subject related videos for them to understand easily by tricks and skills.
382.	FEA- CAD/CAM/CAE	This video briefly explains about Computer Aided Design, Computer Aided Manufacturing, Computer Aided Analysis and Finite Element Analysis.
383.	Finite Element Analysis Introduction	This video explains about Introduction of Finite Element Analysis which is relevant to Computer Aided Engineering.
384.	Finite Element Analysis - Brief History	This video explains about a brief history and origin of Finite Element Analysis which is highly reliable used in Industrial sector.
385.	Emissary of Gray Body	This experiment is used to determine the emissivity of gray surface obtain by comparing with maximum emissivity of black body.
386.	Heat Transfer through Composite Wall	This experiment is used to find out the overall heat transfer coefficient by using three-layer composite wall. This composite wall consists of brass, asbestos and mild steel. We can find the amount of heat transfer from composite wall to cold water.
387.	Finite Element Analysis - Weighted Residual Methods	Weighted residual method (WRM) is an approximation technique in which solution of differential equation is approximated by linear combination of trial or shape functions having unknown coefficients. The approximate

Criterion II
Teaching-Learning and Evaluation

		solution is then substituted in the governing differential equation resulting in error or residual.
388.	Finite Element Analysis - Rayleigh Ritz method	Rayleigh's method of dimensional analysis is a conceptual tool used in physics, chemistry, and engineering. This form of dimensional analysis expresses a functional relationship of some variables in the form of an exponential equation.
389.	Stress Analysis on Cantilever Beam	To investigate the deflection and stress distribution in a long, slender cantilever beam of uniform rectangular cross section made of linear elastic material.
390.	Stress Analysis on Rectangular Plate with Circular hole	To investigate the deflection and stress distribution in a long, rectangular plate with circular hole made of linear elastic material properties that are homogeneous and isotropic.
391.	Torsion Loading	In this video, we will explore torsion, which is the twisting of an object caused by a moment. It is a type of deformation. A moment that tends to cause twisting is called torque. Some of the things covered in this video include how circular bars deform under torsion, how we can calculate the angle of twist, and how we can calculate the stresses and strains that are generated in a circular bar as a result of torsion. We will also discuss internal torque diagrams, and why torsional failure is different for brittle and for ductile materials.
392.	Introduction to Strength of Materials	This video covers basic concepts of the strength of materials for mechanical engineering. Concepts like stress, strain, elastic constant, Poisson's ratio, strain energy, mechanical properties are discussed in this video. This video also gives the fundamental concepts that are used to describe how an object responds to externally applied loads

**Criterion II
Teaching-Learning and Evaluation**

393.	1D, 2D, 3D Elements	There are many different types of elements used in FEA. These elements are developed independently and vary from one finite element (FE) software to another. In general, there are three groups of the element which are one-dimensional (1D), two-dimensional (2D), and three-dimensional (3D) elements.
394.	Basics of Finite Element Analysis	It's to learn finite element analysis than it seems, and I'm going to try to explain what FEA is in a simple and easy to understand way for beginners. Finite
395.	Concepts of Radiation	This video gives some concepts on thermal radiation and characteristics of electromagnetic waves.
396.	Vapour Compression Refrigeration System	In this video, principle of vapour compression refrigeration system is explained.
397.	Rankine Cycle	This video explains about the various thermodynamic processes in Rankine cycle.
398.	Spark Ignition Engine Combustion	In this video, fundamental concept of spark ignition engine combustion through its various stages is explained.
399.	Sectioning	In this video, sectioning of solids is explained.
400.	Development	In this video, development of solids is explained.
401.	Difference VAR & VCR	In this video, difference between vapour compression and vapour absorption refrigeration system is explained.
402.	Introduction to Vapour Compression Refrigeration System	In this video, Introduction to vapour compression refrigeration system is explained.

**Criterion II
Teaching-Learning and Evaluation**

403.	Introduction to the Fluid, types and properties	The term 'fluid' is more closely related to being a solid plasma; however, we consider it as liquid and gas. A fluid carries no shear modulus. Now, let's understand the types of fluid flow.
404.	Introduction to the IC Engines.	In an internal combustion engine (ICE), the ignition and combustion of the fuel occurs within the engine itself. The engine then partially converts the energy from the combustion to work. The engine consists of a fixed cylinder and a moving piston
405.	Code Converters	This video lecture provides the basic information on the process for converting a code of some predetermined bit structure to another code.
406.	VLSI- CMOS Process Technology	This video will provide an information about the basic fabrication process involved in CMOS fabrication.
407.	Control Valves	This video describes the concept of control valve and its working. Control valves are integral elements in all types of industrial applications mainly in flow applications. Industrial control valves are classified based on function and industrial usage.
408.	SCADA and its applications	This video describes the SCADA (Supervisory Control and Data Acquisition) system and its architecture with its features. SCADA is a centralized software and hardware-based system which can be implemented for the entire plant for efficient automatic control and monitoring. Moreover, some of the SCADA applications are also presented with visualization.
409.	Nuclear Power Plants	This video shares the insights of nuclear power plant and the types of reactors used in the nuclear power plants
410.	Bioinformatics	The video speaks on various possibilities on providing solutions to health care issues using bioinformatics approaches.



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**Criterion II
Teaching-Learning and Evaluation**

411.	Intellectual Property Rights	The listener would be able understand the importance of IPR after watching this content.
412.	Electrocardiography	The importance of heart and its function is analyzed. The methodology to assess the performance of heart is also discussed.
413.	Introduction to Transmission System	Power System -Introduction, Installed Capacity (Renewable, Non-Renewable) in India, Types of Transmission system, Transmission line Voltage, Transmission line Components
414.	Energy Conservation Measures in Domestic and Industry	Installed power capacity in India, Importance of Electricity, Importance of Energy Conservation, Energy Conservation Act, Energy Conservation Measures

Principal