	LESSON PLAN	
	JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA	
Name of the Faculty:		Academic Year: 2019-20
Course No.: TH-3		Course Name: MATHEMATICS-I
Programe: Diploma		Branch: Civil, Mechanical, Electrical, Etc and IT
Year/Sem: I& II		Section:A,B,C,D,E,F

Sl. No.	Period	Time (min)	Unit	Topic to be Covered	Teaching Method
1.	1.	55	1	Types of matrices	Blackboard & chalk
2.	2.	55	1	Algebra of matrices, Addition of matrices, Substraction of matrices	Blackboard & chalk
3.	3.	55	1	Multiplication of matrices, properties of matrices	Blackboard & chalk
4.	4.	55	1	Determinant ,types of Determinant	Blackboard & chalk
5.	5.	55	1	Properties of determinant	Blackboard & chalk
6.	6.	55	1	Math Tutorials, problem solving of matrices	Blackboard & chalk
7.	7.	55	1	Expansion of determinants	Blackboard & chalk
8.	8.	55	1	Inverse of a matrices(second and third order)	Smart class
9.	9.	55	1	Adjoint of matrices	Blackboard & chalk
10	10.	55	1	Questions of inverse matrices (second order matrix)	Blackboard & chalk
11	11.	55	1	Cramer's rule	Blackboard & chalk
12	12.	55	1	Math Tutorials, problem solving of inverse matrices	Blackboard & chalk
13	13.	55	1	Properties of Cramer's rule,	Blackboard & chalk
14	14.	55	1	Problem solving of Cramer's rule	Blackboard & chalk
15	15.	55	1	Solution of simultaneous equations by matrix inverse method	Smart class
16	16.	55	1	Solution of simultaneous equations by matrix inverse method (Question should be on two variables)	Blackboard & chalk
17	17.	55	2	Introduction of trigonometry	Blackboard & chalk
18	18.	55	2	Math Tutorials, problem solving of matrix method and doubt class	Blackboard & chalk
19	19.	55	2	Trigonometrical ratios	Blackboard & chalk
20	20.	55	2	Compound angles, find sin18,cos18,tan18,sin36,cos36,etc	Blackboard & chalk
21	21.	55	2	Multiple angles	Blackboard &

22	22.	55	2	sub-multiple angles	Smart class
23	23.	55	2	Define inverse circular functions, theorem	Blackboard & chalk
24	24.	55	2	Math Tutorials, problem solving of compound angle, multiple angle	Blackboard & chalk
25	25.	55	2	Properties of inverse trigonometric function	Blackboard & chalk
26	26.	55	3	Introduction of geometry in two dimension	Blackboard & chalk
27	27.	55	3	Distance formulae, division formulae	Blackboard & chalk
28	28.	55	3	Area of a triangle	Blackboard & chalk
29	29.	55	3	Define slope of a line, find slope	Smart class
30	30.	55	3	Math Tutorials, problem solving of Division formula,area triangle	Blackboard & chalk
31	31.	55	3	Angle between two lines	Blackboard & chalk
32	32.	55	3	Condition of Perpendicularity and parallelism.	Blackboard & chalk
33	33.	55	3	Different forms of straight lines	Blackboard & chalk
34	34.	55	3	Different forms of straight lines (only formulae) i) One point form (ii) two point form (iii) slope form	Blackboard & chalk
35	35.	55	3	(iv) intercept form(v) Perpendicular form	Blackboard & chalk
36	36.	55	3	Math Tutorials, problem solving and doubt clear	Blackboard & chalk
37	37.	55	3	Equation of a line passing through a point and (i) parallel to a line	Smart class
38	38.	55	3	Equation of a line passing through a point and (ii) Perpendicular to a line	Blackboard & chalk
39	39.	55	3	Equation of a line passing through the intersection of two lines	Blackboard & chalk
40	40.	55	3	Distance of a point from a line	Blackboard & chalk
41	41.	55	3	Distance between two parallel lines	Blackboard & chalk
42	42.	55	3	Math Tutorials, problem solving and doubt clear of distance between a point from a line	Blackboard & chalk
43	43.	55	4	Equation of circle	Blackboard & chalk
44	44.	55	4	Center point and radius of the circle	Blackboard & chalk
45	45.	55	4	Equation of circle if center point and radius is given	Blackboard & chalk
46	46.	55	4	General equation of a circle	Smart class
47	47.	55	4	Circle passing through three points	Blackboard & chalk

