LESSON PLAN

NAME OF THE FACULTY :Ms. Preetpal Kaur (Instructor)
DISCIPLINE :Civil A, Civil B, comp, Automobile,electrical, electronics, plastic, arch, Mech A & Mech B
SEMESTER : First
SUBJECT :English and communication skill (Practical)
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK :Practicals = 2

WEEK	Practical
1	Reading Practice of lessons in the Lab Activity classes.
	Comprehension exercises of unseen passages along with the lessons prescribed.
	Vocabulary enrichment and grammar exercises based on the selected readings
2	Conversation Practice
3	Chapter-1.3 Comprehension Passage
4	Chapter 1.4 Comprehension Passages
5	Chapter 1.5 Comprehension Passages
6	Reading aloud Newspaper headlines and important articles
7	Introducing oneself, others and leave- taking(talking about yourself)
8	Just a minute (JAM) sessions: Speaking extempore for one minute on given topics
9	Just a minute (JAM) sessions: Speaking extempore for one minute on given topics
10	Narayan Murthy's speech at LBSNA
11	Offering-Responding to offers
12	Apologizing & Forgiving, Complaining;
13	Talking about likes and dislikes

14	Self-introduction Mock
	Situational Conversation
15	Revision
	Revision

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY :Ms. Neetu Gupta
DISCIPLINE :Civil A, Civil B,Comp, Automobile,Electrical, Electronics, Plastic, Arch, Mech A & Mech B
SEMESTER :1st
SUBJECT :English & communication skill
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK : Lectures (Theory) = 02+02+02+02+02+02+02+02+02+02,

WEEK		THEORY	
	LECTURE DAY		TOPIC (WITH ASSIGNMENT & TESTS)
1	1		Techniques of reading: Skimming and Scanning, Extensive and Intensive Reading: Textual Study
	2		Homecoming – R.N. Tagore
2	3		Life Sketch of Sir MokshagundamVisvesvarayya,
	4		Nouns
3	5		Pronouns
	6		Significance, essentials and effectiveness of Written Communication
4	7		Revision
	8		Revision
1st sessional test			
5	9		Life Sketch of Dr. Abdul Kalam
	10		Concept and Process of Communication
6	11		Types of Communication (Verbal Communication)
	12		Barriers to communication
7	13		Articles
	14		Verbs(Main and Auxiliary)
8	15		Speaking Skill: Significance and essentials of Spoken Communication
	16		Listening Skill: Significance and essentials of Listening, Revision
2nd sessional test			
9	17		Narayan Murthy's speech at LBSNA
	18		Narayan Murthy's speech at LBSNA
10	19		Tenses
	20		Tenses
11	21		Notice Writing
	22		Notice Writing
12	23		Official Letters and E-mails
	24		Official Letters and E-mails
3rd sessional test			
13	25		Frequently-used Abbreviations used in Letter-Writing
	26		Paragraph Writing
14	27		Paragraph Writing
	28		Netiquettes
15	29		Revision
	30		Revision

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY :Ms. Neetu Gupta (Lecturer)
DISCIPLINE : Mech B, Arch
SEMESTER : First
SUBJECT : English and communication skill (Practical)
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK :Practicals = 2

WEEK	Practical
1	Reading Practice of lessons in the Lab Activity classes.
	Comprehension exercises of unseen passages along with the lessons prescribed.
	Vocabulary enrichment and grammar exercises based on the selected readings
2	Conversation Practice
3	Chapter-1.3 Comprehension Passages
4	Chapter 1.4 Comprehension Passages
5	Chapter 1.5 Comprehension Passages
6	Reading aloud Newspaper headlines and important articles
7	Introducing oneself, others and leave- taking(talking about yourself)
8	Just a minute (JAM) sessions: Speaking extempore for one minute on given topics
9	Just a minute (JAM) sessions: Speaking extempore for one minute on given topics
10	Narayan Murthy's speech at LBSNA
11	Offering-Responding to offers
12	Apologizing & Forgiving, Complaining;
13	Talking about likes and dislikes
14	Self-introduction Mock

