



ST.ANN'S COLLEGE FOR WOMEN

(Affiliated to Acharya Nagarjuna University,
Recognised under 2(f) UGC Act 1956, New Delhi)
GORANTLA, GUNTUR – 522034, A. P

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Criteria: I

Metric: 1.1.1



Criterion –I

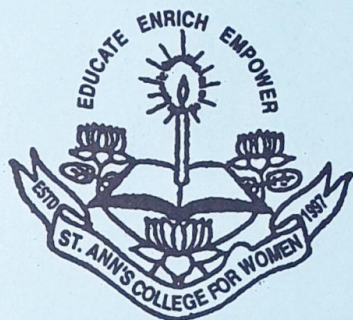
1.1.1 Curriculum Planning and Implementation

TEACHING LESSON PLANS

2018-2019 TO 2022-2023

St. Ann's College for Women

GORANTLA - GUNTUR



LESSON PLAN

2022 - 2023

Name of the Lecturer.....K. VANAJA.....

Department.....BIOTECHNOLOGY.....

LESSON PLAN

Name of the Lecturer: K. VANAJA

Name of the Department: Biotechnology

Class: III - BBC

Subject: Apiculture

Name of the Topic: Modern methods of extraction of Honey

Hours required:

Learning Objectives: Modern methods were developed to overcome the drawbacks of indigenous methods

* In this method first of all work is done to improve the texture of the hive

* The Newton model & Langstroth hive are used

Previous knowledge to be reminded:

Honey Extraction process

Topic Synopsis:

* The common appliances for modern methods for beekeeping include :- Typical movable hive

* Queen excluder

* Honey extractor

* uncapping knife

* other equipment

* It is an artificial movable hive which is made by wooden box based on bee space theory

* This typical movable hive contains 6 parts

* Stand

* Bottom board

* Brood chamber

* Supper

* Inner cover

* Top cover

LESSON PLAN

Name of the teacher: K. V. Narayana
Name of the Department: B.Sc. Agriculture
Topic: Honey Bee

Additional Inputs

Teaching Aids used

- * Blackboard
- * PPT Presentation

References cited

- * Mishra R.C. - Honey bee and their management
- * Singh - Beekeeping in India

Student Activity planned after teaching

- * Preparation of Honey Bee trays & maintenance

Activity planned outside the Class Room, if any

Any other activity



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K. Narayana
Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: K. VANAJA Name of the Department: Biotechnology

Class: III - BBC Subject: Pearl Culture

Name of the Topic: Artificial Production of Pearls

Hours required: 10

Learning Objectives: * Culture of Pearl is complex but sensitive.

i. Collection of oysters

ii. Preparation of Graft tissue

iii. Preparation of Nucleus

iv. Implantation

v. Rearing of oysters

vi. Harvesting

Previous knowledge to be reminded:

cultivation of pearl production

Topic Synopsis: * The culture of Pearl is a complex but sensitive process. It involves the following steps:-

i. Collection of oysters

ii. Preparation of Graft tissue

iii. Preparation of Nucleus

iv. Implantation

v. Rearing of oysters

vi. Harvesting

Fresh water Pearl culture:- These are produced in China, Japan and United States. * Pinctada anomnioides
* Pinctada vulgaris etc.

Marine water Pearl culture:- These oysters only produce one Pearl and that takes about 2 years:- * Pinctada fucata
* Pinctada chemnitzii

Additional Inputs

Teaching Aids used

* Black chart

* Ppt presentation

References cited

* Bardach - Aquaculture farming and husbandry.

Student Activity planned after teaching

* Culture of microorganism for pond maintenance.

Activity planned outside the Class Room, if any

Collection of pearl oysters

Any other activity



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K. V. Vasu
Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: K. VANAJA Name of the Department: Biotechnology
Class: III-BBC Subject: Pearl Culture

Name of the Topic: Chemical composition & natural process of Pearl formation

Hours required:

Learning Objectives: * Chemical composition of Pearl is:-

82-86% - CaCO_3

10-14% - Conchiolin &

2-4% - water.

* Conchiolin & CaCO_3 are referred to as
Nacre.

Previous knowledge to be reminded:

chemical composition of pearl

Topic Synopsis: * The chemical composition of Pearl is:-

82-86% - CaCO_3

10-14% - Conchiolin &

2-4% - water

* Together the Conchiolin & CaCO_3 are referred to as the
Nacre.

* The natural Pearl oysters produce natural pearl as an
adaptation against foreign materials.