48	48.	55	4	Math Tutorials, problem solving and doubt clear of circle	Blackboard & chalk
49	49.	55	4	Equation of circle if end points of the diameter is given	Blackboard & chalk
50	50.	55	4	Different questions solving of circle	Blackboard & chalk
51	51.	55	5	Introduction of co-ordinate geometry in three dimension	Blackboard & chalk
52	52.	55	5	Distance formulae and its question	Blackboard & chalk
53	53.	55	5	Section formulae and its imp questions	Blackboard & chalk
54	54.	55	5	Math Tutorials, problem solving and doubt clear in three dimension	Blackboard & chalk
55	55.	55	5	direction ratio, direction cosine,	Blackboard & chalk
56	56.	55	5	Angle between two lines (condition of parallelism and perpendicularity)	Blackboard & chalk
57	57.	55	5	Equation of a plane	Smart class
58	58.	55	5	Equation of a plane in general form	Blackboard & chalk
59	59.	55	5	Angle between two planes	Blackboard & chalk
60	60.	55	5	Math Tutorials, problem solving of plane	Blackboard & chalk
61	61.	55	5	perpendicular distance of a point from a plane	Smart class
62	62.	55	5	Equation of a plane passing through a point	Blackboard & chalk
63	63.	55	5	Equation of a plane passing through a point and parallel to a plane and perpendicular to a plane	Blackboard & chalk
64	64.	55	6	Introduction of Sphere	Smart class
65	65.	55	6	Equation of a sphere	Blackboard & chalk
66	66.	55	6	Math Tutorials, problem solving	Blackboard & chalk
67	67.	55	6	Center point and radius of the sphere	Blackboard & chalk
68	68.	55	6	Equation of a sphere in general form	Blackboard & chalk
69	69.	55	6	Sphere passing through four points	Blackboard & chalk
70	70.	55	6	Sphere with two end points of a diameter form	Blackboard & chalk
71	71.	55	6	Revision Of matrices and determinants	Blackboard & chalk
72	72.	55	6	Math Tutorials, problem solving	
73	73.	55	6	Revision Of Trigonometry	Blackboard & chalk
74	74.	55	6	Revision Of Trigonometry and problem solving	Blackboard &

75	75.	55	6	Revision Of CO-ORDINATE GEOMETRY IN TWO DIMENSIONS (Straight line)	Blackboard & chalk
76	76.	55	6	Revision Of CIRCLE	Blackboard & chalk
77	77.	55	6	Revision Of CO-ORDINATE GEOMETRY IN THREE DIMENSIONS	Blackboard & chalk
78	78.	55	6	Math Tutorials, problem solving	Blackboard & chalk
79	79.	55	6	Revision Of Sphere	Blackboard & chalk
80	80.	55	6	Expected questions for semester exam	Blackboard & chalk
81	81.	55	6	Previous year questions and answer solving	Blackboard & chalk
82	82.	55	6	Previous year questions and answer solving	Blackboard & chalk
83	83.	55	6	Previous year questions and answer solving	Blackboard & chalk
84	84.	55	6	Previous year questions and answer solving	Blackboard & chalk
85	85.	55	6	Previous year questions and answer solving	Blackboard & chalk
86	86.	55	6	Previous year questions and answer solving	Blackboard & chalk
87	87.	55	6	Previous year questions and answer solving	Blackboard & chalk
88	88.	55	6	All doubt questions and answer solving	Blackboard & chalk
89	89.	55	6	All doubt questions and answer solving	Blackboard & chalk
90	90.	55	6	All doubt questions and answer solving	Blackboard & chalk

				JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA	

Name of the Faculty: Jagannath Oram	Academic Year: 2019-20
Course No.: TH.2B	Course Name: Eng.Chemistry
Programe: Diploma	Branch: Elect., ET , IT & Civil, Mech.
Year/Sem: I / II	Section: A, B, C, D, E, F

Sl. No.	Period	Time (min)	Unit	Topic to be Covered	Teaching Method
1.	1.	55	1	Fundamental particles (electron, proton & neutron Definition,mass and charge).Rutherford's Atomic model (postulates and failure)	Blackboard and Chalk
2.	2.	55	1	Atomic mass and mass number, Definition, examples and properties of Isotopes, isobars and isotones	Blackboard and Chalk
3.	3.	55	1	Bohr's Atomic model (Postulates only), Bohr-Bury scheme	Blackboard and Chalk
4.	4.	55	1	Aufbau's principle, Hund's rule, Electronic configuration (up to atomic no 30).	Blackboard and Chalk
5.	5.	55	1	Question and discussion	Blackboard and Chalk
6.	6.	55	2	Introduction on chemical bonding ,types of chemical bond (electrovalent bond, covalent bond , coordinate bond)	Blackboard and Chalk
7.	7.	55	2	Definition of electrovalent bond, covalent bond , coordinate bond with suitable example such as NaCl, $MgCl_2$, H_2, Cl_2, O_2, N_2, H_2O, CH_4, NH_3, NH_{4+}, SO_2	Blackboard and Chalk
8.	8.	55	3	Introduction on Acid base theory	Blackboard and Chalk
9.	9.	55	3	Concept of Arrhenius, Lowry Bronsted and Lewis theory for acid and base with examples (Postulates and limitations only)	Blackboard and Chalk
10	10.	55	3	Acid base theory	Smart class
11	11.	55	3	Definition of Salt, Types of salts (Normal, acidic, basic, double, complex and mixed salts, definitions with 2 examples from each).	Blackboard and Chalk
12	12.	55	4	Definitions of atomic weight, molecular weight, Equivalent weight	Blackboard and Chalk
13	13.	55	4	Determination of equivalent weight of Acid, Base and Salt	Blackboard and Chalk
14	14.	55	4	Modes of expression of the concentrations (Molarity , Normality & Molality) with Simple Problems.	Blackboard and Chalk
15	15.	55	4	pH of solution (definition with simple numericals)	Blackboard and Chalk
16	16.	55	4	Importance of pH in industry (sugar, textile, paper industries only)	Blackboard and Chalk
17	17.	55	5	Definition and types (Strong & weak) of Electrolytes with example. Electrolysis (Principle & process) with example of NaCl (fused and aqueous solution).	Blackboard and Chalk
18	18.	55	5	Faraday's 1st and 2nd law of Electrolysis (Statement, mathematical expression and Simple numerical)	Blackboard and Chalk