	Situational Conversation
15	Revision
	Revision

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY : SARITA MANN

DISCIPLINE : MECHANICAL,AUTO, ELECTRICAL, PLASTIC

SEMESTER :FIRST

SUBJECT : APPLIED PHYSICS

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK :Lectures= 2+2+2+2Practicals = 4+4 +4+2

WEEK		THEORY		PRACTICAL	
	LECTURE DAY		TOPIC (WITH ASSIGNMENT & TESTS)		TOPIC
1	1		Definition of physics and physical quantities	1	Familiarization of measuring instruments-Vernier caliper, screw gauge spherometer
	2		Units-fundamental and derived units		
2	3		System of units-FPS,CGS,MKS,SI	2	To find the diameter of a solid cylinder using Verniercaliper
	4		Dimensions and dimensional formulae		
3	5		SI unit and dimensions of some physical quantities	3	To find the internal diameter and depth of a beaker using Vernier calliper
	6		Dimensional equations and principle of homogeneity		
4	7		scalar and vector quantities with examples, Vector addition-triangle and parallelogram law and	4	Checking of files and viva voce
	8		Force, its units and resolution of force, Newton's laws of motion with examples		
1st Sessional test					
5	9		Discussion of sessional	5	To find the diameter of wire using screw gauge
	10		Linear momentum, impulse and law of conservation of		
6	11		Angular displacement, velocity, acceleration, time period, frequency	6	To find thickness of paper using screw gauge.
	12		Relation between linear and angular velocity		
7	13		Centripetal and centrifugal force and banking of roads	7	Checking of files & viva-voce
	14		Work-definition, formula and unit and types of work,		
8	15		Energy-definition, units and transformation of energy, Kinetic energy and potential energy	8	To determine the thickness of glass strip using a spherometer
	16		Law of conservation of energy with derivation, Power-definition, formula and units		
2nd Sessional test					
9	17		Discussion of sessional	9	To determine the radius of curvature of a given spherical surface using spherometer
	18		Elasticity and plasticity, deforming and restoring force		
10	19		Definition of stress and strain, Hooke's law	**10**	To verify parallelogram law of forces
	20		Types of modulus of elasticity		
11	21		Pressure-atmospheric pressure, gauge	11	To determine atmospheric pressure using Fortin's barometer
	22		Surface tension and applications		

12	23		Viscosity-definition, examples and effect of	12	To determine force constant of a spring using Hooke's law
	24		Definition of heat and temperature, Difference between heat and temperature		
13	25		Principle and working of mercury thermometer	13	Checking of files & viva-voce
	26		Modes of transfer of heat-conduction, convection, radiation , Different scales of temperature and their relationship		
3rd Sessional test					
14	27		Revision of Unit 1 and Unit 2	14	To measure room temperature with the help of thermometer and convert to different scales
	28		Revision of Unit 3 and Unit 4		
15	29		Revision of Unit 5 and numerical problem	15	Revision of Practicals
	30		Discussion of previous year Q. Papers		

PERFORMA OF LESSON PLAN (First Sem)

