



TRADE MARK

LIONTM

Teacher's Lesson Note

ENGG CHEMISTRY

ELECTRICAL ENGINEER

S.S.I.T POLYTECHNIC
2nd SEMESTER

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
1	2	3	4	5	6	7	8
11-06-24	02		Physics-chemis-try	Introduction of chemistry	Introduction about chemistry	Learning about the syllabus Physical chemistry inorganic chemistry. Industrial chemistry.	
12-06-24	02		Atomic structure	Atomic structure	Fundamental particles	Definition of electron, proton, neutron and its mass and charge.	
13-06-24	03		"	Rutherford's experiments and failure	Rutherford's experiments and failure	Details explanation of Rutherford's failure.	
14-06-24	04		"	Atomic structure, mass, and failure	Atomic structure, mass, and failure	Definition of atomic mass, atomic number and properties.	

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
What is the chemistry?	Types of science Physical science Chemical science Physics, chemistry, Biology.		12/06/24	13/06/24	
What are the fundamental particles?	Physical chemistry inorganic chemistry organic chemistry Industrial chemistry.		12/06/24	13/06/24	
Write down the any two brand books of other fields-atomic model.	Details explanation of fundamental particles, such as electron, proton, neutron, Rutherford's experiment, Bohr's model, Bohr's model.		12/06/24	13/06/24	

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
Postulates any Bohr's binary scheme. Aufbau's principle Write down the Hund's Rule → what is isotopes?	It fails explanation of Bohr's Atomic model. 1 can't explain of orbit-or orbital Bohr binary scheme Aufbau's principle Hund's Rule. electronic configuration (upto 30 atomic no.). Isotopes are the atoms of the elements having the same no of neutron.		12/02/24 12/02/24 12/02/24	12/02/24 12/02/24 12/02/24	

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
15-03-2022	11	11	Chemistry	Chemical Bonding	Types of Bond	Concept of chemical bond and types of chemical bond and of defining	
15-03-2022	11	11	Chemistry	Chemical Bonding	Types of Bond	Characteristics of covalent bond, ionic bond, coordinate bond, native bond.	
15-03-2022	11	11	Chemistry	Chemical Bonding	Types of Bond	Angular momentum number multiply or $\frac{h}{2\pi}$, that is definition of minimal area of flux loop. General method of extraction of metal.	
15-03-2022	11	11	Chemistry	Chemical Bonding	Types of Bond	Dressing Dressing can contain calcium, roofing, melting, refining of ore.	

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
What do mean by chemical bond?	Electrovalent bond covalent bond coordinate bond with examples.		<i>[Signature]</i> 13/03/24	<i>[Signature]</i> 13-03-24	
Write down the characteristics of coordinate bond and covalent bond.	Formation of NaCl, MgCl ₂ , H ₂ , O ₂ .		<i>[Signature]</i> 13/03/24	<i>[Signature]</i> 13-03-24	
What is angular momentum?	Angular momentum $\propto \frac{h}{2\pi}$, that is $n \times \frac{h}{2\pi}$, where $n = 1, 2, 3, \dots$		<i>[Signature]</i> 13/03/24	<i>[Signature]</i> 13-03-24	
What is the dressing?	ore dressing can contain magnetic separation for the extraction of lead.		<i>[Signature]</i> 13/03/24	<i>[Signature]</i> 13-03-24	

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
14-03-24	1	2	3	4	5	6	7
15-03-24	2	3	4	5	6	7	8
19-03-24	3	4	5	6	7	8	
20-03-24	4	5	6	7	8		

All oys

Definition of alloy

Definition of alloy, composition and uses of Brass, Bronze, Amice, Buraluminy.

non-ferrous alloy

The alloy which does not contain iron as its main constituent

Analogous

Alloys contain necessary as one of the constituents is called alloys

composition

it is used in making various jewelry medical instrument types of alloys

Evaluative Questions

9

Expected learning outcome

10

Project work to be assigned

11

Signature of the Teacher

12

Signature of the Headmaster

13

Remarks

14

Write down the alloy, composition and uses of Brass, Bronze.

Definition of alloy, Types of alloys, (ferrous, non ferrous and Amalgam) with example, composition and uses of Brass, Bronze, Amice, Buraluminy.

What is analogous?

