

## PERFORMA OF LESSON PLAN

**NAME OF THE FACULTY** : PREETPAL KAUR

**DISCIPLINE** : MECHANICAL, CIVIL, ELECT, AUTO, ECE, COMPUTER

**SEMESTER** : SECOND

**SUBJECT** : ENGLISH LANGUAGE

**LESSON PLAN DURATION** : 15 WEEKS

**WORK LOAD PER WEEK** : Practicals = 2+2+2+2+2+2+2+2+2+2=20

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Prepositions	1	Motivational Lecture
	2	Prepositions		
	3	Framing Questions		
2	4	Framing Questions	2	Debate
	5	Revision and Test		
	6	Conjunctions		
3	7	Conjunctions	3	Telephonic Conversation: general etiquette for making and receiving calls
	8	Practice of Conjunctions		
	9	Tenses		
4	10	Tenses	4	Offering- Responding to offers
	11	Tenses		
	12	Revision		
5	13	Test of Tenses	5	Requesting– Responding to requests
	14	Unseen Paragraph for Comprehension		
	15	Sessional Test		
6	16	Vocabulary enhancement	6	Congratulating
	17	Prefixe		
	18	Suffixes		
7	19	One word substitution	7	Exploring sympathy and condolences
	20	Synonym		
	21	Antonym		
8	22	Revision	8	Asking Questions- Polite Responses
	23	Business Letters		
	24	Floating Quotations		
9	25	Placing Orders	9	Apologizing, forgiving
	26	Complaint Letters		
	27	Official Letters		
10	28	Official Letters	10	Complaining
	29	Revision		
	30	Sessional Test		

11	31	Letters to Government and other Offices	11	Warning
	32	Memos		
	33	Revision and Test		
12	34	Circular	12	Asking and giving information
	35	Circular		
	36	Office Orders		
13	37	Office Orders	13	Getting and giving permission
	38	Agenda		
	39	Agenda		
14	40	Minutes of Meeting	14	Asking for and giving opinions
	41	Minutes of Meeting		
	42	Note making		
15	43	Revision and discussion of previous year Q. Papers	15	Speaking Practice in all Topics
	44	Revision and discussion of previous year Q. Papers		
	45	Sessional Test		

## PERFORMA OF LESSON PLAN

**NAME OF THE FACULTY** : SUNITA RANA  
**DISCIPLINE** : ELECTRICAL, AUTO, PLASTIC, COMPUTER  
**SEMESTER** : SECOND  
**SUBJECT** : ENGLISH LANGUAGE  
**LESSON PLAN DURATION** : 15 WEEKS  
**WORK LOAD PER WEEK** : Lectures = 3+3+3+3+3 Practicals = 2

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Prepositions	1	Motivational Lecture
	2	Prepositions		
	3	Framing Questions		
2	4	Framing Questions	2	Debate
	5	Revision and Test		
	6	Conjunctions		
3	7	Conjunctions	3	Telephonic Conversation: general etiquette for making and receiving calls
	8	Practice of Conjunctions		
	9	Tenses		
4	10	Tenses	4	Offering- Responding to offers
	11	Tenses		
	12	Revision		
5	13	Test of Tenses	5	Requesting – Responding to requests
	14	Unseen Paragraph for Comprehension		
	15	Sessional Test		
6	16	Vocabulary enhancement	6	Congratulating
	17	Prefixe		
	18	Suffixes		
7	19	One word substitution	7	Exploring sympathy and condolences
	20	Synonym		
	21	Antonym		
8	22	Revision	8	Asking Questions- Polite Responses
	23	Business Letters		
	24	Floating Quotations		
9	25	Placing Orders	9	Apologizing, forgiving
	26	Complaint Letters		
	27	Official Letters		
10	28	Official Letters	10	Complaining
	29	Revision		
	30	Sessional Test		

11	31	Letters to Government and other Offices	11	Warning
	32	Memos		
	33	Revision and Test		
12	34	Circular	12	Asking and giving information
	35	Circular		
	36	Office Orders		
13	37	Office Orders	13	Getting and giving permission
	38	Agenda		
	39	Agenda		
14	40	Minutes of Meeting	14	Asking for and giving opinions
	41	Minutes of Meeting		
	42	Note making		
15	43	Revision and discussion of previous year Q. Papers	15	Speaking Practice in all Topics
	44	Revision and discussion of previous year Q. Papers		
	45	Sessional Test		

## PERFORMA OF LESSON PLAN

NAME OF THE FACULTY : NEETU GUPTA

DISCIPLINE : CIVIL, ECE, ARCH, ARCH UMRI,

SEMESTER : SECOND

SUBJECT : ENGLISH LANGUAGE

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : Lectures = 3+3+3+3 Practicals = 2+2

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Prepositions	1	Motivational Lecture
	2	Prepositions		
	3	Framing Questions		
2	4	Framing Questions	2	Debate
	5	Revision and Test		
	6	Conjunctions		
3	7	Conjunctions	3	Telephonic Conversation: general etiquette for making and receiving calls
	8	Practice of Conjunctions		
	9	Tenses		
4	10	Tenses	4	Offering- Responding to offers
	11	Tenses		
	12	Revision		
5	13	Test of Tenses	5	Requesting – Responding to requests
	14	Unseen Paragraph for Comprehension		
	15	Sessional Test		
6	16	Vocabulary enhancement	6	Congratulating
	17	Prefixes		
	18	Suffixes		
7	19	One word substitution	7	Exploring sympathy and condolences
	20	Synonym		
	21	Antonym		
8	22	Revision	8	Asking Questions- Polite Responses
	23	Business Letters		
	24	Floating Quotations		
9	25	Placing Orders	9	Apologizing, forgiving
	26	Complaint Letters		
	27	Official Letters		
10	28	Official Letters	10	Complaining
	29	Revision		
	30	Sessional Test		