19	19.	55	5	Industrial application of Electrolysis- Electroplating (Zinc only).	Blackboard and smartclass
20	20.	55	6	Definition of Corrosion, Types of Corrosion Atmospheric Corrosion, Waterline corrosion	Blackboard and Chalk
21	21.	55	6	Mechanism of rusting of Iron only. Protection from Corrosion by (i) Alloying and (ii) Galvanization.	Blackboard and Chalk
22	22.	55	7	Definition of Mineral, ores , gangue with example. Distinction between Ores And Minerals. General methods of extraction of metals,	Blackboard and Chalk
23	23.	55	7	i) Ore Dressing ii) Concentration (Gravity separation, magnetic separation, Froth floatation & leaching)	Blackboard and Chalk
24	24.	55	7	iii) Oxidation (Calcinations, Roasting) iv) Reduction (Smelting, Definition & examples of flux, slag)	Blackboard and Chalk
25	25.	55	7	v) Refining of the metal (Electro refining, & Distillation only)	Blackboard and Chalk
26	26.	55	8	Definition of alloy. Types of alloys (Ferro, Non Ferro & Amalgam) with example. Composition and uses of Brass, Bronze, Alnico, Duralumin	Blackboard and Chalk
27	27.	55	9	Saturated and Unsaturated Hydrocarbons (Definition with example)	Blackboard and Chalk
28	28.	55	9	Aliphatic and Aromatic Hydrocarbons (Huckle's rule only)	Blackboard and Chalk
29	29.	55	9	Difference between Aliphatic and aromatic hydrocarbons	Blackboard and Chalk
30	30.	55	9	IUPAC system of nomenclature of Alkane, Alkene	Blackboard and Chalk
31	31.	55	9	Alkyne, alkyl halide and alcohol (up to 6 carbons) with bond line notation.	Blackboard and Chalk
32	32.	55	9	Problem practice	Blackboard and Chalk
33	33.	55	9	Uses of some common aromatic compounds (Benzene, Toluene, BHC, Phenol, Naphthalene, Anthracene and Benzoic acid) in daily life.	Blackboard and Chalk
34	34.	55	10	Sources of water, Soft water, Hard water, hardness, types of Hardness (temporary or carbonate and permanent or non-carbonate)	Blackboard and Chalk
35	35.	55	10	Removal of hardness by lime soda method (hot lime & cold lime—Principle, process & advantages), Advantages of Hot lime over cold lime process.	Blackboard and Chalk
36	36.	55	10	Organic Ion exchange method (principle, process, and regeneration of exhausted resins)	Blackboard and Chalk
37	37.	55	11	Definition of lubricant, Types (solid, liquid and semisolid with examples only	Blackboard and Chalk
38	38.	55	11	specific uses of lubricants (Graphite, Oils, Grease), Purpose of lubrication	Blackboard and Chalk
39	39.	55	12	Definition and classification of fuel, Definition of calorific value of fuel, Choice of good fuel.	Blackboard and Chalk
40	40.	55	12	Liquid: Diesel, Petrol, and Kerosene --- Composition	Blackboard

				and uses.	and Chalk
41	41.	55	12	Gaseous: Producer gas and Water gas (Composition and uses). Elementary idea about LPG, CNG and coal gas (Composition and uses only).	Blackboard and Chalk
42	42.	55	13	Definition of Monomer, Polymer, Homo-polymer, Co-polymer and Degree of polymerization.	Blackboard and Chalk
43	43.	55	13	Difference between Thermosetting and Thermoplastic	Blackboard and Chalk
44	44.	55	13	Composition and uses of Polythene, & Poly-Vinyl Chloride and Bakelite.	Blackboard and Chalk
45	45.	55	13	Definition of Elastomer (Rubber). Natural Rubber (it's draw backs). Vulcanisation of Rubber. Advantages of Vulcanised rubber over raw rubber	Blackboard and Chalk
46	46.	55	13	Pesticides: Insecticides, herbicides, fungicides-Examples and uses.	Blackboard and Chalk
47	47.	55	13	Bio Fertilizers: Definition, examples and uses	Blackboard and Chalk
48	48.	55		Revision	
49	49.	55		Doubt clear class	
50	50.	55		Revision	
51	51.	55		Doubt clear class	
52	52.	55		Revision	
53	53.	55		Doubt clear class	
54	54.	55		Previous year question solve	
55	55.	55		Previous year question solve	
56	56.	55		Revision	
57	57.	55		Doubt clear class	
58	58.	55		Revision	
59	59.	55		Previous year question solve	
60	60.	55		Previous year question solve	

