

Lesson Plan

Name of faculty: - Suman Devi

Discipline:- Applied Science

Semester: -2nd Sem

Subject: -English Language-II

Lesson Plan Duration: - 15 weeks (from Jan-2018 to Apr-2018)

Work Load:- Lectures-3, Practicals-2

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC	PRACTICAL DAY	TOPIC
1 st	1 st	Grammar	1 st	Debate
	2 nd	Prepositions(Define)		
	3 rd	Prepositions(Types)		
2 nd	1 st	Prepositions(Uses)	1 st	Offering- Responding to offers
	2 nd	Prepositions(Uses)		
	3 rd	Revision of Prepositions		
3 rd	1 st	Framing Questions	1 st	Congratulating File checking
	2 nd	Question start with Aus. Verb		
	3 rd	Question start with Aus. verb Modals	2 nd	Exploring sympathy and condolences
4 th	1 st	Question start with Que. Words	1 st	Asking Questions- Polite Responses
	2 nd	Question start with Que. Words		
	3 rd	Revision		
5 th	1 st	1 st Sessional		
	2 nd			
	3 rd			
6 th	1 st	Conjunction(Define)	1 st	Complaining
	2 nd	Type of conjunction		
	3 rd	Explain of Types		
			2 nd	Warning

7 th	1 st	Use of conjunction	1 st	Asking and giving information
	2 nd	Revision of conjunction		
	3 rd	Tenses		
8 th	1 st	Tenses(Define, Type)	1 st	Apologizing, forgiving
	2 nd	Simple present Tenses		
	3 rd	Present Continuous Tenses Present Perfect, continuous Tenses		
9 th	1 st	Past Tenses(Uses)	1 st	Warning
	2 nd	Future Tenses(Uses)		
	3 rd	Revision of Tenses		
10 th	1 st	2 nd Sessional		
	2 nd			
	3 rd			
11 th	1 st	Unseen Passage	1 st	Getting and giving permission
	2 nd	Revision of it		
	3 rd	Business letters(Floating Quotations)		
12 th	1 st	Placing Orders, Complaint Letters.	1 st	Asking and giving opinions
	2 nd	Official Letters- Letters to Government		
	3 rd	Official Letters- Letters to other Offices		
13 th	1 st	Memos, Circular	1 st	Assignment and current topic
	2 nd	Office Orders		
	3 rd	Agenda		
14 th	1 st	Minutes of Meeting	1 st	Assignment
	2 nd	Revision of Letter, Memos		
	3 rd	Revision of circular, Agenda, Minutes of meeting		
15 th	1 st	Sessional 3 rd		
	2 nd			
	3 rd			

Lesson Plan

Name of the Faculty : Mr.Amit Jain
Discipline : Applied Science
Semester : Second
Subject : Applied Mathematics-II
Paper Code : 170022
Lesson Plan Duration : 15weeks (from January, 2018 to April, 2018)

Week	Theory	
	Lecture Day	Topic (including assignment/ test)
1 st	1 st	Definition and concept of function
	2 nd	Exercise of functions
	3 rd	Concept of limits (Lecture-1)
	4 th	Concept of limits (Lecture-2)
	5 th	Concept of limits (Lecture-3)
2 nd	1 st	Problems are taken from the students.
	2 nd	Differentiation of e^x , $\sin x$ by first principle.
	3 rd	Differentiation of $\cos x$, $\tan x$ by first principle.
	4 th	Differentiation of $\cot x$ by first principle.
	5 th	Differentiation of sum and difference of functions (Lecture-1)
3 rd	1 st	Differentiation of sum and difference of functions (Lecture-2)
	2 nd	Differentiation of product of functions (Lecture-1)
	3 rd	Differentiation of product of functions (Lecture-2)
	4 th	Differentiation of quotient of functions (Lecture-1)
	5 th	Differentiation of quotient of functions (Lecture-2)
4 th	1 st	Differentiation of quotient of functions (Lecture-3)
	2 nd	Differentiation of trigonometric functions (Lecture-1)
	3 rd	Differentiation of trigonometric functions (Lecture-2)