11	31	Letters to Government and other Offices	11	Warning
	32	Memos		
	33	Revision and Test		
12	34	Circular	12	Asking and giving information
	35	Circular		
	36	Office Orders		
13	37	Office Orders	13	Getting and giving permission
	38	Agenda		
	39	Agenda		
14	40	Minutes of Meeting	14	Asking for and giving opinions
	41	Minutes of Meeting		
	42	Note making		
15	43	Revision and discussion of previous year Q. Papers	15	Speaking Practice in all Topics
	44	Revision and discussion of previous year Q. Papers		
	45	Sessional Test		

## PERFORMA OF LESSON PLAN

NAME OF THE FACULTY : PUSHPENDRA PRATAP

DISCIPLINE : MECHANICAL, CIVIL, ELX & COMM

SEMESTER : SECOND

SUBJECT : APPLIED MATHEMATICS

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : Lectures = 15 Practicals = \_\_\_\_\_

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Definition of function, its types		
	2	Concept of limits and problems - 1		
	3	Concept of limits and problems - 2		
	4	Concept of limits and problems - 3		
	5	Concept of limits and problems - 4		
2	6	Differentiation of $x^n$ , $\sin x$ by first principle		
	7	Differentiation of $\cos x$ , $\tan x$ by first principle		
	8	Differentiation of $e^x$ by first principle		
	9	Revision		
	10	Differentiation of sum		
3	11	Differentiation of product		
	12	Differentiation of quotient of functions		
	13	Differentiation of implicit functions		
	14	Examples & exercises		
	15	Differentiation of parametric functions		
4	16	Differentiation of function of a function.		
	17	Differentiation of trigonometric function.		
	18	Examples & exercises		
	19	Differentiation of inverse trigonometric functions.		
	20	Logarithmic differentiation		
5	21	Exponential differentiation		
	22	Successive differentiation (upto 3 <sup>rd</sup> order )		
	23	Examples & exercises and Assignment		
	24	Revision		
	25	Sessional Test		
6	26	Application of diff. in Rate measures		
	27	Maxima and minima		
	28	Maxima and minima		
	29	Equation of tangent and normal to a curve		
	30	Integration as inverse operation of differentiation		
7	31	Examples & exercises		
	32	Simple standard integrals		
	33	Simple standard integrals		
	34	Integration by substitution		
	35	Integration by substitution		
8	36	Examples & exercises		
	37	Integration by Parts		
	38	Integration by Parts		

	39	Integration by Partial fractions		
	40	Integration by Partial fractions		
9	41	Examples & exercises		
	42	Evaluation of definite integrals with given limits.		
	43	Evaluation of definite integrals with given limits.		
	44	Evaluation of definite integrals with given limits.		
	45	Evaluation of definite integrals with given limits.		
10	46	Applications of integration		
	47	Applications of integration		
	48	Examples & exercises		
	49	Revision		
	50	Sessional Test		
11	51	Evaluation of $\int_0^{\pi/2} \sin^n x \cdot dx$		
	52	Evaluation of $\int_0^{\pi/2} \cos^n x \cdot dx$		
	53	Evaluation of $\int_0^{\pi/2} \sin^m x \cos^n x \cdot dx$		
	54	Area under a curve and axes		
	55	Area under a curve and axes		
12	56	Area under a curve and axes		
	57	Examples & exercises		
	58	Revision & Assignment		
	59	Numerical integration by Trapezoidal Rule		
	60	Numerical integration by Trapezoidal Rule		
13	61	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	62	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	63	Differential Equations Definition, order, degree		
	64	Linearity, of an ordinary differential equation.		
	65	Formation of differential equation (upto 2 <sup>nd</sup> order)		
14	66	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	67	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	68	Examples & exercises		
	69	Solution of differential equations of first order with variable separable method only		
	70	Solution of differential equations of first order		
15	71	Solution of differential equations of first order		
	72	Revision and discussion of previous year Q. Papers		
	73	Revision and discussion of previous year Q. Papers		
	74	Revision and discussion of previous year Q. Papers		
	75	Sessional Test		



**NAME OF THE FACULTY** : ANURADHA  
**DISCIPLINE** : CIVIL, PLASTIC, COMP  
**SEMESTER** : SECOND  
**SUBJECT** : APPLIED MATHEMATICS  
**LESSON PLAN DURATION** : 15 WEEKS  
**WORK LOAD PER WEEK** : Lectures = 15 Practicals = \_\_\_\_\_

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Definition of function, its types		
	2	Concept of limits and problems - 1		
	3	Concept of limits and problems - 2		
	4	Concept of limits and problems - 3		
	5	Concept of limits and problems - 4		
2	6	Differentiation of $x^n$ , $\sin x$ by first principle		
	7	Differentiation of $\cos x$ , $\tan x$ by first principle		
	8	Differentiation of $e^x$ by first principle		
	9	Revision		
	10	Differentiation of sum		
3	11	Differentiation of product		
	12	Differentiation of quotient of functions		
	13	Differentiation of implicit functions		
	14	Examples & exercises		
	15	Differentiation of parametric functions		
4	16	Differentiation of function of a function.		
	17	Differentiation of trigonometric function.		
	18	Examples & exercises		
	19	Differentiation of inverse trigonometric functions.		
	20	Logarithmic differentiation		
5	21	Exponential differentiation		
	22	Successive differentiation (upto 3 <sup>rd</sup> order)		
	23	Examples & exercises and Assignment		
	24	Revision		
	25	Sessional Test		
6	26	Application of diff. in Rate measures		
	27	Maxima and minima		
	28	Maxima and minima		
	29	Equation of tangent and normal to a curve		
	30	Integration as inverse operation of differentiation		
7	31	Examples & exercises		
	32	Simple standard integrals		
	33	Simple standard integrals		
	34	Integration by substitution		
	35	Integration by substitution		