Subject: Applied Maths

Name of Faculty: Smt. Anuradha

Discipline: Civil A, civil B, Automobile, Electronics, Plastic & Arch

Work Load Per week: Lectures 4+4+4+4+4+4

Lesson Plan Duration :15 Weeks

Week	DAY	Theory (Topics)
1	1	Definition of complex number, real and imaginary parts
	2	Polar and Cartesian Form and their inter conversion
	3	Conjugate of a complex number
	4	Modulus/argument of complex No
2	1	Addition subtraction, multiplication and division of complex number.
	2	Numericals complex number And Assignment-I
	3	Fundamental Rules of Logarithms
	4	Logarithm Conversation Log to exp and vice versa
3	1	Numericals Logarithms
	2	Numericals And Assignment-II
	3	Factorial
	4	Permutation, combination
4	1	Binomial theorem expansion
	2	General Term, Middle Term/ Co- eff of xn
	3	Binomial theorem for any index And Assignment-III
	4	Revision
1st Sessional test		
5	1	Matrics: Define/Types
	2	Addition subtraction of Matrices
	3	Multiplication of Matrices
	4	Determinants (up to 2 order) by laplace method
6	1	Solution of equation by Cramer's RuleAnd Assignment-IV
	2	Trigonometry: Concept of angle: measurement of angle
	3	Conversion of angles
	4	Fundamental Identities, Allied angles
7	1	Addition and subtraction formula
	2	Addition and subtraction formula Numericals
	3	Transformation formula
	4	Numericals
8	1	Numericals
	2	Application: Angle of elevation/height/distance
	3	Numericals And Assignment-V
	4	Revision
2ndSessional test		
9	1	Point: Distance Formula
	2	Mid Point Formula
	3	Area of Triangle
	4	Straight line: Slope of a line
10	1	Equation of straight line in various standards forms
	2	Equation of straight line in various standards forms
	3	Intersection of two straight lines, concurrency of lines
	4	Angle between two straight lines, parallel and perpendicular lines
11	1	Perpendicular distance formula,
	2	Conversionofgeneralformofequationtothevariousforms And Assignment-VI
	3	Circle: General equation of a circle

	4	Centre and radius of circle
12	1	Find Standard equation of circle and centre and radius
	2	Find general equation of circle and centre and radius
	3	Tofindtheequationofacircle,given threepointslyingonit
	4	Tofindtheequationofacircle given coordinatesofendpointsofadiameter, Assignment-VII
13	1	Theoretical Introduction of MATLAB
	2	Addition and subtraction of values Trigonometric functions
	3	Addition and subtraction of values Inverse Trigonometricfunctions
	4	GeneralPracticeAnd Assignment-VIII
3rdSessional test		
14	1	Practice of Previous Question Papers
	2	Practice of Previous Question Papers
	3	Practice of Previous Question Papers
	4	Practice of Previous Question Papers
15	1	Revision
	2	Revision
	3	Revision
	4	Revision

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY :Sunita Rani (Lecturer)
DISCIPLINE :Civil B, Plastic
SEMESTER : First
SUBJECT : APPLIED CHEMISTRY (Theory)
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK :Lectures= 3+3

WEEK	THEORY		
	LECTURE DAY		TOPIC (WITH ASSIGNMENT & TESTS)
1	1		Introduction of AtomicStructure,Bohr'smodelofatom
	2		Dualcharacterofmatter:derivationofde-Broglie's equation Heisenberg's Principle of Uncertainty, modern concept of atomic structure
	3		Definitionoforbitals shapesofs,pandd-orbitals
2	4		Quantumnumbersandtheirsignificance
	5		AufbauandPauli'sexclusionprinciples Hund'srule
	6		Electronic configurationofelementsuptoatomicnumber 30.
3	7		Periodic TableModernPeriodiclawandPeriodictable, Classificationofelementsintos,p
	8		Classificationofelementsintod, f-blocks,metals,non-metalsandmetalloids
	9		Chemicalbonding:causeofbonding,ionicbond Physicalproperties ofionic,
4	10		Covalentbond,andmetallicbond(electronseaorgasmodel), Physicalproperties
	11		Doubt Quarries and Revision
	12		Metals: mechanical properties of metals such as conductivity, elasticity, strength and stiffness,luster, hardness, toughness, ductility, malleability
1st Sessional test			
5	13		Metals: mechanical properties of metals such as, brittleness, and impact resistance and theiruses. Definition of a mineral, ore, gangue, flux and slag
	14		Metallurgy of iron from haematite using ablastfurnace Commercialvarieties ofiron
	15		Alloys: definition, necessity of making alloys, composition, properties and uses of duralumin andsteel.Heattreatmentofsteel-normalizing,annealing,quenching,tempering.
6	16		Doubt Quarries and Revision
	17		Solutions: definition, expression of the concentration of a solution in percentage (w/w, w/v andv/v),normality,molarityandmolalityandppm.
	18		Simpleproblemsonsolutionpreparation
7	19		Arrhenius concept of acids and bases, strong and weak acids and bases, pH value of a solutionanditssignificance,pHscale
	20		Simplenumericalproblems onpHofacidsandbases.
	21		Hard and soft water, causes of hardness of water, types of hardness– temporary and permanenthardness

