Name Of the Faculty:-Ranjana Saini
Discipline:-Applied Science
Semester:-IInd
Subject:-Chemistry

Lesson Plan Duration:-15 weeks(from January,2018 to April,2018)

** Work Load(Lecture/Practical) per week(in hours):-Lectures -03,Practicals-02

Week	Theory		Practical	
	Lecture day	Topic (including assignment/ test)	Practical Day	Topic
lst	1st	General Metallurgical term with reference to iron	1st	Gravimetric Anlaysis(Group I)
	2nd	General methods used in extraction of metal from their ores	2nd	Gravimetric Anlaysis(Group II)
	3rd	Metallurgy of iron		
2nd	4th	Metallurgy of aluminium	3rd	Determination of percentage purity of Blue vitrol using N/10 hypo(Group I)
	5th	Alloy's & its types	4th	Determination of percentage purity of Blue vitrol using N/10 hypo(Group II)
	6th	Invar, nichrome , steel		
3rd	7th	Alnico, brass	5th	Determination of moisture in given sample of coal (Group I)
	8th	Bronze , duralumin	6th	Determination of moisture in given sample of coal (Group II)
	9th	Magnalium and solder		
4th	10th	Defination of corrosion type and factor	7th	Viva (Group I)
	11th	Theory of Corrosion	8th	Viva (Group II)
	12th	Passivity in metel , cathodic protection		
5th	13th	Cementation , sheradizing , Chromozing , Calorizing	9th	Determination of percentage of volatile and non volatile matter in given coal sample (Group I)
	14th	Inorganic and organic coating	10th	Determination of percentage of volatile and non volatile matter in given coal sample (Group II)
	15th	Internal corrosion preventive measure		
6th	16th	Heat treatment and Revision	11th	Determination of ash. In given sample of coal (Group I)
	17th	Test of lst and 2nd	12th	Determination of ash. In given sample of coal (Group II)
	18th	Fuel - Definition , classification , characterstic of good fuel		
7th	19th	Merits of Gaseous fuel type of coal	13th	Determination of viscosity using redwood viscometer (Group I)
	20th	Calorific value and its determination	14th	Determination of viscosity using redwood viscometer (Group II)
	21st	Analysis of coal (Proximate)		
Week	Theory		Practical	
	Lecture day	Topic (including assignment/ test)	Practical Day	Topic
8th	22nd	Analysis of coal (ultimate)	15th	Viva (Group I)
	23rd	CNG , LPG,power alcohol	16th	Viva (Group II)
	24th	Water gas , Bio gas,oil gas		

9th	25th	Hydrogen as future fuel Nuclear fuel	17th	Determination of flash point (Group I)
	26th	Lubricant :- Its types	18th	Determination of flash point (Group II)
	27th	Classification		
10th	28th	Physical properties of Lubricant	19th	To study the effect of Metal on corrosion coupling of iron(Group I)
	29th	Chemical Properties	20th	To study the effect of Metal on corrosion coupling of iron(Group II)
	30th	Designation of Lubricating oil		
11th	31st	Application of cutting fluid	21th	Detection of Iron in given solution of rust (Group I)
	32nd	Types of cutting fluid	22nd	Detection of Iron in given solution of rust (Group II)
	33rd	Selection of cutting fluid		
12th	34th	Test	23rd	Viva (Group I)
	35th	Ceramics / Types and application	24th	Viva (Group II)
	36th	Refactories & composite material/ type and application		
13th	37th	Glass	25th	Revision (Group I)
	38th	Paint varnish enamels	26th	Revision (Group II)
	39th	Polymer/Monomer and degree of polymerisation		
14th	40th	Addition and condensation polymer /P E	27th	Revision (Group I)
	41st	PS,PVC,Teflon,Nylone 66 Bakalite	28th	Revision (Group II)
	42nd	Plastic		
15th	43rd	Application of Polymer	29th	Revision (Group I)
	44th	Revision	30th	Revision (Group II)
	45th	Test		