8	36	Examples & exercises		
	37	Integration by Parts		
	38	Integration by Parts		
	39	Integration by Partial fractions		
	40	Integration by Partial fractions		
9	41	Examples & exercises		
	42	Evaluation of definite integrals with given limits.		
	43	Evaluation of definite integrals with given limits.		
	44	Evaluation of definite integrals with given limits.		
	45	Evaluation of definite integrals with given limits.		
10	46	Applications of integration		
	47	Applications of integration		
	48	Examples & exercises		
	49	Revision		
	50	Sessional Test		
11	51	Evaluation of $\int_0^{\pi/2} \sin^n x \cdot dx$		
	52	Evaluation of $\int_0^{\pi/2} \cos^n x \cdot dx$		
	53	Evaluation of $\int_0^{\pi/2} \sin^m x \cos^n x \cdot dx$		
	54	Area under a curve and axes		
	55	Area under a curve and axes		
12	56	Area under a curve and axes		
	57	Examples & exercises		
	58	Revision & Assignment		
	59	Numerical integration by Trapezoidal Rule		
	60	Numerical integration by Trapezoidal Rule		
13	61	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	62	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	63	Differential Equations Definition, order, degree		
	64	Linearity, of an ordinary differential equation.		
	65	Formation of differential equation (upto 2 <sup>nd</sup> order)		
14	66	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	67	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	68	Examples & exercises		
	69	Solution of differential equations of first order with variable separable method only		
	70	Solution of differential equations of first order		
15	71	Solution of differential equations of first order		
	72	Revision and discussion of previous year Q. Papers		
	73	Revision and discussion of previous year Q. Papers		
	74	Revision and discussion of previous year Q. Papers		
	75	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : SAKSHI SETHI  
**DISCIPLINE** : MECHANICAL, CIVIL, AUTO  
**SEMESTER** : SECOND  
**SUBJECT** : APPLIED MATHEMATICS  
**LESSION PLAN DURATION** : 15 WEEKS  
**WORK LOAD PER WEEK** : Lectures = 15 Practicals = \_\_\_\_\_

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Definition of function, its types		
	2	Concept of limits and problems - 1		
	3	Concept of limits and problems - 2		
	4	Concept of limits and problems - 3		
	5	Concept of limits and problems - 4		
2	6	Differentiation of $x^n$ , $\sin x$ by first principle		
	7	Differentiation of $\cos x$ , $\tan x$ by first principle		
	8	Differentiation of $e^x$ by first principle		
	9	Revision		
	10	Differentiation of sum		
3	11	Differentiation of product		
	12	Differentiation of quotient of functions		
	13	Differentiation of implicit functions		
	14	Examples & exercises		
	15	Differentiation of parametric functions		
4	16	Differentiation of function of a function.		
	17	Differentiation of trigonometric function.		
	18	Examples & exercises		
	19	Differentiation of inverse trigonometric functions.		
	20	Logarithmic differentiation		
5	21	Exponential differentiation		
	22	Successive differentiation (upto 3 <sup>rd</sup> order )		
	23	Examples & exercises and Assignment		
	24	Revision		
	25	Sessional Test		
6	26	Application of diff. in Rate measures		
	27	Maxima and minima		
	28	Maxima and minima		
	29	Equation of tangent and normal to a curve		
	30	Integration as inverse operation of differentiation		
7	31	Examples & exercises		
	32	Simple standard integrals		
	33	Simple standard integrals		
	34	Integration by substitution		
	35	Integration by substitution		

8	36	Examples & exercises		
	37	Integration by Parts		
	38	Integration by Parts		
	39	Integration by Partial fractions		
	40	Integration by Partial fractions		
9	41	Examples & exercises		
	42	Evaluation of definite integrals with given limits.		
	43	Evaluation of definite integrals with given limits.		
	44	Evaluation of definite integrals with given limits.		
	45	Evaluation of definite integrals with given limits.		
10	46	Applications of integration		
	47	Applications of integration		
	48	Examples & exercises		
	49	Revision		
	50	Sessional Test		
11	51	Evaluation of $\int_0^{\pi/2} \sin^n x \cdot dx$		
	52	Evaluation of $\int_0^{\pi/2} \cos^n x \cdot dx$		
	53	Evaluation of $\int_0^{\pi/2} \sin^m x \cos^n x \cdot dx$		
	54	Area under a curve and axes		
	55	Area under a curve and axes		
12	56	Area under a curve and axes		
	57	Examples & exercises		
	58	Revision & Assignment		
	59	Numerical integration by Trapezoidal Rule		
	60	Numerical integration by Trapezoidal Rule		
13	61	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	62	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	63	Differential Equations Definition, order, degree		
	64	Linearity, of an ordinary differential equation.		
	65	Formation of differential equation (upto 2 <sup>nd</sup> order)		
14	66	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	67	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	68	Examples & exercises		
	69	Solution of differential equations of first order with variable separable method only		
	70	Solution of differential equations of first order		
15	71	Solution of differential equations of first order		
	72	Revision and discussion of previous year Q. Papers		
	73	Revision and discussion of previous year Q. Papers		
	74	Revision and discussion of previous year Q. Papers		
	75	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : SAKSHI GOYAL

**DISCIPLINE** : ELECTRICAL

**SEMESTER** : SECOND

**SUBJECT** : APPLIED MATHEMATICS

**LESSON PLAN DURATION** : 15 WEEKS

**WORK LOAD PER WEEK** : Lectures = 10 Practicals = \_\_\_\_\_

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Definition of function, its types		
	2	Concept of limits and problems - 1		
	3	Concept of limits and problems - 2		
	4	Concept of limits and problems - 3		
	5	Concept of limits and problems - 4		
2	6	Differentiation of $x^n$ , $\sin x$ by first principle		
	7	Differentiation of $\cos x$ , $\tan x$ by first principle		
	8	Differentiation of $e^x$ by first principle		
	9	Revision		
	10	Differentiation of sum		
3	11	Differentiation of product		
	12	Differentiation of quotient of functions		
	13	Differentiation of implicit functions		
	14	Examples & exercises		
	15	Differentiation of parametric functions		
4	16	Differentiation of function of a function.		
	17	Differentiation of trigonometric function.		
	18	Examples & exercises		
	19	Differentiation of inverse trigonometric functions.		
	20	Logarithmic differentiation		
5	21	Exponential differentiation		
	22	Successive differentiation (upto 3 <sup>rd</sup> order )		
	23	Examples & exercises and Assignment		
	24	Revision		
	25	Sessional Test		
6	26	Application of diff. in Rate measures		
	27	Maxima and minima		
	28	Maxima and minima		
	29	Equation of tangent and normal to a curve		
	30	Integration as inverse operation of differentiation		
7	31	Examples & exercises		
	32	Simple standard integrals		
	33	Simple standard integrals		
	34	Integration by substitution		
	35	Integration by substitution		