8	22		Expression of hardness of water, ppm unit of hardness; disadvantages of hard water;removal of hardness
	23		Removal of temporary hardness by boiling and Clark'smethod; removalofpermanent hardness of water by Ion-Exchange method
	24		Boiler problems caused byhard water: scale and sludge formation, priming and foaming, caustic embrittlement;watersterilizationbychlorine,UVradiationandRO
9	25		Doubt Quarries and Revision
	26		Fuels:definitionandclassificationofhigherandlowercalorificvalues,unitsofcalorificva
	27		Characteristics of an ideal fuel. Petroleum: composition and refining of petroleum
2nd Sessional Test			
10	28		Gaseousfuels: composition, properties and uses of CNG, PNG, LNG, LPG
	29		Relative advantages of liquidandgaseousfuels oversolidfuels.Scopeofhydrogenasfuturefuel.
	30		Lubricants-Functionsandqualitiesofagoodlubricant,classificationoflubricants
11	31		Lubrication mechanism (brief idea only
	32		Physical properties (brief idea only) of alubricant: oiliness, viscosity, viscosity index, flash and fire point, ignition temperature, pourpoint.
	33		Doubt Quarries and Revision
12	34		PolymersandPlastics:definitionofpolymer,classification,additionandcondensationpolymerization
	35		Preparationpropertiesandusesofpolythene,PVC,Nylon-66
	36		Preparationpropertiesanduses Bakelite;definition of plastic
13	37		Thermoplastics and thermosetting polymers; natural rubber and neoprene,othersyntheticrubbers (names only).
	38		Corrosion: definition, dry and wet corrosion
	39		Factors affecting rate of corrosion, methods ofpreventionofcorrosion—hotdipping
14	40		Preventionofcorrosion metalcladding,cementation,quenching,cathodicprotectionmethods
	41		Introductionandapplicationofnanotechnology:nano-materials
	42		Classification,applications ofnanotechnologyinvarious
3rd Sessional test			
15	43		Doubt Quarries and Revision
	44		Revision and discussion of previous year Q. Papers
	45		Revision and discussion of previous year Q. Papers

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY :Dr. Sunita Rani
DISCIPLINE : Automobile, Mech A & Mech B
SEMESTER :1st
SUBJECT :ESDM
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK : Lectures = 02+02+02

WEEK			THEORY
	LECTURE DAY		TOPIC (WITH ASSIGNMENT & TESTS)
1	1		**Introduction**
	2		Basicsofecology , Eco system- concept
2	3		Sustainabledevelopment
	4		Renewableandnon-renewable Sources of energy and their advantages& disadvantages
3	5		Rain water harvesting
	6		Deforestation – its effects & control measures
4	7		AirPollution:Sourceofairpollution
	8		Effectofairpollutiononhumanhealth,economy, Airpollutioncontrolmethods
1st sessional test			
5	9		Defination and Sourceofnoisepollution,Unitofnoise,Effectofnoisepollution, Acceptable noise level, Different method of minimizing noise pollution
	10		Revision of Soil and Noise Pollution
6	11		Water Pollution: Impurities in water, Cause of water pollution
	12		Source of water pollution.Effect of water pollution on human health, Concept of DO, BOD, COD
7	13		Prevention ofwaterpollution- Watertreatmentprocesses, Sewagetreatment
	14		Waterqualitystandard. Defination and Sources of soil pollution
8	15		Effects and Control of soil pollution, Types of Solid waste- House hold, Industrial, Agricultural, Biomedical,
	16		Disposal of solid waste, Solid waste management E-waste, E – waste management
2nd sessional test			
9	17		ImpactofEnergyUsageonEnvironmentGlobal Warming
	18		Green House Effect, Depletion of Ozone Layer, Acid Rain
10	19		Eco-friendlyMaterial, Recycling of Material, Concept of Green Buildings
	20		Concept of Carbon Credit&Carbonfootprint.
11	21		Revision of ImpactofEnergyUsageonEnvironment
	22		NaturalDisaster:suchasFlood,Cyclone