	LESSON PLAN	
	JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA	
Name of the Faculty: Anima Ekka		Academic Year: 2019-20
Course No.:		Course Name: Communicative English
Programe: Diploma		Branch: Math and Science Deptt.
Year/Sem: I / II		Section:D,E,F

Sl. No.	Period	Time (min)	Unit	Topic to be Covered	Teaching Method
1.	1.	55		Types of Reading Skills	
2.	2.	55		Methods of Reading	
3.	3.	55		Major hurdles in Reading	
4.	4.	55		Test of Reading Skill	
5.	5.	55		Note –Making and its importance	
6.	6.	55		Methods of Note-Making	
7.	7.	55		Test on Note-Making	
8.	8.	55		Summary Writing & its features	
9.	9.	55		Practice of Summary Writing	
10	10.	55		**Standing Up For Yourself** By Yevgeny Yevtushenk unit-I followed by discussion of questions	
11	11.	55		**Standing Up For Yourself** By Yevgeny Yevtushenk unit-II followed by discussion of questions	
12	12.	55		**Standing Up For Yourself** By Yevgeny Yevtushenk unit-III followed by discussion of questions	
13	13.	55		**Standing Up For Yourself** By Yevgeny Yevtushenk unit-IV followed by discussion of questions	
14	14.	55		**The Magic Of Teamwork** By Sam Pitroda unit-I followed by discussion of questions	
15	15.	55		**The Magic Of Teamwork** By Sam Pitroda unit-II followed by discussion of questions	
16	16.	55		**The Magic Of Teamwork** By Sam Pitroda unit-III followed by discussion of questions	
17	17.	55		**The Magic Of Teamwork** By Sam Pitroda unit-IV followed by discussion of questions	
18	18.			**Inchcape Rock** By Robert Southey Unit-I followed by discussion of questions	
19	19.	55		**Inchcape Rock** By Robert Southey Unit-II followed by discussion of questions	
20	20.			**Inchcape Rock** By Robert Southey Unit-III followed by discussion of questions	
21	21.			**To My True Friend** By Elizabeth Pinard Unit-I followed by discussion of questions	
22	22.	55		**To My True Friend** By Elizabeth Pinard Unit-II followed by discussion of questions	
23	23.	55		**To My True Friend** By Elizabeth Pinard Unit-III followed by discussion of questions	
24	24.	55		Use of synonyms, antonyms	

25	25.	55	2	Same word used in different situations in different meaning	
26	26.	55	2	Single word substitute	
27	27.	55	2	Countable and Uncountable Noun/Articles	
28	28.	55	2	Determiners	
29	29.	55	3	Modal Verbs	
30	30.	55	3	Tenses	
31	31.	55	3	Voice-change	
32	32.	55	3	Subject-verb Agreement	
33	33.	55	3	Practice Test on Grammar	
34	34.	55	3	Paragraph writing; Features of Paragraph Writing (Topic Statement, Supporting Points and Plot Compatibility	
35	35.	55	3	Developing Ideas into Paragraphs (Describing Place/ Person/ Object /Situation and any general topic of interest)	
36	36.	55	3	Notice writing	
37	37.	55	4	Agenda writing	
38	38.	55	4	Report writing (Format of a Report, Reporting an event / news)	
39	39.	55	4	Personal letter writing	
40	40.	55	4	Letter to the Principal, Librarian, Head of the Deptt, and Hostel Superintendent	
41	41.	55	4	Business letters writing Letter of Enquiry, Placing an Order, Execution of an Order, Complaint, Cancellation of an order(Features, Format and example	
42	42.	55	4	Job application and C.V.(Features, Format and example)	
43	43.	55	4	**A. Introduction to Communication** 1. Meaning, Definition and concept of communication 2. Good Communication and Bad Communication	
44	44.	55	4	3. Communication model • One-way Communication Model and Two-way Communication Model with examples	
45	45.	55	4	4. Process of communication and factors responsible for it • Sender, Message, Channel, Receiver / Audience, Feedback, Noise, Context	
46	46.	55	4	**B. Professional Communication** 1. Meaning of professional communication 2. Types of professional communication ; Down-ward communication (How it takes place, symbol, merits and demerits) Parallel communication (How it takes place, symbol, merits and demerits)	
47	47.	55	4	Informal communication	

				• Grape vine communication (How it takes place, symbol, merits and demerits	
48	48.	55	4	**Non- Verbal Communication** 1. Meaning of nonverbal Communication	
49	49.	55	5	2. Different areas of Non-verbal Communication • Kinesics or Body Language (Postures and Gestures, Facial Expression and Eye Contact)	
50	50.	55		• Proxemics or Spatial Language (Private Space, Personal Space, Social Space, Public Space)	
51	51.	55		• Language of Signs and Symbols(Audio Sign and Visual Sign in everyday life with merits and demerits	
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	LESSON PLAN
	JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA
Name of the Faculty: BABITA PADHI	Academic Year: 2019-20
Course Code.: Th.2a.	Course Name: Engineering Physics
Program: Diploma first year	Branch: Civil, Mechanical & Electrical, ETC,IT
Year/Semester: Ist & IInd sem	Section: A,B,C & D,E,F