8	36	Examples & exercises		
	37	Integration by Parts		
	38	Integration by Parts		
	39	Integration by Partial fractions		
	40	Integration by Partial fractions		
9	41	Examples & exercises		
	42	Evaluation of definite integrals with given limits.		
	43	Evaluation of definite integrals with given limits.		
	44	Evaluation of definite integrals with given limits.		
	45	Evaluation of definite integrals with given limits.		
10	46	Applications of integration		
	47	Applications of integration		
	48	Examples & exercises		
	49	Revision		
	50	Sessional Test		
11	51	Evaluation of $\int_0^{\pi/2} \sin^n x \cdot dx$		
	52	Evaluation of $\int_0^{\pi/2} \cos^n x \cdot dx$		
	53	Evaluation of $\int_0^{\pi/2} \sin^m x \cos^n x \cdot dx$		
	54	Area under a curve and axes		
	55	Area under a curve and axes		
12	56	Area under a curve and axes		
	57	Examples & exercises		
	58	Revision & Assignment		
	59	Numerical integration by Trapezoidal Rule		
	60	Numerical integration by Trapezoidal Rule		
13	61	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	62	Numerical integration by Simpson's 1/3 <sup>rd</sup> Rule		
	63	Differential Equations Definition, order, degree		
	64	Linearity, of an ordinary differential equation.		
	65	Formation of differential equation (upto 2 <sup>nd</sup> order)		
14	66	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	67	Formation of differential equation (upto 2 <sup>nd</sup> order)		
	68	Examples & exercises		
	69	Solution of differential equations of first order with variable separable method only		
	70	Solution of differential equations of first order		
15	71	Solution of differential equations of first order		
	72	Revision and discussion of previous year Q. Papers		
	73	Revision and discussion of previous year Q. Papers		
	74	Revision and discussion of previous year Q. Papers		
	75	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : SARITA MANN

**DISCIPLINE** : MECHANICAL, CIVIL, ELX & COMM

**SEMESTER** : SECOND

**SUBJECT** : APPLIED PHYSICS

**LESSON PLAN DURATION** : 15 WEEKS

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

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Wave motion	1	To find the time period of a simple pendulum
	2	Transverse and longitudinal wave motion with examples		
	3	Displacement, amplitude, time period, frequency		
	4	Wavelength, wave velocity		
2	5	Relationship among wave velocity	2	To determine and verify the time period of Cantilever
	6	Frequency and wave length		
	7	Simple Harmonic Motion (SHM): definition, examples		
	8	Cantilever (definition ,formula of time period		
3	9	Free, forced and resonant vibrations with examples	3	Checking of files & viva-voce
	10	Acoustics of buildings – reverberation, reverberation time		
	11	Echo, noise, coefficient of absorption of sound, methods to control reverberation time		
	12	Ultrasonics – Introduction		
4	13	Ultrasonics and their engineering applications	4	To verify ohm's laws by plotting a graph between voltage and current.
	14	Problem solving and Assignment		
	15	Reflection and refraction with laws, refractive index, lens formula & power of lens		
	16	Total internal reflection and its applications,		
5	17	Critical angle and conditions for total internal reflection	5	To verify laws of resistances in series combination.
	18	Microscope, Telescope and Uses		
	19	Revision		
	20	Sessional Test		
6	21	Coulombs law, unit charge	6	To verify laws of resistance in parallel combination.
	22	Electric field, Electric lines of force & Electric flux,		
	23	Electric Intensity and Electric potential, Electric field intensity		
	24	Gauss law, Capacitor and Capacitance		
7	25	Series and parallel combination of capacitors	7	Checking of files & viva-voce
	26	Dielectric, its effect on capacitance, dielectric break down		
	27	Problem solving and Assignment		
	28	Revision		
8	29	Electric Current and its Unit	8	To find resistance of galvanometer by half deflection method
	30	Direct and alternating current		
	31	Resistance and Specific Resistance		
	32	Conductance		

9	33	Series and Parallel combination of Resistances	9	Conversion of Galvanometer into an Ammeter of given range.
	34	Ohm's law		
	35	Superconductivity and Heating effect of current		
	36	Electric power, Electric energy and its units		
10	37	Kirchhoff's laws	10	Checking of files & viva-voce
	38	Applications as Wheatstone bridge		
	39	Revision, Problem solving		
	40	Sessional Test		
11	41	Introduction to magnetism, Types of magnetic materials	11	To identify different components like resistance, capacitor, diode.
	42	Dia, para and ferromagnetic materials with examples.		
	43	Magnetic field, magnetic intensity		
	44	Magnetic lines of force, magnetic flux and their units		
12	45	Electromagnetic induction Faraday's Laws	12	To study colour coding scheme of resistance.
	46	Self and Mutual induction		
	47	Energy bands, Insulator, semi conductor, conductor		
	48	Intrinsic and extrinsic semiconductors		
13	49	p-n junction diode and its V-I characteristics	13	Checking of files & viva-voce
	50	Diode as rectifier		
	51	half wave and full wave rectifier semiconductor transistor; pnp and npn		
	52	Application of semiconductor diodes (Zener, LED)		
14	53	Problem solving and Assignment	14	Revision of practicals
	54	Lasers: full form, characteristics		
	55	Engineering and medical applications of lasers		
	56	Introduction to optical fibers & its Applications		
15	57	Introduction to nanotechnology & its Application	15	Revision of practicals
	58	Revision and discussion of previous year Q. Papers		
	59	Revision and discussion of previous year Q. Papers		
	60	Sessional Test		



## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : PRITI SRIVASTAVA

**DISCIPLINE** : MECHANICAL, CIVIL, ELECTRICAL (B)

**SEMESTER** : SECOND

**SUBJECT** : APPLIED PHYSICS

**LESSON PLAN DURATION** : 15 WEEKS

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

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Wave motion	1	To find the time period of a simple pendulum
	2	Transverse and longitudinal wave motion with examples		
	3	Displacement, amplitude, time period, frequency		
	4	Wavelength, wave velocity		
2	5	Relationship among wave velocity	2	To determine and verify the time period of Cantilever
	6	Frequency and wave length		
	7	Simple Harmonic Motion (SHM): definition, examples		
	8	Cantilever (definition ,formula of time period		
3	9	Free, forced and resonant vibrations with examples	3	Checking of files & viva-voce
	10	Acoustics of buildings – reverberation, reverberation time		
	11	Echo, noise, coefficient of absorption of sound, methods to control reverberation time		
	12	Ultrasonics – Introduction		
4	13	Ultrasonics and their engineering applications	4	To verify ohm's laws by plotting a graph between voltage and current.
	14	Problem solving and Assignment		
	15	Reflection and refraction with laws, refractive index, lens formula & power of lens		
	16	Total internal reflection and its applications,		
5	17	Critical angle and conditions for total internal reflection	5	To verify laws of resistances in series combination.
	18	Microscope, Telescope and Uses		
	19	Revision		
	20	Sessional Test		
6	21	Coulombs law, unit charge	6	To verify laws of resistance in parallel combination.
	22	Electric field, Electric lines of force & Electric flux,		
	23	Electric Intensity and Electric potential, Electric field intensity		
	24	Gauss law, Capacitor and Capacitance		
7	25	Series and parallel combination of capacitors	7	Checking of files & viva-voce
	26	Dielectric, its effect on capacitance, dielectric break down		
	27	Problem solving and Assignment		
	28	Revision		
8	29	Electric Current and its Unit	8	To find resistance of galvanometer by half deflection method
	30	Direct and alternating current		
	31	Resistance and Specific Resistance		
	32	Conductance		

9	33	Series and Parallel combination of Resistances	9	Conversion of Galvanometer into an Ammeter of given range.
	34	Ohm's law		
	35	Superconductivity and Heating effect of current		
	36	Electric power, Electric energy and its units		
10	37	Kirchhoff's laws	10	Checking of files & viva-voce
	38	Applications as Wheatstone bridge		
	39	Revision, Problem solving		
	40	Sessional Test		
11	41	Introduction to magnetism, Types of magnetic materials	11	To identify different components like resistance, capacitor, diode.
	42	Dia, para and ferromagnetic materials with examples.		
	43	Magnetic field, magnetic intensity		
	44	Magnetic lines of force, magnetic flux and their units		
12	45	Electromagnetic induction Faraday's Laws	12	To study colour coding scheme of resistance.
	46	Self and Mutual induction		
	47	Energy bands, Insulator, semi conductor, conductor		
	48	Intrinsic and extrinsic semiconductors		
13	49	p-n junction diode and its V-I characteristics	13	Checking of files & viva-voce
	50	Diode as rectifier		
	51	half wave and full wave rectifier semiconductor transistor; pnp and npn		
	52	Application of semiconductor diodes (Zener, LED)		
14	53	Problem solving and Assignment	14	Revision of practicals
	54	Lasers: full form, characteristics		
	55	Engineering and medical applications of lasers		
	56	Introduction to optical fibers & its Applications		
15	57	Introduction to nanotechnology & its Application	15	Revision of practicals
	58	Revision and discussion of previous year Q. Papers		
	59	Revision and discussion of previous year Q. Papers		
	60	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : RAJINDER SINGH RANA

**DISCIPLINE** : ELECTRICAL ENGG (A), AUTOMOBILE

**SEMESTER** : SECOND

**SUBJECT** : APPLIED PHYSICS

**LESSON PLAN DURATION** : 15 WEEKS

**WORK LOAD PER WEEK** : Lectures = 4+4 Practicals = \_\_\_\_\_

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Wave motion	1	
	2	Transverse and longitudinal wave motion with examples		
	3	Displacement, amplitude, time period, frequency		
	4	Wavelength, wave velocity		
2	5	Relationship among wave velocity	2	
	6	Frequency and wave length		
	7	Simple Harmonic Motion (SHM): definition, examples		
	8	Cantilever (definition ,formula of time period		
3	9	Free, forced and resonant vibrations with examples	3	
	10	Acoustics of buildings – reverberation, reverberation		
	11	Echo, noise, coefficient of absorption of sound, methods to control reverberation time		
	12	Ultrasonics – Introduction		
4	13	Ultrasonics and their engineering applications	4	
	14	Problem solving and Assignment		
	15	Reflection and refraction with laws, refractive index, lens formula & power of lens		
	16	Total internal reflection and its applications,		
5	17	Critical angle and conditions for total internal reflection	5	
	18	Microscope, Telescope and Uses		
	19	Revision		
	20	Sessional Test		
6	21	Coulombs law, unit charge	6	
	22	Electric field, Electric lines of force & Electric flux,		
	23	Electric Intensity and Electric potential, Electric field		
	24	Gauss law, Capacitor and Capacitance		
7	25	Series and parallel combination of capacitors	7	
	26	Dielectric, its effect on capacitance, dielectric break		
	27	Problem solving and Assignment		
	28	Revision		
8	29	Electric Current and its Unit	8	
	30	Direct and alternating current		
	31	Resistance and Specific Resistance		
	32	Conductance		