	4 th	Differentiation of trigonometric functions (Lecture-3)
	5 th	Problems are taken from the students.
5 th	1 st	Differentiation of inverse trigonometric functions (Lecture-1)
	2 nd	Differentiation of inverse trigonometric functions (Lecture-2)
	3 rd	Differentiation of inverse trigonometric functions (Lecture-3)
	4 th	Logarithmic differentiation (Lecture-1)
	5 th	Logarithmic differentiation (Lecture-2)
6 th	1 st	Formulas revision of Differential Calculus with examples
	2 nd	Successive Differentiation upto 2 nd order (Lecture-1)
	3 rd	Successive Differentiation upto 2 nd order (Lecture-2)
	4 th	Successive Differentiation upto 2 nd order (Lecture-3)
	5 th	Problems are taken from the students.
7 th	1 st	Application of differential calculus in Rate Measures (Lecture-1)
	2 nd	Application of differential calculus in Rate Measures (Lecture-2)
	3 rd	Application of differential calculus in Maxima and Minima (Lecture-1)
	4 th	Application of differential calculus in Maxima and Minima (Lecture-2)
	5 th	Problems are taken from the students.
8 th	1 st	Problem discussion of Unit 1 (Differential Calculus)
	2 nd	<ul style="list-style-type: none"> • Copy Checking • Assignment Checking
	3 rd	Test-1
	4 th	Integration as inverse operation of differentiation with simple examples
	5 th	<ul style="list-style-type: none"> • Indefinite Integral (Lecture-1) • Assignment work on Integral Calculus
9 th	1 st	Indefinite Integral (Lecture-2)
	2 nd	Indefinite Integral (Lecture-3)
	3 rd	Indefinite Integral (Lecture-4)
	4 th	Indefinite Integral (Lecture-5)
	5 th	Indefinite Integral (Lecture-6)
10 th	1 st	Indefinite Integral (Lecture-7)
	2 nd	Problems are taken from the students.
	3 rd	Definite Integrals (Lecture-1)
	4 th	Definite Integrals (Lecture-2)
	5 th	Definite Integrals (Lecture-3)
11 th	1 st	Definite Integrals (Lecture-4)
	2 nd	Evaluation of
	3 rd	Evaluation of
	4 th	Formulas revision of Integral Calculus with examples

	5 th	Applications of integration for evaluation of area under a curve and axes (Lecture-1)
12 th	1 st	Applications of integration for evaluation of area under a curve and axes (Lecture-2)
	2 nd	Numerical integration by Trapezoidal Rule using pre-existing mathematical models (Lecture-1)
	3 rd	Numerical integration by Trapezoidal Rule using pre-existing mathematical models (Lecture-2)
	4 th	Numerical integration by Simpson's 1/3 rd Rule using pre-existing mathematical models (Lecture-1)
	5 th	Numerical integration by Simpson's 1/3 rd Rule using pre-existing mathematical models (Lecture-2)
13 th	1 st	Problem discussion of Unit 2 (Integral Calculus)
	2 nd	<ul style="list-style-type: none"> • Copy Checking • Assignment Checking
	3 rd	Test-2
	4 th	<ul style="list-style-type: none"> • Definition, order and degree of an ordinary differential equation (Lecture-1) • Assignment work on Differential Equations and Statistics
	5 th	Definition, order and degree of an ordinary differential equation (Lecture-2)
14 th	1 st	Linearity of an ordinary differential equation
	2 nd	Measures of Central Tendency: Mean
	3 rd	Measures of Central Tendency: Median
	4 th	Measures of Central Tendency: Mode
	5 th	Measures of Dispersion: Mean deviation
15 th	1 st	Measures of Dispersion: Standard Deviation (Lecture-1)
	2 nd	Co-efficient of rank correlation
	3 rd	Problem discussion of Unit 3 (Differential Equations and Statistics)
	4 th	<ul style="list-style-type: none"> • Copy Checking • Assignment Checking
	5 th	Test-3