Sl. No.	Period	Time (min)	Unit	Topic to be Covered	Teaching Method
1.	1.	55	1	Physical quantities definition and concept, fundamental & derived units, systems of units.	Chalkboard
2.	2.	55		Definition of dimension and dimensional formulae of physical quantities, principle of homogeneity.	Chalkboard
3.	3.	55		Dimensional equations and Principle of homogeneity. Checking the dimensional correctness of Physical relations.	Chalkboard
4.	4.	55	2	Scalar and Vector quantities, Representation of vectors types of vectors.	Chalkboard
5.	5.	55		Triangle and Parallelogram law of vector Addition Resolution of Vectors.	Chalkboard
6.	6.	55		Simple Numerical on Horizontal and Vertical components, Scalar and vector product of vectors, properties.	Chalkboard
7.	7.	55	3	Concept of Rest and Motion, Displacement, Speed, Velocity, Acceleration.	Chalkboard
8.	8.	55		Force, numerical Equations of Motion under Gravity	Chalkboard
9.	9.	55		Angular displacement, Angular velocity and Angular acceleration. Relation between –Linear & Angular velocity, Linear & Angular acceleration.	Chalkboard
10	10.	55		Projectile, Equation of Trajectory, Time of Flight, Maximum Height.	Chalkboard
11	11.	55		Horizontal Range for a projectile fired at an angle, Condition for maximum Horizontal Range.	Chalkboard
12	12.	55	4	Work – Definition, Formula & SI units, Friction – Definition & Concept.	Chalkboard
13	13.	55		Types of friction- Static, dynamic, Limiting Friction.	Chalkboard
14	14.	55		Laws of Limiting Friction, Coefficient of Friction – Definition & Formula.	Chalkboard
15	15.	55		Simple Numerical, Methods to reduce friction.	Chalkboard
16	16.	55	5	Newton's Laws of Gravitation – Statement	Chalkboard
17	17.	55		Gravitational Constant (G)- Definition, Unit and Dimension. Acceleration due to gravity (g).	Chalkboard
18	18.	55		Class Test up to 4th unit	Chalkboard
19	19.	55		Definition of mass and weight, Relation between g and G. Variation of g with altitude and depth.	Chalkboard
20	20.	55		Kepler's Laws of Planetary Motion.	Chalkboard
21	21.	55	6	Simple Harmonic Motion (SHM) - Definition & Examples.	Chalkboard

22	22.	55		Expression for displacement, velocity, acceleration of a body/ particle in SHM.	Chalkboard
23	23.	55		Wave motion – Definition & Concept. Transverse and Longitudinal wave motion – Definition, Examples & Comparison.	Chalkboard
24	24.	55		Definition of different wave parameters (Amplitude, Wavelength, Frequency, Time Period. Derivation of Relation between Velocity, Frequency and Wavelength of a wave.	Chalkboard
25	25.	55		Applications of Ultrasonic as assignment and revision of previous topic.	Chalkboard
26	26.	55	7	Heat and Temperature – Definition & Difference Units of Heat, Specific Heat (concept, definition, unit, dimension and simple numerical).	Chalkboard
27	27.	55		Thermal Expansion – Definition & Concept, Expansion of Solids.	Chalkboard
28	28.	55		Coefficient of linear, superficial and cubical expansions of Solids – Definition & Units, Relation between α, β & γ	Chalkboard
29	29.	55		Change of state and latent heat and simple numerical.	Chalkboard
30	30.	55		Work and Heat - Concept & Relation, Joule's Mechanical Equivalent of Heat (Definition, Unit)	Chalkboard
31	31.	55		First Law of Thermodynamics.	Chalkboard
32	32.	55	8	Smart class regarding Optics.	Smart TV
33	33.	55		Reflection & Refraction – Definition, Laws of reflection and refraction, Refractive index – Definition, Formula &Simple numerical (Ray Diagram) & formula.	Chalkboard
34	34.	55		Critical Angle and Total internal reflection – Concept, Refraction through Prism.	Chalkboard
35	35.	55		Fibre Optics – Definition, Properties & Applications. Doubt clear.	Chalkboard
36	36.	55	9	Electrostatics – Definition & Concept, Statement & Explanation of Coulombs laws,	Chalkboard
37	37.	55		Definition of Unit charge, Absolute & Relative Permittivity (ε).	Chalkboard
38	38.	55		Electric potential and Electric Potential difference ,Electric field, Electric field intensity (E) , Capacitance concept.	Chalkboard
39	39.	55		Series and Parallel combination of Capacitors, Formula for effective capacitance & Simple numerical)	Chalkboard
40	40.	55		Magnet, Properties of a magnet. Coulomb's Laws in Magnetism – Statement & Explanation, Unit Pole.	Chalkboard
41	41.	55		Magnetic field, Magnetic Field intensity (H) - Magnetic lines of force (Definition and Properties)Magnetic Flux (Φ) & Magnetic Flux Density (B) concept.	Chalkboard
42	42.	55	10	Electric Current – Definition, Formula & SI Units. Ohm's law, and its applications.	Chalkboard
43	43.	55		Concept of resistance,	Chalkboard