9	33	Series and Parallel combination of Resistances	9	
	34	Ohm's law		
	35	Superconductivity and Heating effect of current		
	36	Electric power, Electric energy and its units		
10	37	Kirchhoff's laws	10	
	38	Applications as Wheatstone bridge		
	39	Revision, Problem solving		
	40	Sessional Test		
11	41	Introduction to magnetism, Types of magnetic materials	11	
	42	Dia, para and ferromagnetic materials with examples.		
	43	Magnetic field, magnetic intensity		
	44	Magnetic lines of force, magnetic flux and their units		
12	45	Electromagnetic induction Faraday's Laws	12	
	46	Self and Mutual induction		
	47	Energy bands, Insulator, semi conductor, conductor		
	48	Intrinsic and extrinsic semiconductors		
13	49	p-n junction diode and its V-I characteristics	13	
	50	Diode as rectifier		
	51	half wave and full wave rectifier semiconductor transistor; pnp and npn		
	52	Application of semiconductor diodes (Zener, LED)		
14	53	Problem solving and Assignment	14	
	54	Lasers: full form, characteristics		
	55	Engineering and medical applications of lasers		
	56	Introduction to optical fibers & its Applications		
15	57	Introduction to nanotechnology & its Application	15	
	58	Revision and discussion of previous year Q. Papers		
	59	Revision and discussion of previous year Q. Papers		
	60	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : PUSHPENDRA KAUR

**DISCIPLINE** : CIVIL, ELCTRICAL (A), AUTO

**SEMESTER** : SECOND

**SUBJECT** : APPLIED PHYSICS

**LESSON PLAN DURATION** : 15 WEEKS

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

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Wave motion	1	To find the time period of a simple pendulum
	2	Transverse and longitudinal wave motion with examples		
	3	Displacement, amplitude, time period, frequency		
	4	Wavelength, wave velocity		
2	5	Relationship among wave velocity	2	To determine and verify the time period of Cantilever
	6	Frequency and wave length		
	7	Simple Harmonic Motion (SHM): definition, examples		
	8	Cantilever (definition ,formula of time period		
3	9	Free, forced and resonant vibrations with examples	3	Checking of files & viva-voce
	10	Acoustics of buildings – reverberation, reverberation time		
	11	Echo, noise, coefficient of absorption of sound, methods to control reverberation time		
	12	Ultrasonics – Introduction		
4	13	Ultrasonics and their engineering applications	4	To verify ohm's laws by plotting a graph between voltage and current.
	14	Problem solving and Assignment		
	15	Reflection and refraction with laws, refractive index, lens formula & power of lens		
	16	Total internal reflection and its applications,		
5	17	Critical angle and conditions for total internal reflection	5	To verify laws of resistances in series combination.
	18	Microscope, Telescope and Uses		
	19	Revision		
	20	Sessional Test		
6	21	Coulombs law, unit charge	6	To verify laws of resistance in parallel combination.
	22	Electric field, Electric lines of force & Electric flux,		
	23	Electric Intensity and Electric potential, Electric field intensity		
	24	Gauss law, Capacitor and Capacitance		
7	25	Series and parallel combination of capacitors	7	Checking of files & viva-voce
	26	Dielectric, its effect on capacitance, dielectric break down		
	27	Problem solving and Assignment		
	28	Revision		
8	29	Electric Current and its Unit	8	To find resistance of galvanometer by half deflection method
	30	Direct and alternating current		
	31	Resistance and Specific Resistance		
	32	Conductance		

9	33	Series and Parallel combination of Resistances	9	Conversion of Galvanometer into an Ammeter of given range.
	34	Ohm's law		
	35	Superconductivity and Heating effect of current		
	36	Electric power, Electric energy and its units		
10	37	Kirchhoff's laws	10	Checking of files & viva-voce
	38	Applications as Wheatstone bridge		
	39	Revision, Problem solving		
	40	Sessional Test		
11	41	Introduction to magnetism, Types of magnetic materials	11	To identify different components like resistance, capacitor, diode.
	42	Dia, para and ferromagnetic materials with examples.		
	43	Magnetic field, magnetic intensity		
	44	Magnetic lines of force, magnetic flux and their units		
12	45	Electromagnetic induction Faraday's Laws	12	To study colour coding scheme of resistance.
	46	Self and Mutual induction		
	47	Energy bands, Insulator, semi conductor, conductor		
	48	Intrinsic and extrinsic semiconductors		
13	49	p-n junction diode and its V-I characteristics	13	Checking of files & viva-voce
	50	Diode as rectifier		
	51	half wave and full wave rectifier semiconductor transistor; pnp and npn		
	52	Application of semiconductor diodes (Zener, LED)		
14	53	Problem solving and Assignment	14	Revision of practicals
	54	Lasers: full form, characteristics		
	55	Engineering and medical applications of lasers		
	56	Introduction to optical fibers & its Applications		
15	57	Introduction to nanotechnology & its Application	15	Revision of practicals
	58	Revision and discussion of previous year Q. Papers		
	59	Revision and discussion of previous year Q. Papers		
	60	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : SHALLY GUPTA

**DISCIPLINE** : PLASTIC, ECE, ELECTRICAL

**SEMESTER** : SECOND

**SUBJECT** : APPLIED PHYSICS

**LESSON PLAN DURATION** : 15 WEEKS

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

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	Wave motion	1	To find the time period of a simple pendulum
	2	Transverse and longitudinal wave motion with examples		
	3	Displacement, amplitude, time period, frequency		
	4	Wavelength, wave velocity		
2	5	Relationship among wave velocity	2	To determine and verify the time period of Cantilever
	6	Frequency and wave length		
	7	Simple Harmonic Motion (SHM): definition, examples		
	8	Cantilever (definition ,formula of time period		
3	9	Free, forced and resonant vibrations with examples	3	Checking of files & viva-voce
	10	Acoustics of buildings – reverberation, reverberation time		
	11	Echo, noise, coefficient of absorption of sound, methods to control reverberation time		
	12	Ultrasonics – Introduction		
4	13	Ultrasonics and their engineering applications	4	To verify ohm's laws by plotting a graph between voltage and current.
	14	Problem solving and Assignment		
	15	Reflection and refraction with laws, refractive index, lens formula & power of lens		
	16	Total internal reflection and its applications,		
5	17	Critical angle and conditions for total internal reflection	5	To verify laws of resistances in series combination.
	18	Microscope, Telescope and Uses		
	19	Revision		
	20	Sessional Test		
6	21	Coulombs law, unit charge	6	To verify laws of resistance in parallel combination.
	22	Electric field, Electric lines of force & Electric flux,		
	23	Electric Intensity and Electric potential, Electric field intensity		
	24	Gauss law, Capacitor and Capacitance		
7	25	Series and parallel combination of capacitors	7	Checking of files & viva-voce
	26	Dielectric, its effect on capacitance, dielectric break down		
	27	Problem solving and Assignment		
	28	Revision		
8	29	Electric Current and its Unit	8	To find resistance of galvanometer by half deflection method
	30	Direct and alternating current		
	31	Resistance and Specific Resistance		
	32	Conductance		