Lesson Plan

Name of the Faculty : **Gagandeep**
 Discipline : **Applied Science**
 Semester : **2ndsem**
 Subject : **APPLIED PHYSICS – II**
 Paper Code :
 Lesson Plan Duration : **15weeks (from January, 2018 to April, 2018)**

Week	Theory	
	Lecture Day	Topic (including assignment/ test)
1 st	1 st	Wave motion and its applications :-
	2 nd	Wave motion, transverse and longitudinal wave motion with examples, Terms used in wave motion like displacement
	3 rd	
	4 th	Amplitude, time period, frequency, wavelength, wave velocity
	5 th	Relationship among wave velocity, frequency and wave length
2 nd	1 st	Simple Harmonic Motion (SHM): definition, examples
	2 nd	Cantilever (definition, formula of time period (without derivation))
	3 rd	
	4 th	Free, forced and resonant vibrations with examples
	5 th	Acoustics of buildings – reverberation, reverberation time, echo, noise
3 rd	1 st	Coefficient of absorption of sound, methods to control reverberation time
	2 nd	Ultrasonics – Introduction and their engineering applications (cold welding, drilling, SONAR)
	3 rd	
	4 th	Ultrasonics – Introduction and their engineering applications (cold welding, drilling, SONAR)
	5 th	Optics :- Reflection and refraction with laws
4 th	1 st	Refractive index
	2 nd	Lens formula (no derivation), power of lens (related numerical problems)
	3 rd	
	4 th	Total internal reflection and its applications, Critical angle and conditions for total internal reflection
	5 th	Microscope, Telescope (definition)
5 th	1 st	Uses of microscope and telescope
	2 nd	Electrostatics :- Coulombs law, unit charge
	3 rd	
	4 th	Coulombs law, unit charge
	5 th	Electric field, Electric lines of force (definition and properties)
6 th	1 st	Electric field, Electric lines of force (definition and properties)
	2 nd	Electric flux, Electric Intensity and Electric potential (definition, formula)
	3 rd	
	4 th	Electric flux, Electric Intensity and Electric potential (definition, formula)
	5 th	Electric field intensity due to a point charge
7 th	1 st	Electric field intensity due to a point charge
	2 nd	Gauss law (Statement and derivation)
	3 rd	
	4 th	Capacitor and Capacitance (with formula and units)
	5 th	Series and parallel combination of capacitors (simple numerical)

		problems)
8 th	1 st	Series and parallel combination of capacitors (simple numerical problems)
	2 nd	Current Electricity :-
	3 rd	
	4 th	Electric Current and its Unit
	5 th	Direct and alternating current
9 th	1 st	Resistance and Specific Resistance(definition and units) Conductance
	2 nd	Series and Parallel combination of Resistances
	3 rd	
	4 th	Series and Parallel combination of Resistances
	5 th	Ohm's law (statement and formula)
10 th	1 st	Superconductivity(definition only)
	2 nd	Heating effect of current
	3 rd	
	4 th	Electric power
	5 th	Electric energy and its units
11 th	1 st	Kirchhoff's laws(statement and formula)
	2 nd	Electromagnetism:-
	3 rd	
	4 th	Introduction to magnetism
	5 th	Types of magnetic materials
12 th	1 st	Dia, para and ferromagnetic materials with examples
	2 nd	Dia, para and ferromagnetic materials with examples
	3 rd	
	4 th	Magnetic field,magnetic intensity
	5 th	Magnetic lines of force
13 th	1 st	Electromagnetic induction (definition)
	2 nd	Semiconductor physics :-
	3 rd	
	4 th	Energy bands
	5 th	Types of materials (insulator, semi conductor, conductor)
14 th	1 st	Intrinsic and extrinsic semiconductors
	2 nd	p-n junction diode and its V-I characteristics
	3 rd	
	4 th	Diode as rectifier – half wave and full wave rectifier (centre tap only)
	5 th	Semiconductor transistor; pnp and npn (Introduction only)
15 th	1 st	Modern Physics :-
	2 nd	Lasers: full form, characteristics, engineering and medical applications of lasers
	3 rd	
	4 th	Fibre optics: Introduction to optical fibers(definition ,parts),applications of optical fibers in different fields
	5 th	Introduction to nanotechnology(definition of nanomaterials with examples) and its applications