				Series and Parallel combination of resistors.	
44	44.	55		Kirchhoff's laws, and recalling of previous class concept.	Chalkboard
45	45.	55		Application of Kirchhoff's laws to Wheatstone bridge - Balanced condition of Wheatstone's Bridge – Condition of Balance.	Chalkboard
46	46.	55	11	Electromagnetism – Definition & Concept.	Chalkboard
47	47.	55		Force acting on a current carrying conductor placed in a uniform magnetic field.	Chalkboard
48	48.	55		Faraday's Laws of Electromagnetic Induction, Lenz's Law	Chalkboard
49	49.	55		Fleming's Left Hand Rule, Fleming's Right Hand Rule 11.6 Comparison between Fleming's Right Hand Rule and Fleming's Left Hand Rule.	Chalkboard
50	50.	55	12	LASER & laser beam (Concept and Definition),Principle of LASER (Population Inversion & Optical Pumping) Properties & Applications of LASER	Chalkboard
51	51.	55		Wireless Transmission – Ground Waves, Sky Waves, Space Waves (Concept & Definition)	Chalkboard
52	52.	55		Doubt class and discussing previous year question paper.	Chalkboard
53	53.	55		Doubt class and discussing previous year question paper.	Chalkboard
54	54.			Revision of unit-1&2	Chalkboard
55	55.			Revision of unit-4&5	Chalkboard
56	56.			Revision of unit-6&7	Chalkboard
57	57.			Revision of unit-8&9	Chalkboard
58	58.			Revision of unit-10,11&12	Chalkboard
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			LAB LESSON PLAN	
			JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA	
Name of the Faculty: Jagannath Oram			Academic Year: 2019-20	
Course No.: Pr 2(a)			Course Name: Engineering Chemistry practical	
Programe: Diploma			Branch: Electrical, ETC/IT, Civil, Mech.	
Year/Sem: I & II			Section: A, B, C, D, E, F	

Sl. No.	Week	Time (min)	Experiments to be performed	Teaching method
1.	1st/Sept	110	Introduction and some basic knowledge about chemistry laboratory	Chalkboard/ white board
2.	2nd /Sept	110	Demonstration on Preparation and study of physical and chemical properties CO2 gas. Conduction of Experiment on Preparation and study of physical and chemical properties CO2 gas.	Chalkboard/ white board
3.	3rd/ Sept	110	Demonstration on Preparation and study of physical and chemical properties NH3 gas. Conduction of Experiment on Preparation and study of physical and chemical properties NH3 gas.	Chalkboard/ white board
4.	4th/Sept	110	Demonstration on Crystallization of Copper sulphate from copper carbonate. Conduction of Experiment on Crystallization of Copper sulphate from copper carbonate.	Chalkboard/ white board
5.	1st/Oct	110	Demonstration on Simple acid-base titrations (i) Acidimetry. Conduction of Acidimetry titration.	Chalkboard/ white board
6.	2nd/Oct		Demonstration on Simple acid-base titrations (ii) Alkalimetry. Conduction of Alkalimetry titration	Chalkboard/ white board
7.	3rd/Oct	110	Demonstration and conduction of Tests for acid radicals (Known): Carbonate, Sulphide, Sulphate. Chloride, Nitrate	Chalkboard/ white board
8.	4th/Oct	110	Demonstration and Conduction of Test for Basic radicals (Known): (i) Ammonium, (ii) Zinc, (iii) Magnesium, (iv) Aluminium, (v) Calcium, (vi) Sodium and (vii) potassium	Chalkboard/ white board
9.	1st/Nov	110	Conduction of Test for unknown Acid radicals	Chalkboard/ white board
10.	2nd/Nov	110	Conduction of Test for unknown basic radicals	Chalkboard/ white board

JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA

Name of the Faculty: Anima Ekka	Academic Year: 2019-20
Course No.: Th-1(a)	Course Name: Communicative English(Theory)
Programe: Diploma	Branch: Civil,Mech./Elect.,ETC,IT .
Year/Sem: I / II	Section: A,B,C,D,E,F