9	33	Series and Parallel combination of Resistances	9	Conversion of Galvanometer into an Ammeter of given range.
	34	Ohm's law		
	35	Superconductivity and Heating effect of current		
	36	Electric power, Electric energy and its units		
10	37	Kirchhoff's laws	10	Checking of files & viva-voce
	38	Applications as Wheatstone bridge		
	39	Revision, Problem solving		
	40	Sessional Test		
11	41	Introduction to magnetism, Types of magnetic materials	11	To identify different components like resistance, capacitor, diode.
	42	Dia, para and ferromagnetic materials with examples.		
	43	Magnetic field, magnetic intensity		
	44	Magnetic lines of force, magnetic flux and their units		
12	45	Electromagnetic induction Faraday's Laws	12	To study colour coding scheme of resistance.
	46	Self and Mutual induction		
	47	Energy bands, Insulator, semi conductor, conductor		
	48	Intrinsic and extrinsic semiconductors		
13	49	p-n junction diode and its V-I characteristics	13	Checking of files & viva-voce
	50	Diode as rectifier		
	51	half wave and full wave rectifier semiconductor transistor; pnp and npn		
	52	Application of semiconductor diodes (Zener, LED)		
14	53	Problem solving and Assignment	14	Revision of practicals
	54	Lasers: full form, characteristics		
	55	Engineering and medical applications of lasers		
	56	Introduction to optical fibers & its Applications		
15	57	Introduction to nanotechnology & its Application	15	Revision of practicals
	58	Revision and discussion of previous year Q. Papers		
	59	Revision and discussion of previous year Q. Papers		
	60	Sessional Test		



## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : ARCHANA SHARMA

**DISCIPLINE** : MECHANICAL, CIVIL, PLASTIC

**SEMESTER** : SECOND

**SUBJECT** : APPLIED CHEMISTRY

**LESSON PLAN DURATION** : 15 WEEKS

**WORK LOAD PER WEEK** : Lectures = 3+3+3 Practicals = 4+4

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	General metallurgical terms	1	Gravimetric analysis
	2	Metallurgy operations with reference to iron		
	3	Metallurgy operations with copper		
2	4	Metallurgy operations with aluminium	2	Determination of percentage purity of commercial sample of blue vitriol using N/20 Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>
	5	Manufacture of steel- Open hearth process.		
	6	Alloys, properties and applications of ferrous alloys		
3	7	Alloys- different alloys their uses	3	Revision and Viva
	8	Revision		
	9	Test		
4	10	Definition of corrosion , its types and factors affecting corrosion rate	4	Gravimetric estimation of moisture in the given coal sample
	11	Wet corrosion, Positivity		
	12	Metallic Coating		
5	13	Inorganic coatings, Organic coatings heat treatment	5	Determination of percentage composition of volatile/non-volatile matter in the given coal sample
	14	Revision		
	15	Sessional Test		
6	16	Definition of fuel, classification, characteristics	6	Revision and Viva
	17	Comparison of fuels, Calorific value		
	18	Bomb Calorimeter and numerical		
7	19	Types of Coal and Proximate Analysis	7	Gravimetric estimation of ash content in the given coal sample
	20	Octave number and Cetane number		
	21	Gaseous fuel- CNG, LPG, Producer gas		
8	22	Water gas and biogas, hydrogen as future fuels,	8	Determination of viscosity of given liquid using Redwood viscometers
	23	Revision		
	24	Test		
9	25	Definition of Lubricant and boundary Lubricant hydrodynamic, boundary lubrication	9	Determination of flash point of given lubricating oil using Able's flash point
	26	liquid lubricants, solid lubricants, semi-solid lubricants and synthetic lubricants		

	27	Physical properties of Lubricant		apparatus
10	28	Chemical properties of Lubricant	10	Revision and Viva
	29	Revision		
	30	Sessional Test		
11	31	Applications of cutting fluids, types and the that govern the selection of cutting fluids factors	11	To study the effect of metal coupling on corrosion of iron
	32	Definition and types and applications of- Ceramics,		
	33	Refractory and Composite materials		
12	34	Glass-chemical composition and application of Soda,	12	Revision and Viva
	35	Definition of polymer, monomer and degree of polymerization		
	36	Addition and condensation polymers		
13	37	(PE, PS, PVC, Teflon, Nylon -66 and Bakelite)	13	Detection of iron metal in the given solution of rust
	38	Definition of plastics, thermo plastics and thermo setting plastics		
	39	Distinctions between thermo plastics and thermo		
14	40	Applications of polymers in industry and daily life	14	Revision and Viva
	41	Revision		
	42	Doubt Quarries and Revision		
15	43	Revision and discussion of previous year Q. Papers	15	Revision and Viva
	44	Revision and discussion of previous year Q. Papers		
	45	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY** : DR. SUNITA RANI