Lesson Plan

Name of faculty:- Gagandeep Kaur

Discipline:- Applied Science

Semester:- 2nd

Subject:- Electronics 1

Lesson Plan Duration:- 15 weeks (from Jan-2018 to Apr-2018)

Work Load:- Lectures-3, Practicals-2

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC	PRACTICAL DAY	TOPIC
1st	1 st	PN junction diode, Mechanism of current flow	1st	Identification and testing of resistor, inductor
	2 nd	Drift current ,Diffusion current , Depletion layer		
	3 rd	Effect of forward and reverse biasing in a PN junction	2 nd	Identification and testing of capacitor, diode
2nd	1 st	Concept of junction capacitance in forward and reverse biased conditions, Ideal diode	1st	Identification and testing of transistor
	2 nd	Semiconductor diode characteristics, static and dynamic resistance		
	3 rd	Half wave rectifier	2 nd	Identification and testing of different types of switches
3rd	1 st	Full wave rectifier	1st	Measurement of resistances using multimeter and

	2 nd	Relation between DC output and AC input voltage, Rectifier Efficiency		their comparison with colour code values
	3 rd	Concept of ripples, Filter circuits	2 nd	File checking
4th	1 st	Filter circuits	1 st	To plot V-I characteristics of a Semiconductor diode and to calculate its static and dynamic resistance
	2 nd	Zener diode, Varactor diode, Schottky diode		
	3 rd	Light emitting diode, Photo diode	2 nd	To plot V-I characteristics of a zener diode and finding its reverse breakdown voltage
5th	1 st	Zener diode and its characteristics	1 st	Observation of input and output wave shapes of a half-wave rectifier and verification of relationship between dc output and ac input voltage
	2 nd	Use of zener diode for voltage stabilization		
	3 rd	Problems of unit 1		File Checking
6th	1 st	Assignment - 1	1 st	Observation of input and output wave shapes of a full wave rectifier and verification of relationship between dc output and ac input voltage
	2 nd	Concept of junction transistor, PNP and NPN transistors		
	3 rd	Symbols of transistor and Mechanism of current flow	2 nd	Observation of input and output wave shapes of a full wave rectifier with shunt capacitor
7th	1 st	Transistor configurations: common base (CB)	1 st	Observation of input and output wave shapes of a full wave rectifier with series inductor
	2 nd	Common emitter		
	3 rd	Class test 1	2 nd	Plotting input and output characteristics of a transistor in CB configuration
8th	1 st	Common collector (CC), current relation and their input/output characteristics	1 st	File Checking
	2 nd	Comparison of the three configurations		