12	23		NaturalDisaster:EarthquakesandLandslidesetc
	24		Man-made Disaster: such as Fire, Industrial Pollution
13	25		Man-made Disaster: Nuclear Disaster, Biological Disasters,Accidents (Air, Sea Rail & Road)
	26		Man-made Disaster: Structural failures (Building and Bridge),War& Terrorismetc.
14	27		DisasterPreparednessPlan Prediction, Disaster Preparedness Early Warnings and Safety Measures of Disaster
	28		PsychologicalresponseandManagement(Trauma,Stress), PsychologicalresponseandManagement(RumourandPanic)
3rd Sessional test			
15	29		Revision and discussion of previous year Q. Papers
	30		Revision and discussion of previous year Q. Papers

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY :Sunita Rani (Lecturer)
DISCIPLINE :Civil B, Plastic
SEMESTER : First
SUBJECT : APPLIED CHEMISTRY (Practical)
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK :Practicals = 4+4

WEEK	Practical			
	LECTURE DAY			Name of Practical
1	1			Topreparestandardsolutionofoxalicacid
2	2			To dilutethe givenKMnO4solution
3	3			To find outthestrengthingrams perlitreofanunknownsolutionofsodiumhydroxideusingastandard(N/10)oxalicacidsolution
4	4			To find outthestrengthingrams perlitreofanunknownsolutionofsodiumhydroxideusingastandard(N/10)oxalicacidsolution
5	5			To findoutthetotalalkalinityinpartspermillion(ppm)ofawatersample withthe help ofastandardsulphuricacidsolution.
6	6			To findoutthetotalalkalinityinpartspermillion(ppm)ofawatersample withthe help ofastandardsulphuricacidsolution.
7	7			To determinethetotalhardnessofgivenwatersamplebyEDTA method
8	8			To determinethetotalhardnessofgivenwatersamplebyEDTA method
9	9			Todetermine theamountoftotaldissolved solids(TDS)inppminagivensample ofwatergravimetrically
10	10			TodeterminethepHofdifferentsolutionsusingadigitalpHmeter
11	11			Todeterminethecalorificvalueofasolid/liquidfuelusingaBombcalorimeter
12	12			To determine theviscosityofalubricatingoilusingaRedwoodviscometer
13	13			To determine theviscosityofalubricatingoilusingaRedwoodviscometer
14	14			TopreparеasampleofPhenol-formaldehyderesin(Bakelite)/Nylon-66inthelab
15	15			TopreparеasampleofPhenol-formaldehyderesin(Bakelite)/Nylon-66inthelab

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY :Satvinder Kumar (Sr. Lecturer)
DISCIPLINE :Civil A, Arch
SEMESTER : First
SUBJECT : APPLIED CHEMISTRY (Theory)
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK :Lectures= 3+3