Name Of the Faculty:-Arvinder kaur
Discipline:-Applied Science
Semester:-IInd
Subject:-Physics
Lesson Plan Duration:-15 weeks(from January,2018 to April,2018)
** Work Load(Lecture/Practical) per week(in hours):-Lectures -04,Practicals-02

Week	Theory		Practical	
	Lecture day	Topic (including assignment/ test)	Practical Day	Topic
Ist	1st	Introduction to wave motion	1st	To find the time period of a simple Pendulum (Group I)
	2nd	Types of wave motion		
	3rd	Terms used in wave motion	2nd	To find the time period of a simple Pendulum (Group II)
	4th	Continued last topic		
2nd	5th	Simple harmonic motion	3rd	To determine and verify the time period of cantilever (Group I)
	6th	Cantilever and its time period		
	7th	Types of vibrations	4th	To determine and verify the time period of cantilever (Group II)
	8th	Assignment and checking home work		
3rd	9th	Accoustics of buildings	5th	Checking practical files and viva (Group I)
	10th	Definitions related with the above topic		
	11th	Reverberation and methods to control reberberation time	6th	Checking practical files and viva (Group II)
	12th	Ultrasonics and its application		
4th	13th	Reflection and refraction and their laws.Terms related with them.	7th	To verify Ohm's laws by plotting a graph between voltage and current (Group I)
	14th	Related numerical problems.		
	15th	Total internal reflection and its applications.	8th	To verify Ohm's laws by plotting a graph between voltage and current (Group II)
	16th	Microscope- Telescope		
5th	17th	Uses of microscope and telescope.	9th	To verify laws of resistance in series combination (Group I)
	18th	Test on above unit . Unit -3		
	19th	Coulomb's law	10th	To verify laws of resistance in series combination (Group II)
	20th	Electric field - definition and properties		
6th	21th	Electric flux,Electric intensity and Electric potential.	11th	Checking of files and viva. (Group I)
	22th	Electric field intensity due to point charge		
	23rd	Assignment and checking home work.	12th	Checking of files and viva. (Group II)
	24th	Gauss's Law (statement and derivation)		
7th	25th	Capacitor and capacitance with formula and units.	13th	To verify laws of resistance in parallel combination. (Group I)
	26th	Series and parallel combination of capacitors.		
	27th	Numerical problems on the basis of above topic.	14th	To verify laws of resistance in parallel combination. (Group II)
	28th	Class discussion on the unit.		

Week	Theory		Practical	
	Lecture day	Topic (including assignment/ test)	Practical Day	Topic
8th	29th	Class test of above Unit-4	15th	To find resistance of galvanometer by half reflection method. (Group I)
	30th	Electric current and its units, direct and alternating current		
	31st	Resistance and specific resistance	16th	To find resistance of galvanometer by half reflection method. (Group II)
	32nd	Conductance,series and parallel combination of resistance.		
9th	33rd	Assignment and checking home work.	17th	Checking of files and viva. (Group I)
	34th	Ohm's law		
	35th	Super conductivity	18th	Checking of files and viva. (Group II)
	36th	Continued above topic		
10th	37th	Heating effect of current.	19th	To verify laws of reflection of light using mirror. (Group I)
	38th	Electric power, Electric energy and its units.		
	39th	Kirchhoff's laws (statement and formula)	20th	To verify laws of reflection of light using mirror. (Group II)
	40th	Discussion in class and having problems on above topic.		
11th	41st	Class test Unit-5	21th	To identify different components like resistance capacitor and diode. (Group I)
	42nd	Introduction to magnetism		
	43rd	Types of magnetic materials	22nd	To identify different components like resistance capacitor and diode. (Group II)
	44th	Dia, para and ferro maganetic materials with example		
12th	45th	Magnetic field, Magnetic intensity	23rd	Checking of files and viva.(Group I)
	46th	Magnetic lines of force, magnetic flux and their units.		
	47th	Magnetic induction	24th	Checking of files and viva.(Group II)
	48th	Test of above topic		
13th	49th	Energy bands, Types of materials	25th	To study colour coding scheme of resistance (Group I)
	50th	Their classification		
	51st	P-N junction diode and its characteristics	26th	To study colour coding scheme of resistance (Group II)
	52nd	Diode as rectifier.		
14th	53rd	Semi conductor transistor	27th	Checking of files and viva. (Group I)
	54th	Assignment and checking home - work.		
	55th	Lasers, Characteristics and applications.	28th	Checking of files and viva. (Group II)
	56th	Fibre optics introduction and applications.		
15th	57th	Introduction to nano technology.	29th	Revision (Group I)
	58th	Application of nano technology.		
	59th	Assignment and checking copies	30th	Revision (Group II)
	60th	Revision of syllabus		