	3 rd	Transistor biasing, its need	2 nd	Plotting input and output characteristics of a transistor in CE configuration
9th	1 st	Operating point, Effect of temperature on the operating point of a transistor	1st	Measurement of operating point in case of (i) fixed biased circuit (ii) potential divider biasing circuit
	2 nd	Need of stabilization of operating point, Different biasing circuits		
	3 rd	Assignment 2	2 nd	File Checking
10th	1 st	Different biasing circuits		
	2 nd	Simple problems to calculate operating point in different biasing circuits		
	3 rd	Concept of h-parameters of a transistor		
11th	1 st	Class test 2	1st	Remaining lectures will be used for theory revision
	2 nd	Single stage transistor amplifier circuit in CE configuration		
	3 rd	Working of single stage transistor amplifier Concept of DC and AC load line	2 nd	
12th	1 st	Voltage gain of single stage transistor amplifier using characteristics of the device ,Concept of input and output impedance	1st	
	2 nd	AC equivalent circuit of single stage transistor amplifiers, Frequency response of a single stage transistor amplifier		
	3 rd	Need of multi-stage transistor amplifiers	2 nd	
13th	1 st	Voltage gain, Current gain, Power gain, Frequency response, Decibel gain and Band width	1st	
	2 nd	RC coupled two-stage amplifier		
	3 rd	Loading effect in multistage amplifiers, Emitter	2 nd	

		follower		
14th	1 st	Direct coupled amplifier	1st	
	2 nd	Transformer coupled amplifier		
	3 rd	Assignment 3, Construction, operation, characteristics and applications of a N channel JFET and P channel JFET	2 nd	
15th	1 st	Class test 3		
	2 nd	MOSFET		
	3 rd	Comparison between BJT, JFET and MOSFET , Power MOSFET		

Lesson Plan

Name of the Faculty : - Mrs. Suman Devi
Discipline : - Applied Science
Semester :- 2nd
Subject :- ENVIRONMENTAL STUDIES
Paper Code :
Lesson Plan Duration :- 15 weeks (from January, 2018 to April,2018)

Week	Theory	
	Lecture Day	Topic (including assignment/ test)
1 st	1 st	Ecology, Eco system- concept
	2 nd	Structure and Importance of ecosystem
	3 rd	Carbon, Nitrogen cycle
	4 th	Sulphur cycle, Sustainable development
	5 th	Conservation of land
2 nd	1 st	Preservation of species, prevention of advancement of deserts
	2 nd	lowering of watertable, Rain water harvesting
	3 rd	Acid Rain, maintenance of ground water
	4 th	Seminar 1

	5 th	Water supply engineering, Deforestation – its effects and control measures
3 rd	1 st	Assignment 1
	2 nd	Pollution: Sources of pollution - natural and man made
	3 rd	Classification of pollutants
	4 th	Causes, effects and control measures of pollution
	5 th	Causes, effects and control measures of pollution
4 th	1 st	Prevention of Pollution(lecture 1)
	2 nd	Prevention of Pollution (lecture 2)
	3 rd	Photocatalytic degradation of pollutants
	4 th	Waste Minimization Techniques
	5 th	Class test 1
5 th	1 st	Concept of Zero Discharge
	2 nd	Solid waste management
	3 rd	Classification of refuse material
	4 th	Effects and control measures
	5 th	Introduction to E-waste Management
6 th	1 st	Environmental Legislation - Water (prevention and control of pollution) Act 1974
	2 nd	Prevention and Control of Pollution Act 1981
	3 rd	Environmental Protection Act 1986
	4 th	Role and Function of State Pollution Control Board
	5 th	Assignment 2
7 th	1 st	Environmental Impact Assessment (EIA)
	2 nd	Seminar 2
	3 rd	Introduction to Energy Conservation Act 2001 and Energy Conservation (Amendment) Act 2010
	4 th	Energy Conservation
	5 th	Energy Management
8 th	1 st	Solar Energy
	2 nd	Wind Energy
	3 rd	Bio Energy
	4 th	Hydro Energy
	5 th	Global Warming, Green House Effect
9 th	1 st	Energy Conservation, Energy efficiency & its need
	2 nd	Seminar 3
	3 rd	Recycling of Material
	4 th	Concept of Green Buildings
	5 th	Assignment 3
10 th	1 st	Class test 3
	2 nd	Depletion of Ozone Layer
	3 rd	Revision of syllabus
	4 th	Physical, chemical and biological treatment of pollutants
	5 th	Chemical degradation of waste
11 th	1 st	Solar energy
	2 nd	Wind energy
	3 rd	Revision of 1 st unit