WEEK	THEORY		
	LECTURE DAY		TOPIC (WITH ASSIGNMENT & TESTS)
1	1		Introduction of AtomicStructure,Bohr'smodelofatom
	2		Dualcharacterofmatter:derivationofde-Broglie's equation Heisenberg's Principle of Uncertainty, modern concept of atomic structure
	3		Definitionoforbitals shapesofs,pandd-orbitals
2	4		Quantumnumbersandtheirsignificance
	5		AufbauandPauli'sexclusionprinciples Hund'srule
	6		Electronic configurationofelementsuptoatomicnumber 30.
3	7		Periodic TableModernPeriodiclawandPeriodictable, Classificationofelementsintos,p
	8		Classificationofelementsintod, f-blocks,metals,non-metalsandmetalloids
	9		Chemicalbonding:causeofbonding,ionicbond Physicalproperties ofionic,
4	10		Covalentbond,andmetallicbond(electronseaorgasmodel), Physicalproperties
	11		Doubt Quarries and Revision
	12		Metals: mechanical properties of metals such as conductivity, elasticity, strength and stiffness,luster, hardness, toughness, ductility, malleability
1st Sessional test			
5	13		Metals: mechanical properties of metals such as, brittleness, and impact resistance and theiruses. Definition of a mineral, ore, gangue, flux and slag
	14		Metallurgy of iron from haematite using ablastfurnace Commercialvarieties ofiron
	15		Alloys: definition, necessity of making alloys, composition, properties and uses of duralumin andsteel.Heattreatmentofsteel-normalizing,annealing,quenching,tempering.
6	16		Doubt Quarries and Revision
	17		Solutions: definition, expression of the concentration of a solution in percentage (w/w, w/v andv/v),normality,molarityandmolalityandppm.
	18		Simpleproblemsonsolutionpreparation
7	19		Arrhenius concept of acids and bases, strong and weak acids and bases, pH value of a solutionanditssignificance,pHscale
	20		Simplenumericalproblems onpHofacidsandbases.
	21		Hard and soft water, causes of hardness of water, types of hardness– temporary and permanenthardness

8	22		Expression of hardness of water, ppm unit of hardness; disadvantages of hard water;removal of hardness
	23		Removal of temporary hardness by boiling and Clark'smethod; removalofpermanent hardness of water by Ion-Exchange method
	24		Boiler problems caused byhard water: scale and sludge formation, priming and foaming, caustic embrittlement;watersterilizationbychlorine,UVradiationandRO
9	25		Doubt Quarries and Revision
	26		Fuels:definitionandclassificationofhigherandlowercalorificvalues,unitsofcalorificvalue
	27		Characteristics of an ideal fuel. Petroleum: composition and refining of petroleum
2nd Sessional Test			
10	28		Gaseousfuels: composition, properties and uses of CNG, PNG, LNG, LPG
	29		Relative advantages of liquidandgaseousfuels oversolidfuels.Scopeofhydrogenasfuturefuel.
	30		Lubricants-Functionsandqualitiesofagoodlubricant,classificationoflubricants
11	31		Lubrication mechanism (brief idea only
	32		Physical properties (brief idea only) of alubricant: oiliness, viscosity, viscosity index, flash and fire point, ignition temperature, pourpoint.
	33		Doubt Quarries and Revision
12	34		PolymersandPlastics:definitionofpolymer,classification,additionandcondensationpolymerization
	35		Preparationpropertiesandusesofpolythene,PVC,Nylon-66
	36		Preparationpropertiesanduses Bakelite;definition of plastic
13	37		Thermoplastics and thermosetting polymers; natural rubber and neoprene,othersyntheticrubbers (names only).
	38		Corrosion: definition, dry and wet corrosion
	39		Factors affecting rate of corrosion, methods ofpreventionofcorrosion—hotdipping
14	40		Preventionofcorrosion metalcladding,cementation,quenching,cathodicprotectionmethods
	41		Introductionandapplicationofnanotechnology:nano-materials
	42		Classification,applications ofnanotechnologyinvarious engineeringapplications(brief)
3rd Sessional test			
15	43		Doubt Quarries and Revision
	44		Revision and discussion of previous year Q. Papers
	45		Revision and discussion of previous year Q. Papers