**DISCIPLINE** : MECHANICAL, CIVIL, AUTO

**SEMESTER** : SECOND

**SUBJECT** : APPLIED CHEMISTRY

**LESSON PLAN DURATION** : 15 WEEKS

**WORK LOAD PER WEEK** : Lectures = 3+3+3 Practicals = 4+4+4

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	General metallurgical terms	1	Gravimetric analysis
	2	Metallurgy operations with reference to iron		
	3	Metallurgy operations with copper		
2	4	Metallurgy operations with aluminium	2	Determination of percentage purity of commercial sample of blue vitriol using N/20 Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>
	5	Manufacture of steel- Open hearth process.		
	6	Alloys, properties and applications of ferrous alloys		
3	7	Alloys- different alloys their uses	3	Revision and Viva
	8	Revision		
	9	Test		
4	10	Definition of corrosion , its types and factors affecting corrosion rate	4	Gravimetric estimation of moisture in the given coal sample
	11	Wet corrosion, Positivity		
	12	Metallic Coating		
5	13	Inorganic coatings, Organic coatings heat treatment	5	Determination of percentage composition of volatile/non-volatile matter in the given coal sample
	14	Revision		
	15	Sessional Test		
6	16	Definition of fuel, classification, characteristics	6	Revision and Viva
	17	Comparison of fuels, Calorific value		
	18	Bomb Calorimeter and numerical		
7	19	Types of Coal and Proximate Analysis	7	Gravimetric estimation of ash content in the given coal sample
	20	Octave number and Cetane number		
	21	Gaseous fuel- CNG, LPG, Producer gas		
8	22	Water gas and biogas, hydrogen as future fuels,	8	Determination of viscosity of given liquid using Redwood viscometers
	23	Revision		
	24	Test		
9	25	Definition of Lubricant and boundary Lubricant hydrodynamic, boundary lubrication	9	Determination of flash point of given lubricating oil using Able's flash point
	26	liquid lubricants, solid lubricants, semi-solid lubricants and synthetic lubricants		

	27	Physical properties of Lubricant		apparatus
10	28	Chemical properties of Lubricant	10	Revision and Viva
	29	Revision		
	30	Sessional Test		
11	31	Applications of cutting fluids, types and the that govern the selection of cutting fluids factors	11	To study the effect of metal coupling on corrosion of iron
	32	Definition and types and applications of- Ceramics,		
	33	Refractory and Composite materials		
12	34	Glass-chemical composition and application of Soda,	12	Revision and Viva
	35	Definition of polymer, monomer and degree of polymerization		
	36	Addition and condensation polymers		
13	37	(PE, PS, PVC, Teflon, Nylon -66 and Bakelite)	13	Detection of iron metal in the given solution of rust
	38	Definition of plastics, thermo plastics and thermo setting plastics		
	39	Distinctions between thermo plastics and thermo		
14	40	Applications of polymers in industry and daily life	14	Revision and Viva
	41	Revision		
	42	Doubt Quarries and Revision		
15	43	Revision and discussion of previous year Q. Papers	15	Revision and Viva
	44	Revision and discussion of previous year Q. Papers		
	45	Sessional Test		

## **PERFORMA OF LESSON PLAN**

**NAME OF THE FACULTY : AMIT SOOD**

**DISCIPLINE : CIVIL (C), PLASTIC**

**SEMESTER : SECOND**

**SUBJECT : APPLIED CHEMISTRY**

**LESSON PLAN DURATION : 15 WEEKS**

**WORK LOAD PER WEEK : Lectures = 3 Practicals = 4+4**

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (WITH ASSIGNMENT & TESTS)	PRACTICAL DAY	TOPIC
1	1	General metallurgical terms	1	Gravimetric analysis
	2	Metallurgy operations with reference to iron		
	3	Metallurgy operations with copper		
2	4	Metallurgy operations with aluminium	2	Determination of percentage purity of commercial sample of blue vitriol using $N/20 Na_2S_2O_3$
	5	Manufacture of steel- Open hearth process.		
	6	Alloys, properties and applications of ferrous alloys		
3	7	Alloys- different alloys their uses	3	Revision and Viva
	8	Revision		
	9	Test		
4	10	Definition of corrosion , its types and factors affecting corrosion rate	4	Gravimetric estimation of moisture in the given coal sample
	11	Wet corrosion, Positivity		
	12	Metallic Coating		
5	13	Inorganic coatings, Organic coatings heat treatment	5	Determination of percentage composition of volatile/non-volatile matter in the given coal sample
	14	Revision		
	15	Sessional Test		
6	16	Definition of fuel, classification, characteristics	6	Revision and Viva
	17	Comparison of fuels, Calorific value		
	18	Bomb Calorimeter and numerical		
7	19	Types of Coal and Proximate Analysis	7	Gravimetric estimation of ash content in the given coal sample
	20	Octave number and Cetane number		
	21	Gaseous fuel- CNG, LPG, Producer gas		
8	22	Water gas and biogas, hydrogen as future fuels,	8	Determination of viscosity of given liquid using Redwood viscometers
	23	Revision		
	24	Test		
9	25	Definition of Lubricant and boundary Lubricant hydrodynamic, boundary lubrication	9	Determination of flash point of given lubricating oil using Able's flash point
	26	liquid lubricants, solid lubricants, semi-solid lubricants and synthetic lubricants		

	27	Physical properties of Lubricant		apparatus
10	28	Chemical properties of Lubricant	10	Revision and Viva
	29	Revision		
	30	Sessional Test		
11	31	Applications of cutting fluids, types and the that govern the selection of cutting fluids factors	11	To study the effect of metal coupling on corrosion of iron
	32	Definition and types and applications of- Ceramics,		
	33	Refractory and Composite materials		
12	34	Glass-chemical composition and application of Soda,	12	Revision and Viva
	35	Definition of polymer, monomer and degree of polymerization		
	36	Addition and condensation polymers		
13	37	(PE, PS, PVC, Teflon, Nylon -66 and Bakelite)	13	Detection of iron metal in the given solution of rust
	38	Definition of plastics, thermo plastics and thermo setting plastics		
	39	Distinctions between thermo plastics and thermo		
14	40	Applications of polymers in industry and daily life	14	Revision and Viva
	41	Revision		
	42	Doubt Quarries and Revision		
15	43	Revision and discussion of previous year Q. Papers	15	Revision and Viva
	44	Revision and discussion of previous year Q. Papers		
	45	Sessional Test		