Analogous contains necessary as one of the constituents is called alloys

14/03/24

14-03-24

15/03/24

15-03-24

19/03/24

19-03-24

20/03/24

20-03-24

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
21-03-24	01		organic chemistry	hydrocarbon	introduction of hydrocarbon	Learning about the hydrocarbon, details analysis and explanation.	
22-03-24	02		hydrocarbon	classification of hydrocarbon	Saturated and unsaturated hydrocarbon.		
23-03-24	03		hydrocarbon	Alcohol	Alcohol are obtained by replacing one H atom of alkane.		
25-03-24	04		Classes of compounds	Types of compounds	There are the saturated hydrocarbon in which the carbon are linked by single bonds (C-C) they are also called paraffins.		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	What do you mean hydrocarbon	classification of hydrocarbon	21/03/24	21-03-24	
10	What is Assignment? Determine the equivalent weights as the following acids bases and salts		22/03/24	22-03-24	
	How many classes of compounds?	There are 5 types of Alkanes, Alkenes, Alkynes, Aldehydes, Ketones, Alcohols	23/03/24	23-03-24	

TEACHING

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
28-03-2025	1	2	3	4	5	6	7
4-04-2025	1	2	3	4	5	6	7
5-04-2025	1	2	3	4	5	6	7
Water treatment				Water hardness	Types of hardness	Learning Activities to be taken up	TLM to be used
				Underground water	Types of water	Learning Activities to be taken up	TLM to be used
				Surface water	Types of water	Learning Activities to be taken up	TLM to be used

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
What is water?	Water is one of the most plentiful and readily available of all chemical substances called water.		28/03/25	28-03-25	
How many types of water?	Two types of water (i) Soft water (ii) Hard water.		30/03/25	04-04-25	
How many types of hardness water?	Hardness water are two types (i) Temporary hardness (ii) Permanent hardness		05/04/25	05-04-25	

TEACHING

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
12-04-24	2	3	4	Removal of permanent hardness	lime soda process	In this process hard water is treated with a calculated quantity of lime and soda.	
13-04-24	10			Hot lime soda process		This process involves treatment of hard water with lime and soda at a temp. of 80-100°C.	
15-04-24	10			Organic ion-exchange resins (anion exchange resins)		In this method the ion-exchangeable for hardness are exchanged with other ions which don't make water hard.	

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9 What types of lime soda?	10 Lime soda are two types. ① Cold lime soda process. ② Hot lime soda process.	11	12 Seen 12-04-24	13 Seen 13-04-24	14 Seen 15-04-24
10 How many types of ion-exchange resins?	11 Ion-exchange resins are of two types. ① Cation-exchange resins (R-H) ② Anion-exchange resins.	12	13 Seen 15-04-24	14	

HEADERS

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
12-04-24	2	3	4	5	6	7	8
12-04-24				Removal of permanent hardness	lime soda process	In this process hard water is treated with a calculated quantity of lime and soda.	
13-04-24	09				Hot lime soda process	This process involves treatment of hard water with lime and soda at a temp. of 80-150°C.	
15-04-24	10			Organic ion-exchange resins (anion-exchange resins)		In this method the ion-exchange resins are exchanged with other ions which don't make water hard.	

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
What types of lime soda?	Lime soda are two types. ① Cold lime soda process. ② Hot lime soda process.		Seen 12/04/24	Seen 12-04-24	
How many types of ion-exchange resins?	Ion-exchange resins are of two types. ① Cation-exchange resins (R-H) ② Anion-exchange resins.		Seen 13/04/24	Seen 13-04-24	
			Seen 15-04-24	Seen 15-04-24	

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
1	2	3	4	5	6	7	8
16-04-2021				Fuel	Introduction of Fuel	Fuel is any material that can be made to react with other substances so that it releases energy.	
16-04-2021				Calorific value of fuel	Characteristics of good fuel	petrol or gasoline it contains a mixture of hydrocarbons between petrol & kerosene	
16-04-2021				Composition of some good fuel		For household use mainly found in steel and glass manufacture	

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
Definition of Fuel?	Fuel is defined as a combustible substance which on combustion produces a large amount of heat energy with out producing out		16/04/21	16-04-21	
Uses of petrol gasoline?	It is used as a fuel for internal combustion engines or automobile		18/04/21	18-04-21	
			22/04/21	22-04-21	

LEARNING ACTIVITY

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
26-04-24	05			Polymer	Introduction of polymer materials that are used in almost every material.	It is tough, flexible, transparent, chemically inert as well as poor conductor of electricity.	
26-04-24	06			Rubbers	Draws balls of natural rubber	Vulcanization of natural rubber is a thermoplastic.	

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9 How many types of polymer?	10 Two types of polymers. (i) homo-polymers (ii) copolymers.	11	24/04/24	25-04-24	
What is an polythene?	12 polythene is a poor conductor of electricity it has moderate tensile strength but good tearing strength.	13	26-04-24	26-04-24	
14 Vulcanization of natural rubber?	The chemical process in which natural rubber is heated with 1 to 6% sulphur containing compounds and accelerators or natural rubbers are called vulcanization.	15			

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
29-04-24	07			Chemicals or agricultural pesticides	pesticides are chemical compounds that are used to kill pests including insects, rodents, fungi and unwanted plants.		
29-04-24				Fungicides		Fungicides are pesticides that prevent, kill mitigate, or inhibit the growth of fungi on plants.	

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9 How many types of pesticides are there?	10 There are three types → insecticides → herbicides → Fungicides	11	29/04/24	29-04-24	
What is Fungicide?	Fungicides are pesticides that prevent, kill mitigate or inhibit the growth of fungi on plants.	11	29/04/24	30-04-24	