* Foreign substance, for example a grain of sand (or)
small insect must enter the shell of molluscs.

* The Mollusc begin to secrete Nacre against a grain
of sand result in a smooth surface is obtained. This
is called pearl, this pearl become a large pearl.

* The pearl is the result of self-defense of the Oyster.

Additional Inputs

Teaching Aids used

- * Blackboard
- * Chart

References cited

- * Haus Maria - Basics of Pearl farming.
- * Alexander E. Farn - Pearls

Student Activity planned after teaching

- * Graft tissue preparation
- * Implantation techniques.

Activity planned outside the Class Room, if any

collection of pearl oyster -

Any other activity



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K. Vanaja
Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: K. VANAJA Name of the Department: Biotechnology

Class: II - BBC Subject: Immunology & r-DNA

Name of the Topic : Bioinformatics, Database - Nucleotide & Protein

Hours required :

Learning Objectives : Definition

- * data bases :- DNA sequence database
- Protein sequence databases
- RNA sequence database

Previous knowledge to be reminded :

- * Bio - meaning living
- * Informatics meaning information science
- * DNA, RNA & protein structures.

Topic Synopsis : * Bioinformatics is information technology dealing with the maintenance and use of data in Molecular Biology using computers.

* Bioinformatics involves the collection, maintenance, distribution, analyse and usage of the large amount of data generated in Molecular Biology for Biological investigations.

* BLAST, FASTA are used to analyze the DNA Sequence.

* PIR, Swiss prot are used to analyse the Protein sequence.

Sequence Analysis.

Additional Inputs

visit different web sit - biological data site

Teaching Aids used

- * Black board
- * Internet
- * Biotechnology - V. Kumarasen

References cited

- * Biotechnology - V. Kumarasen

Student Activity planned after teaching

- * Collection of database.
- * Observation of different databases.

Activity planned outside the Class Room, if any

Any other activity



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V. Vanaja
Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: K. VANAJA Name of the Department: Biotechnology
Class: I-BBC Subject: Biomolecules & Analytical

Name of the Topic : Biological role of vitamins, Bioenergetics

Hours required :

Learning Objectives : Biological role and deficiency manifestation of vitamin A, B, C, D and K.

* Study of energy.

Previous knowledge to be reminded : * Minerals & vitamins are essential nutrients - because acting in convert.

* Study of energy in living system .

* Energy is a capacity (&) ability to do work.

Topic Synopsis : * vitamins may be regarded as organic compounds required in the diet in small amount to perform specific biological functions for normal maintenance of growth and health of the organisms.

* Funk coined the term vitamin in 1913.

* They are classified into:
1. Fat soluble (A, D, E, K)
2. Water soluble (C & B group)

* Bioenergetics are related to initial & final state of energy of reactions.

* Entropy - order of randomness that is higher than the molecules than higher the entropy.

* Enthalpy :- It is the heat content of the reacting system. An enthalpy changes.

Different Natural Source of vitamins

Additional Inputs

Awareness program on vitamins

Teaching Aids used

- *Black board
- *ppt presentation

References cited

*BioChemistry - U. Sathyanarayanan

Student Activity planned after teaching

*preparation of Vitamins chart.

Activity planned outside the Class Room, if any

* Multivitamin tables.
able to list & explain vitamins essential to the health functioning of the human body.

Any other activity

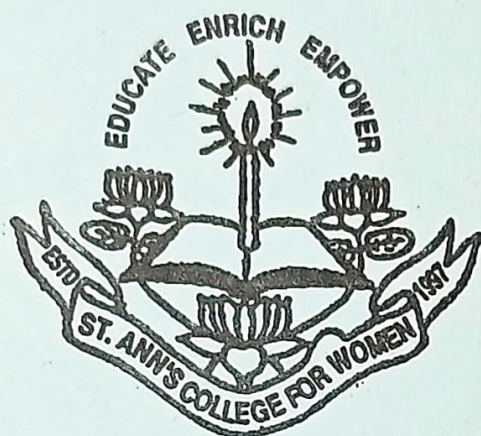


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K. V. Rao
Signature of the Lecturer

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LESSON PLAN

20 21 - 20 22

Name of the Lecturer.....*Ch. Rama Rao*.....

Department.....*Physics*.....

LESSON PLAN

Name of the Lecturer: Ch. Rama Rao Name of the Department: physics

Class: III B.Sc. Subject: V

Name of the Topic : Electromagnetic Induction Introduction

Hours required : 3h

Learning Objectives :

* Concept of Faraday's law

* Lenz's law

* Self Inductance and mutual Inductance.