Sl. No.	Period	Time (min)	Topic to be Covered	Teaching Method
1.	1.	55	Types of Reading Skills	Blackboard& chalk
2.	2.	55	Methods of Reading	Blackboard& chalk
3.	3.	55	Major hurdles in Reading	Blackboard& chalk
4.	4.	55	Test of Reading Skill	Blackboard& chalk
5.	5.	55	Note –Making and its importance	Blackboard& chalk
6.	6.	55	Methods of Note-Making	Blackboard& chalk
7.	7.	55	Test on Note-Making	
8.	8.	55	Summary Writing & its features	Blackboard& chalk
9.	9.	55	Practice of Summary Writing	
10	10.	55	**Standing Up For Yourself** By Yevgeny Yevtushenk unit-I followed by discussion of questions	Blackboard& chalk
11	11.	55	**Standing Up For Yourself** By Yevgeny Yevtushenk unit-II followed by discussion of questions	Blackboard& chalk
12	12.	55	**Standing Up For Yourself** By Yevgeny Yevtushenk unit-III followed by discussion of questions	Blackboard& chalk
13	13.	55	**Standing Up For Yourself** By Yevgeny Yevtushenk unit-IV followed by discussion of questions	Blackboard& chalk
14	14.	55	**The Magic Of Teamwork** By Sam Pitroda unit-I followed by discussion of questions	Blackboard& chalk
15	15.	55	**The Magic Of Teamwork** By Sam Pitroda unit-II followed by discussion of questions	Blackboard& chalk
16	16.	55	**The Magic Of Teamwork** By Sam Pitroda unit-III followed by discussion of questions	Blackboard& chalk
17	17.	55	**The Magic Of Teamwork** By Sam Pitroda unit-IV followed by discussion of questions	Blackboard& chalk
18	18.		**Inchcape Rock** By Robert Southey Unit-I followed by discussion of questions	Blackboard& chalk
19	19.	55	**Inchcape Rock** By Robert Southey Unit-II followed by discussion of questions	Blackboard& chalk
20	20.		**Inchcape Rock** By Robert Southey Unit-III followed by discussion of questions	Blackboard& chalk
21	21.		**To My True Friend** By Elizabeth Pinard Unit-I followed by discussion of questions	Blackboard& chalk

22	22.	55	**To My True Friend** By Elizabeth Pinard Unit-II followed by discussion of questions	Blackboard& chalk
23	23.	55	**To My True Friend** By Elizabeth Pinard Unit-III followed by discussion of questions	Blackboard& chalk
24	24.	55	Use of synonyms, antonyms	Blackboard& chalk
25	25.	55	Same word used in different situations in different meaning	Blackboard& chalk
26	26.	55	Single word substitute	Blackboard& chalk
27	27.	55	Countable and Uncountable Noun/Articles	Blackboard& chalk
28	28.	55	Determiners	Blackboard& chalk
29	29.	55	Modal Verbs	Blackboard& chalk
30	30.	55	Tenses	Blackboard& chalk
31	31.	55	Voice-change	Blackboard& chalk
32	32.	55	Subject-verb Agreement	Blackboard& chalk
33	33.	55	Practice Test on Grammar	Blackboard& chalk
34	34.	55	Paragraph writing; Features of Paragraph Writing (Topic Statement, Supporting Points and Plot Compatibility	Blackboard& chalk
35	35.	55	Developing Ideas into Paragraphs (Describing Place/ Person/ Object /Situation and any general topic of interest	Blackboard& chalk
36	36.	55	Notice writing	Blackboard& chalk
37	37.	55	Agenda writing	Blackboard& chalk
38	38.	55	Report writing (Format of a Report, Reporting an event / news)	Blackboard& chalk
39	39.	55	Personal letter writing	Blackboard& chalk
40	40.	55	Letter to the Principal, Librarian, Head of the Deptt, and Hostel Superintendent	Blackboard& chalk
41	41.	55	Business letters writing Letter of Enquiry, Placing an Order, Execution of an Order, Complaint, Cancellation of an order(Features, Format and example	Blackboard& chalk
42	42.	55	Job application and C.V.(Features, Format and example)	Blackboard& chalk
43	43.	55	**A. Introduction to Communication** 1. Meaning, Definition and concept of communication 2. Good Communication and Bad Communication	Blackboard& chalk
44	44.	55	3. Communication model • One-way Communication Model and Two-way	Blackboard& chalk

			Communication Model with examples	
45	45.	55	4. Process of communication and factors responsible for it • Sender, Message, Channel, Receiver / Audience, Feedback, Noise, Context	Blackboard& chalk
46	46.	55	**B. Professional Communication** 1. Meaning of professional communication 2. Types of professional communication ; Down-ward communication (How it takes place, symbol, merits and demerits) Parallel communication (How it takes place, symbol, merits and demerits)	Blackboard& chalk
47	47.	55	Informal communication • Grape vine communication (How it takes place, symbol, merits and demerits	Blackboard& chalk
48	48.	55	**D. Non- Verbal Communication** 1. Meaning of nonverbal Communication	Blackboard& chalk
49	49.	55	2. Different areas of Non-verbal Communication • Kinesics or Body Language (Postures and Gestures, Facial Expression and Eye Contact)	
50	50.	55	• Proxemics or Spatial Language (Private Space, Personal Space, Social Space, Public Space)	
51	51.	55	• Language of Signs and Symbols(Audio Sign and Visual Sign in everyday life with merits and demerits	Blackboard& chalk
52	52.	55	Revision classes	
53	53.	55	Revision classes	
54	54.	55	Revision classes	
55	55.	55	Revision classes	
56	56.	55	Revision classes	
57	57.	55	Doubt clearing classes	
58	58.	55	Doubt clearing classes	
59	59.	55	Solving of previous years' question papers	
60	60.	55	Solving of previous years' question papers	