PERFORMA OF LESSON PLAN

NAME OF THE FACULTY :Satvinder Kumar (Sr. Lecturer)
DISCIPLINE :Civil A, Arch
SEMESTER : First
SUBJECT : APPLIED CHEMISTRY (Practical)
LESSION PLAN DURATION : 15 WEEKS
WORK LOAD PER WEEK :Practicals = 4+4

WEEK	Practical			
	LECTURE DAY			Name of Practical
1	1			Topreparestandardsolutionofoxalicacid
2	2			To dilutethe givenKMnO4solution
3	3			To find outthestrengthingrams perlitreofanunknownsolutionofsodiumhydroxideusingastandard(N/10)oxalicacidsolution
4	4			To find outthestrengthingrams perlitreofanunknownsolutionofsodiumhydroxideusingastandard(N/10)oxalicacidsolution
5	5			To findoutthetotalalkalinityinpartspermillion(ppm)ofawatersample withthe help ofastandardsulphuricacidsolution.
6	6			To findoutthetotalalkalinityinpartspermillion(ppm)ofawatersample withthe help ofastandardsulphuricacidsolution.
7	7			To determinethetotalhardnessofgivenwatersamplebyEDTA method
8	8			To determinethetotalhardnessofgivenwatersamplebyEDTA method
9	9			Todetermine theamountoftotaldissolved solids(TDS)inppminagivensample ofwatergravimetrically
10	10			TodeterminethepHofdifferentsolutionsusingadigitalpHmeter
11	11			Todeterminethecalorificvalueofasolid/liquidfuelusingaBombcalorimeter
12	12			To determine theviscosityofalubricatingoilusingaRedwoodviscometer
13	13			To determine theviscosityofalubricatingoilusingaRedwoodviscometer
14	14			TopreparеasampleofPhenol-formaldehyderesin(Bakelite)/Nylon-66inthelab
15	15			TopreparеasampleofPhenol-formaldehyderesin(Bakelite)/Nylon-66inthelab

LESSON PLAN

NAME OF THE FACULTY : PritiSrivastava

DISCIPLINE : Mechanical B, Civil B, ECE, Architecture

SEMESTER :FIRST

SUBJECT : APPLIED PHYSICS

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : Lectures = 2+2+2+2Practicals = 4+4 +4+2

WEEK		THEORY		PRACTICAL	
	LECTURE DAY		TOPIC (WITH ASSIGNMENT & TESTS)		TOPIC
1	1		Definition of physics and physical quantities, Fundamental and	1	Familiarization of measuring instruments-vernier caliper, screw gauge, spherometer
	2		Units-fundamental and derived units, System of Units, FPS, CGS		
2	3		MKS,SI, Dimensions, Dimensional Formula	2	To find the diameter of a solid cylinder using vernier caliper
	4		SI unit and dimensions of some physical quantities		
3	5		Dimensional equations and principle of homogenity	3	To find the internal diameter and depth of a beaker using verniercaliper
	6		Applications of DA, Checking correctness, Conversion of Units		
4	7		Scalar and vector quantities definition, example, types,	4	Checking of files and viva voce
	8		Vector addition-triangle and parallelogram law and		
5	9		Force, its units and resolution of force, Newton's laws of motion	5	To find the diameter of wire using screw gauge
	10		Linear momentum, impulse and law of conservation of		
6	11		Angular displacement, Angular velocity, Angular acceleration,	6	To find thickness of paper using screw gauge.
	12		Relation between linear and angular velocity, Centripetal and		
7	13		banking of roads, Rotational Motion- definition, examples	7	Checking of files & viva-voce
	14		Definitionoftorque,angularmomentum,momentofinertiaanditsp hysicalsignificance		
8	15		Work-definition, formula, unit and types of work, zero ,positive and negative work examples	8	To determine the thickness of glass strip using a spherometer
	16		Friction-definition and daily life examples , Power-definition, formula and units		
9	17		Energy-definition,units and transformation of energy	9	To determine the radius of curvature of a given spherical
	18		Kinetic energy, potential energy-definition,examples,formulaand derivation		
10	19		Law of conservation of energy with derivation	**1**	To verify parallelogram law of
	20		SimplenumericalproblemsbasedonformulaofPowerandEnergy		---
11	21		Elasticityandplasticity-definition,deformingforce,restoring force,exampleof elasticandplastic	11	To determine atmospheric pressure using fortin's barometer
	22		Definition of stress and strain, Hookes law, modulus of elasticity		------
12	23		Pressure-definition,atmosphericpressure,gaugepressure,absolutepressure	12	To determine force constant of a spring using hookes law