Name Of the Faculty:-Gurjeet Kaur
Discipline:-Applied Science
Semester:-IInd
Subject:-Environment Studies
Lesson Plan Duration:-15 weeks(from January,2018 to April,2018)
** Work Load(Lecture/Practical) per week(in hours):-Lectures -03

Week	Theory	
	Lecture day	Topic (including assignment/ test)
Ist	1st	Basics of ecology-Concept, Structure,importance
	2nd	Carbon, Nitrogen cycle.
	3rd	Sulphur cycle, Sustainable development
2nd	4th	Conservation-Land reforms, species
	5th	Advancement of deserts, lowering of water table
	6th	Rain water harventing , acid rain
3rd	7th	Water supply engineering , maintenance of ground water
	8th	Deforestation
	9th	Revision / Test
4th	10th	Pollution sources
	11th	Classification of pollutants
	12th	Causes of pollution
5th	13th	Effect of pollution
	14th	Control of pollution
	15th	Cleaner production technologies
6th	16th	Physical & Chemical treatment of pollutants
	17th	Biological treatment of pollutants
	18th	Photocatalytical degradtion of pollutants
7th	19th	Waste minimisation technique, chemical degradation of waste
	20th	Concept of zero discharge
	21st	Revision / Test

Week	Theory	
	Lecture day	Topic (including assignment/ test)
8th	22nd	Solid waste management
	23rd	Classification of refuse material, its sources
	24th	Effect and control of refuse material
9th	25th	E-Waste management
	26th	Environment legistation water act 1974
	27th	Air act 1981
10th	28th	Environment act 1986
	29th	Role and function of state pollution control board
	30th	E I A
11th	31st	Energy conservation act 2001
	32nd	Energy conservation act 2010 and its importance
	33rd	Revision
12th	34th	Energy conservation & management
	35th	Energy efficiency and its need
	36th	Solar and wind energy
13th	37th	Bio and hydro energy
	38th	Global warming , Green house effect
	39th	Ozone layer deplation
14th	40th	Recycling of materials
	41st	Recycling of materials
	42nd	Concept of green buildings
15th	43rd	Revision
	44th	Revision
	45th	Revision

SPECIMEN OF LESSON PLAN
NAME OF THE FACULTY:- O.P.Gera
SEMESTER:-2nd
SUBJECT:-ENGINEERING DRAWING-II
LESSON PLAN DURAITION:- 15 WEEKS
DISCIPLINE:- APPLIED SCIENCE