	4 th	Revision of 1 st unit
	5 th	Oral test
12 th	1 st	Revision of 2 nd unit
	2 nd	Revision of 2 nd unit
	3 rd	Oral test
	4 th	Revision of 3 rd unit
	5 th	Revision of 3 rd unit
13 th	1 st	Oral test
	2 nd	Revision of 4 th unit
	3 rd	Revision of 4 th unit
	4 th	Oral test
	5 th	Revision of 5 th unit
14 th	1 st	Revision of 5 th unit
	2 nd	Oral test
	3 rd	Revision of 6 th unit
	4 th	Revision of 6 th unit
	5 th	Oral test
15 th	1 st	Revision of 7 th unit
	2 nd	Revision of 7 th unit
	3 rd	Oral test
	4 th	
	5 th	

Lesson Plan

Name of faculty:- Mr.RamBhagat (Practical)

Discipline: AppliedScience

Semester: II

Subject: EngineeringDrawing -II

Lesson Plan Duration: 15weeks (from Jan-2018 to Apr-2018)

Work Load: Practicals-8

WEEK	PRACTICAL	
	PRACTICAL DAY	TOPIC
1	1	Principle and utility of detail and assembly drawings
	2	Wooden joints i.e. corner mortice and tenon joint, Tee halving joint, Mitre faced corner joint, Tee bridle joint,
2	1	Crossed wooden joint, Cogged joint, Dovetail joint, Through Mortice and Tenon joint, furniture drawing - freehand and with the help of drawing instruments
	2	Thread Terms and Nomenclature
3	1	Types of threads-External and Internal threads, Right and Left hand threads (Actual and Conventional representation), single and multiple start threads
	2	Different Forms of screw threads-V threads (B.S.W threads, B.A thread, American National and Metric thread),
4	1	Square threads (square, Acme, Buttress and Knuckle thread)
	2	Different views of hexagonal and square nuts and hexagonal headed bolt
5	1	Sessional 1 st

	2	
6	1	Assembly of Hexagonal headed bolt and Hexagonal nut with washer, Assembly of square headed bolt with hexagonal and with washer.
	2	Different types of locking devices-Lock nut, castle nut, split pin nut, locking plate, slotted nut and spring washer
7	1	Foundations bolts-Rag bolt, Lewis bolt, curved bolt and eye bolt. Drawing of various types of machine screw, set screw, studs and washers
	2	Various types of keys and cotters and their practical application and preparation of drawing of various keys and cotters showing keys and cotters in position
8	1	Sheet checking .
	2	Various types of joints (3 sheets) - Spigot and socket joint - Gib and cotter joint - Knuckle joint
9	1	Types of general purpose-rivets heads (4 Sheets)
	2	Caulking and fullering of riveted joints and revision for sessional tests.
10	1	
	2	Sessional 2 nd
11	1	Types of riveted joints (i) Lap joint-Single riveted, double riveted (chain and zig-zag type) (ii) Single riveted, Single cover plate butt joint (chain type)

	2	(iii) Single riveted, double cover plate butt joint (chain type) (iv) Double riveted, double cover plate butt joint(chain and zig-zag type)
12	1	Couplings (2 sheets) , Flange coupling (Protected and non-protected), muff coupling and half-lap muff coupling
	2	Symbols and Conventions (2 sheets) , Civil engineering sanitary fitting symbols
13	1	Electrical fitting symbols for domestic interior installations
	2	AUTO CAD (for practical and viva-voce only) Concept of AutoCAD, Tool bars in AutoCAD, coordinate system, snap, grid, and ortho mode , Drawing commands – point, line, arc, circle, ellipse
14	1	Editing commands – scale, erase, copy, stretch, lengthen and explode
	2	Sheet checking and doubt clearing.
15	1	Sessional 3 rd
	2	