* self Inductance of a long solenoid.

Previous knowledge to be reminded :

Intermediate syllabus

Topic Synopsis :

$$\mathcal{E} = - \left(\frac{d\Phi_B}{dt} \right)$$

Lenz's law: The direction of induced emf in a closed circuit is such that it opposes the original cause that produced it.

$$i = -\frac{1}{R} \left(\frac{d\Phi_B}{dt} \right)$$

$$\text{Magnetic flux } \oint \mathbf{E} \cdot d\mathbf{l} = -\frac{d}{dt} \int \mathbf{B} \cdot d\mathbf{s}$$

$$\text{curl } \mathbf{E} = - \left(\frac{\partial \mathbf{B}}{\partial t} \right)$$

$$\mathcal{E} = -B \cdot l \cdot v \quad (\text{Induced emf})$$

Self Inductance of a solenoid is

$$L = \mu_0 n^2 A l$$

Examples / Illustrations

Spark is observed in electrical switch
is on (or) off quickly

Additional Inputs

notes

Teaching Aids used

Black - Board

References cited

unified text book.

Student Activity planned after teaching

Students are asked to practice the
Derivation

Activity planned outside the Class Room, if any

Students are asked to go through Intermediate
Syllabus.

Any other activity

MODERN PHYSICS.

LESSON PLAN

Name of the Lecturer: Ch. Rama Rao Name of the Department: physics

Class: III B.Sc Subject: VI

Name of the Topic : Atomic and molecular physics

Hours required : 3h

Learning Objectives :

- * Scattering of light
- * Raman effect
- * Raman shift
- * applications.

Previous knowledge to be reminded :

scattering concept in
intermediate syllabus.

Topic Synopsis :

Raman effect:

when light incident on solid (or)
liquid (or) gas it is scattered. The scattered
light consists of greater frequency lines
and lesser frequency lines is called
Raman effect.

* greater frequency lines are called
anti-stokes lines

* lesser freq. lines are called
Stokes lines.

Examples / Illustrations

- * Raman effect is pure molecular phenomenon
- * To study the structure of molecules -
- * To study the single, double and triple bonds etc.

Additional Inputs

notes

Teaching Aids used

Black - Board

References cited

unified text book

Student Activity planned after teaching

students are asked questions on the topic.

Activity planned outside the Class Room, if any

students are asked to practice the expt. study at home

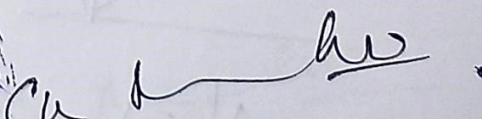
Any other activity



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Signature of the Lecturer

matter waves
LESSON PLAN

Name of the Lecturer: Ch. Rama Rao Name of the Department: Physics
Class: III B.Sc Subject: V.I

Name of the Topic : wave and particle duality of radiation

Hours required : 3h

Learning Objectives :

- * dual nature of radiation
- * de-Broglie theory, properties of matter
- * Davisson-Germer electron diffraction
expt. for wave nature supported.

Previous knowledge to be reminded :

Inter Syllabus

Topic Synopsis : de-Broglie wave length

$$\lambda = \frac{h}{mv} = \frac{h}{\sqrt{2mE}} = \frac{h}{\sqrt{2meV}} = \frac{12.26}{\sqrt{V}}$$

where h is Planck's constant = 6.62×10^{-34} J-sec.

* phase velocity, wave velocity

$$v_p = \frac{\omega}{k} = \frac{c^2}{v}$$

* Explanation of electron diffraction
experiment.

* The velocity of matter wave depend
on the velocity of matter particle.

* the velocity of matter wave is greater than the
velocity of light.

Additional Inputs

notes

Teaching Aids used

Black - Board

References cited

unified text book

Student Activity planned after teaching

practice derivation - de Broglie's relation
diffraction diagram.

Activity planned outside the Class Room, if any

Any other activity

Structure of Nucleus

LESSON PLAN

Name of the Lecturer: Ch. Rama Rao Name of the Department: physics

Class: III B.Sc Subject: VI

Name of the Topic : Introduction on nuclear physics.

Hours required : 3h properties of nucleus

Learning Objectives :

To study the structure of nucleus
and properties of nucleus.

* Binding Energy $E = \Delta m \cdot c^2$

Previous knowledge to be reminded :

Intermediate concepts.