WEEK		LECTURE DAY	DRAWING TOPIC
1		1	Introduction to Assembly Drawing
		2	Principle and utility of detail and assembly drawings
2		3	Wooden joints i.e. corner mortise and tenon joint
		4	Tee halving joint, Mitre faced corner joint
3		5	Tee bridle joint, Crossed wooden joint, Cogged joint
		6	Dovetail joint, Through Mortise and Tenon joint,
4		7	furniture drawing - freehand and with the help of drawing instruments
		8	Screw Threads : Thread Terms and Nomenclature
5		9	Types of threads-External and Internal threads, Right and Left hand threads
		10	single and multiple start threads.
6		11	Different Forms of screw threads-V threads (B.S.W threads, B.A thread
		12	American National and Metric thread), Square threads (square, Acme, Buttress and Knuckle thread)
7		13	Different views of hexagonal and square nuts. Square and hexagonal headed bolt.
		14	Assembly of Hexagonal headed bolt and Hexagonal nut with washer
8		15	Assembly of square headed bolt with hexagonal and with washer
		16	Different types of locking devices-Lock nut, castle nut, split pin nut, locking plate, slotted nut and spring washer
9		17	Foundations bolts-Rag bolt, Lewis bolt, curved bolt and eye bolt
		18	Drawing of various types of studs
10		19	Various types of keys and cotters - their practical application, drawings of various keys and cotters showing keys and cotters in position
		20	Various types of joints - Spigot and socket joint - Gib and cotter joint

11		21	Knuckle joint
		22	Types of general purpose-rivets heads
12		23	Caulking and fullering of riveted joints
		24	Types of riveted joints (i) Lap joint-Single riveted, double riveted (chain and zig-zag type)
13		25	(ii) Single riveted, Single cover plate butt joint
		26	(iii) Single riveted, double cover plate butt joint
14		27	(iv) Double riveted, double cover plate butt joint(chain and zig-zag type)
		28	Introduction to coupling, their use and types
15		29	Muff coupling Flange coupling (protected)
		30	Flexible Coupling

LESSON PLAN

Name of the faculty : Ms. Parampreet Kaur
Discipline Applied Sciences
Semester 2
Subject English Language –II :
Lesson Plan Duration : 15 weeks (From January 2018 to April, 2018)

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical Day	Topic
	1st	Introduction ,Form of prepositions,		Locating main ideas in a listening excerpt
1	2nd	Position and correct use of prepositions	**1**	
	3rd	Worksheets of prepositions		
	1st	Pronouns ,types of pronouns		Note making
2	2nd	Identifying the pronouns	2	
	3rd	Worksheets of pronouns		
	1st	Notice ,Types of notices		Offering : responding to offers
3	2nd	Format of notice	**3**	
	3rd	Writing practice		
	1st	Determiners and its types		Requesting: responding to request
4	2nd	Circular, format of circular	4	
	3rd	Writing practice of circular		
	1st	Difference between notice and circular		congratulations
5	2nd	Memo format	**5**	
	3rd	Writing practice of memo		
	1st	Test of notice,circular & memo		Expressing sympathy and offering condolences
6	2nd	Practice of writing skills	6	
	3rd	Conjunctions &its types		
	1st	Continue the previous topic(conjunctions)		Asking questions : polite response
7	2nd	Question & question tags	**7**	
	3rd	Rules of question tags		

	1st	Practice work of question tags		Apologizing – forgiving
8	2nd	Paragraph writing, its rules	8	
	3rd	Practice of writing skills		
	1st	Agenda for a meeting		Complaining- making complaints
9	2nd	Practice of agenda for a meeting	9	
	3rd	Minutes of the meeting		
	1st	Practice of minutes		Persuading and warning
10	2nd	Tenses	10	
	3rd	Present tense & its types		
	1st	Continue present tense		Asking for and giving information
11	2nd	Past tense &its types	11	
	3rd	Continue past tense		
	1st	Future tense		Giving instructions
12	2nd	Types of future tense	12	
	3rd	Continue future tense		
	1st	Assignment of tenses		Getting and giving permissions
13	2nd	Telephonic message	13	
	3rd	Format of telephone message		
	1st	Practice of paragraph writing		Expressing disappointments
14	2nd	Test of tenses	14	
	3rd	Test of writing skills		
	1st	Test of prepositions		Surprise test
15			15	