	LESSON PLAN	
	JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA	
Name of the Faculty: Anima Ekka		Academic Year: 2019-20
Course No.: Pr-1(a)		Course Name: Communicative English(Practical)
Programe: Diploma		Branch: Civil,Mech./Elect.,ETC,IT .
Year/Sem: I / II		Section: A,B,C,D,E,F

Sl. No.	Period	Time (min)	Topic to be Covered	Children's Activity
1	1,2	110	**Listening to a text piece**	**After listening the student will fill-in-blanks, question &answer from the text read aloud**
2	3,4	110	**Listening to a text piece**	**After listening the student will fill-in-blanks, question &answer from the text read aloud**
3	5,6	110	**Listening to a text piece**	**After listening the student will fill-in-blanks, question &answer from the text read aloud**
4	7,8	110	**Listening to a text piece**	**After listening the student will fill-in-blanks, question &answer from the text read aloud**
5	9,10	110	**Listening to a text piece**	**After listening the student will fill-in-blanks, question &answer from the text read aloud**
6	11,12	110	**Reading of text**	**Student will read the text aloud**
7	13,14	110	**Reading of poem**	**Student will recite the poem aloud**
8	15,16	110	**Reading of papers in seminar**	**Student will read the paper aloud**
9	17,18	110	**Speech delivery on environmental issues**	**Student will deliver the speech**
10	19,20	110	**Speech delivery on topic of your interest**	**Student will deliver the speech**
11	21,22	110	**Welcome Speech**	**Student will deliver the speech**
12	23,24	110	**Vote of Thanks**	**Student will deliver the speech**
13	25,26	110	**Group Discussion on the given topic**	**Students will participate in a discussion on a given topic**

14	27,28	110	**Role Play-I**	**Student will deliver dialogues with proper intonation**
15	29,30	110	**Role Play-II**	**Student will deliver dialogues with proper intonation**
16	31,32	110	**Telephonic Conversation-I**	**Student will deliver dialogues with proper intonation**
17	33,34	110	**Telephonic Conversation-II**	**Student will deliver dialogues with proper intonation**
18	35,36	110	**Personality Development**	**Students participate in icebreaker activities**
19	37,38	110	**Personality Development-Physical appearance**	**Students dress up formally taking care of hair style &footwear**
20	39,40	110	**Personality Development-Body Language**	**Students will practice correct body language**
21	41,42	110	**Personality Development-Proxemics**	**Students will engage in conversation/discussion by maintaining proper spatial arrangement.**
22	43,44	110	**Personality Development- Audience Purpose**	**Students will face the audience by giving presentation**
23	45,46	110	**Interpersonal skill-GDs**	**Students will participate in a discussion on a given topic**
24	47,48	110	**Interpersonal skill-Seminars**	**Students will give presentation on technical topics**
25	49,50	110	**Interpersonal skill-Interview**	**Students will face mock interview**
26	51,52	110	**Practice Session**	**Students will practice giving presentations, speech, etc**
27	53,54	110	**Practice Session**	**-do-**
28	55,56	110	**Practice Session**	**-do-**
29	57,58	110	**Practice Session**	**-do-**
30	59,60	110	**Practice Session**	**-do-**

LAB LESSON PLAN
JHARSUGUDA ENGINEERING SCHOOL,JHARSUGUDA

Name of the Faculty: Babita Padhi	Academic Year: 2019-20
Course No.: Pr 2(a)	Course Name: Engineering Physic practical
Programe: Diploma	Branch: Civil, Mech.& Elect., ETC, IT
Year/Sem: I & II	Section: A, B, C, D, E, F

Sl. No.	Week	Time (min)	Experiments to be performed	Teaching method
1.	1st/Sept	110	Introduction and demonstration on length measuring instrument slide caliper. Conducting slide caliper experiment for finding the volume of cylinder (solid, hollow).	Chalkboard/ white board
2.	2nd /Sept	110	Demonstration on screw gauge for the measurement of length, radius, thickness. Conducting screw gauge experiment for finding the area of cross section of a wire/plane lamina.	Chalkboard/ white board
3.	3rd/ Sept	110	Demonstration on spherometer for the measurement of radius of curvature. Conducting spherometer experiment for finding the radius of curvature of a given spherical surface(convex, concave).	Chalkboard/ white board
4.	4th/Sept	110	Demonstration on prism for finding the angle of prism. Conducting prism experiments.	Drawing board
5.	1st/Oct	110	Demonstration on finding angle of deviation. Plotting of ID curve and finding refractive index.	Drawing board
6.	2nd/Oct		Puja Holiday.	
7.	3rd/Oct	110	Demonstration on tracing of the magnetic lines of force. Conducting magnet experiment for tracing the magnetic lines of force for a bar magnet.	Drawing board
8.	4th/Oct	110	Demonstration on pendulum for finding acceleration due to gravity. Conducting pendulum experiments for finding "g" using simple pendulum and plotting l-t^2 graph.	Chalkboard/ white board
9.	1st/Nov	110	Demonstration on verifying Ohm's law to find the resistance of a wire. Conducting experiment on verifying ohm's law by Ammeter- Voltmeter method	Chalkboard/ white board
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