Topic Synopsis :

* nuclear mass : $(Zm_p + Nm_n) - \mu_{\text{nucleus}}$

* nuclear radius $\propto A^{1/3}$

$r = r_0 A^{1/3}$

* nuclear charge

* nuclear spin, quantum states

* electric quadrupole moment.

* Scattering of α -particles; Rutherford concluded that the atom of any element consists of central core called nucleus.

Additional Inputs

note

Teaching Aids used

Black - Board.

References cited

unified text book

Student Activity planned after teaching

solve problems on nuclear radius and B.E

Activity planned outside the Class Room, if any

some more problems on the above topics

Any other activity

LESSON PLAN

Name of the Lecturer: Ch. Rama Rao Name of the Department: physics

Class: III B.Sc Subject: V.I

Name of the Topic : β -decay

Hours required : 2h

Learning Objectives :

* To study about neutrino hypothesis.

* Give explanation on β -decay.

* Fermi's theory of β -decay

Previous knowledge to be reminded :

syllabus covered in last class

Topic Synopsis :

According to Yukawa's theory

$$n \rightarrow p + \pi^- \rightarrow p + e^- + \bar{\nu}$$

where e^- is electron and $\bar{\nu}$ is antineutrino.

neutron \rightarrow ${}_1^1\text{H}$ (proton) + electron + neutrino.

$${}_0^1n \rightarrow {}_1^1\text{H} + {}_{-1}^0e + \bar{\nu}$$

$$\text{Mass} \quad 1 \rightarrow 1 + 0 + 0$$

$$\text{Charge} \quad 0 \rightarrow 1 + -1 + 0$$

Examples / Illustrations

Additional Inputs

notes

Teaching Aids used

black - Board .

References cited

unified text book .

Student Activity planned after teaching

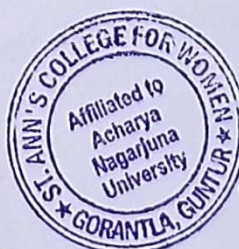
Activity planned outside the Class Room, if any

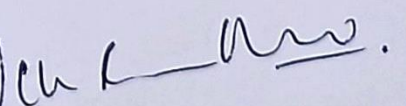
students are asked to write self test on
above topic .

Any other activity


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LESSON PLAN

2020 - 2021

Name of the Lecturer..... B. JOYCE

Department..... CHEMISTRY

LESSON PLAN

Name of the Lecturer: B. Joyce Name of the Department: Chemistry
Class: EN MBc, MPL, RBC Subject: Coordination Chemistry

Name of the Topic : stability of complexes

Hours required : 1 hr

Learning Objectives : To learn about,

1. factors affecting stability of complexes
2. Types of stabilities

Previous knowledge to be reminded :

Dissociation, association
complexes, coordination

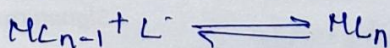
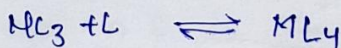
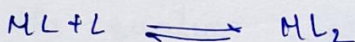
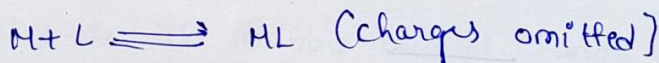
Topic Synopsis :

Constant or formation Constant.

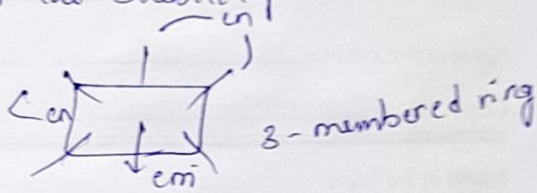
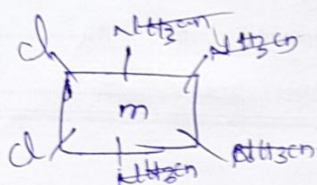
→ The reciprocal of β ($\frac{1}{\beta}$) is called instability constant or dissociation constant.

→ The complex forming reversible reaction $[M^{n+} + nL \rightleftharpoons ML_n]$ does not take place in a single step. It takes place in several steps.

→ The steps involved in the complex $[ML_n]$ formation are represented as.



Ring formations - more the no. of rings more is the stability



Additional Inputs

The stability of metal complex is governed by two different aspects such as thermodynamic and - kinetic stability.

Teaching Aids used

PPT- youtube videos.