Name of faculty-Sunil Khali
Discipline- Common
SEMESTER- 2nd
SUBJECT- Applied Mathematics-II
LESSON PLAN DURATION-15 WEEKS(from January,2018)
Work Load: lectures-05 hrs/week

Week	Theory	
	Lecture day	Topic
1st	1st	Definition of function;
	2nd	Concept of limits (Introduction only)
	3rd	Problems related to function.
	4th	Problems related to four standard limits only
	5th	Extra problems related to functions &limits
2nd	6th	Differentiation of x^n, sin x, by first principle.
	7th	Differentiation of cos x, tan x, e^x by first principle
	8th	Differentiation by using standard formulas.
	9th	Differentiation of sum, product and quotient of functions
	10th	Differentiation by using chain rule process.
3rd	11th	Differentiation of trigonometric functions
	12th	Differentiation of inverse trigonometric functions
	13th	Differentiation of logarithmic differentiation
	14th	Differentiation of successive differentiation (upto2nd order)
	15th	Application of differential calculus in:
4th	16th	Rate measures
	17th	Maxima and minima
	18th	Class test of function &Limit
	19th	Class test of first principal
	20th	Class test of trigonometric functions, inverse trigonometric functions.
		logarithmic differentiation, successive differentiation (upto2nd order) Maxima and minima
5th	21th	Students problems on differentiation
	22th	Students problems on functions &limits
	23th	Revision of limits & functions.
	24th	Revision of differentiations.
	25th	Revision of application of differential calculus.
6th	26th	Concept of Integration.
	27th	Integration of simple functions as Inverse operation
		of differentiation.
	28th	Simple standard integral.
	29th	Problems related to standard integrals.
	30th	Integration of sum, difference of functions.
7th	31th	Integration by parts.
	32th	Problems related to by parts
	33th	Evaluation of definite Integral of functions with given

		limits.
	34th	Evaluation of definite integral of sinx power n and limit
		is 0 to ∏/2
	35th	Evaluation of definite integral of cosx power n and limit
		is 0 to ∏/2
8th	**36th**	Students Problems related on definite integral.
	37th	Evaluation of definite integral of product of sinx power n and cosx power n and limit is 0 to ∏/2
	38th	Class test of Indefinite integral
	39th	Class test of definite integral
	40th	Review of class test
9th	**41th**	Application of Integration :- for evaluation of area under the curve and
		area.
	42th	Continuation of evaluation of area under curve and axes.
	43th	Problems related to application of integration.
	44th	Revision / doubts.
	45th	Class test of application of integration.
10th	**46th**	Numerical integration by Trapezoidal rule.
	47th	Continuation of Trapezoidal rule.
	48th	Numerical integration by simpson's 1/3 rule.
	49th	Continuation of Simpson's rule.
	50th	Problems & doubts of students.
11th	**51th**	Concepts of Differential Equation.
	52th	Order and degree of differential equation.
	53th	Linearity of differential equation.
	54th	Revision & doubts.
	55th	Class test of Differential equation.
12th	**56th**	Introduction to Statistics.
	57th	Measure of central tendency by calculating mean.
	58th	Measure of central tendency by calculating median.
	59th	Measure of central tendency by calculating mode.
	60th	Revision & class test.
13th	**61th**	Measure of Dispersion by finding mean deviation about mean.
	62th	Measure of Dispersion by finding mean deviation about median.
	63th	Continuation of measure of dispersion.
	64th	Revision & class test.
	65th	Measure of Dispersion by calculating standard deviation of individual
		series.
14th	**66th**	To calculate standard deviation for continous frequency distribution.
	67th	Problems and doubts of students relating standard deviation.
	68th	Class Test.

	69th	Coefficient of rank correlation.
	70th	Continuation of rank correlation.
15th	**71th**	Revision of Differential calculus.
	72th	Revision of Indefinite integral.
	73th	Revision of definite integral.
	74th	Revision of Differential equation.
	75th	Revision of Statistics.