	24		Surfacetension-definition,SIunit,applicationsofsurfacetension,effectoftemperat		------
13	25		Viscosity:definition,unit,examples,effectoftemperatureonviscosity	13	Checking of files & viva-voce
	26		Heat and temperature- Definition,Units, Difference between heat and temperature		------
14	27		Principle and working of mercury thermometer, Problem discussions unit 4	14	To measure room temperature with the help of thermometer
	28		Modes of transfer of heat-conduction , convection , radiation, Propertiesofheatradiation		------
15	29		Different scales of temperature and their relationship	1	Revision of practicals
	30		Problem discussion, Preparation of end semester exams		------

LESSON PLAN

NAME OF THE FACULTY : Praveen Mohan

DISCIPLINE : Civil A, Computer, Architecture

SEMESTER :FIRST

SUBJECT : APPLIED PHYSICS

LESSION PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : Lectures= 2+2Practicals = 4+4+2

WEEK		THEORY		PRACTICAL	
	LECTURE DAY		TOPIC (WITH ASSIGNMENT & TESTS)		TOPIC
1	1		Definition of physics and physical quantities, Fundamental and	1	Familiarization of measuring instruments-vernier caliper, screw gauge, spherometer
	2		Units-fundamental and derived units, System of Units, FPS, CGS		
2	3		MKS,SI, Dimensions, Dimensional Formula	2	To find the diameter of a solid cylinder using vernier caliper
	4		SI unit and dimensions of some physical quantities		
3	5		Dimensional equations and principle of homogenity	3	To find the internal diameter and depth of a beaker using vernier caliper
	6		Applications of DA, Checking correctness, Conversion of Units		
4	7		Scalar and vector quantities definition, example, types,	4	Checking of files and viva voce
	8		Vector addition-triangle and parallelogram law and		
5	9		Force, its units and resolution of force, Newton's laws of motion	5	To find the diameter of wire using screw gauge
	10		Linear momentum, impulse and law of conservation of		
6	11		Angular displacement, Angular velocity, Angular acceleration,	6	To find thickness of paper using screw gauge.
	12		Relation between linear and angular velocity, Centripetal and		
7	13		banking of roads, Rotational Motion- definition, examples	7	Checking of files & viva-voce
	14		Definitionoftorque,angularmomentum,momentofinertiaanditsp hysicalsignificance		
8	15		Work-definition, formula, unit and types of work, zero ,positive and negative work examples	8	To determine the thickness of glass strip using a spherometer
	16		Friction-definition and daily life examples , Power-definition, formula and units		
9	17		Energy-definition,units and transformation of energy	9	To determine the radius of curvature of a given spherical
	18		Kinetic energy, potential energy-definition,examples,formulaand derivation		
10	19		Law of conservation of energy with derivation	**1**	To verify parallelogram law of
	20		Simplenumericalproblemsbasedon formulaofPowerandEnergy		---
11	21		Elasticityandplasticity-definition,deformingforce,restoring force,exampleof elasticandplastic	11	To determine atmospheric pressure using fortin's barometer
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