References cited

Text book on Coordination chemistry - PR publications

Student Activity planned after teaching

Exercise with Examples
slip test , Assignment

Activity planned outside the Class Room, if any

Google search on stability of different types of complexes.

Any other activity

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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: B. JOYCE Name of the Department: CHEMISTRY

Class: II BBC, MBC, & MPC Subject: Coordination Chemistry

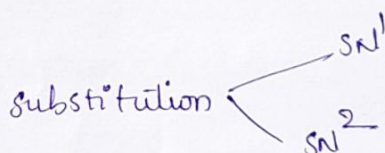
Name of the Topic: THERMODYNAMIC AND KINETIC STABILITY.

Hours required: 1 hr

Learning Objectives: To learn differences b/w thermodynamic stability & kinetic stability.

To understand substitution capacity complexes.

Previous knowledge to be reminded:



Bond - making & Bond - Breaking.

Topic Synopsis:

- Each step will have an equilibrium constant. These constants are indicated as $K_1, K_2, K_3, K_4, \dots, K_n$. therefore B is equal to $B = K_1 \times K_2 \times K_3 \times K_4 \dots \times K_n$.
- The metal complexes generally undergo ligand exchange reactions and several other types of reactions involving the ligand.
- The ease of these type of chemical reactions (rate) is indicated by another stability constant called kinetic stability constant.
- Since, the kinetic stability is concerned with chemical reactions such as $Mn + nL \rightleftharpoons MnL_n$ the activation energy of the reaction comes into play. Lower the activation energy [Ea], faster is the substitution reaction.
- Based on the ease or rate of these reactions, complexes are named as labile and inert.

Thermodynamic Stability of -4
 $[\text{Co}(\text{CN})_3]^{+3}$ ion; $[\text{Fe}(\text{CN})_6]^{4-}$ in

Additional Inputs

Instantaneous, slow or moderate
and very slow reactions.

Teaching Aids used

(unified) Youtube videos, PPT

References cited

united Chemistry - Dr. O. P. Agarwal
Kalayani united chemistry - Y. R. Sharma
K. Rama Rao.

Student Activity planned after teaching

Exercise with Example,
Slip text

Activity planned outside the Class Room, if any

google search on stability of
different types of complexes

Any other activity

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Signature of the Lecturer

Name of the Lecturer: B. JOYCE

Name of the Department: CHEMISTRY

Class: I BBL, NBL, MPL

Subject: Organic Chemistry

Name of the Topic: CHEMISTRY-II [INORGANIC CHEMISTRY]

Hours required: UNIT-I - chemistry of 'd'-block elements.
09 hr

Learning Objectives: To study the special properties of transition metals.

Stability of various oxidation states.

Previous knowledge to be reminded:

classification of elements into s, p, d & f-block elements.

presence of incomplete shells.

d-block elements series.

Topic Synopsis: Definition of d-block"when an incoming e^- enters into d-orbital it is called as d-block elements."The general electronic configuration is $[n-1]d^{1-10}ns^2$
there are two incomplete shells, so d-block elements are called transition elements.

There are 3 series of transition elements viz 3d, 4d & 5d series. There are 10 elements in each series.

There are 3 triads namely Cu, Ti, Cr triads in which all three elements in each series have same d & physical properties.

Zn, Cd & Hg are called pseudo transition elements - A¹⁰,
Ag & Pt are called coinage elements.

Examples / Illustrations

They transition elements are crystalline, and metals with lustrous property. They are good conductors of heat and electricity.
Cu, wires good conductor of electricity.
Hg, is liquid metal
Cr & Cu exhibit anomalous configuration

Additional Inputs

Conductors, Semi-Conductors - uses.

Teaching Aids used

Samples of conductors, starts with diagrams of semi-conductors
Black-board and oral Teaching.

References cited

Text book of inorganic chemistry - Agarwall
" " " " - Cotton & Wilkinson
unified chemistry - Kalyani publications

Student Activity planned after teaching

collection of Ti, Cu, Cr, Pt, Fe sample metals
transition metals properties from google search

Activity planned outside the Class Room, if any

collection of Ti, Cu, Cr, Pt, Fe sample metals.

Any other activity

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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: B. Jayas Name of the Department: Chemistry

Class: IMBC, MPC, BBC Subject: Organic Chemistry

Name of the Topic : Magnetic property

Hours required : 01 hour

Learning Objectives : To study magnetism

Previous knowledge to be reminded : Magnet has north & South poles
opposite poles attract each other and same
poles repel each other.

Topic Synopsis : Paramagnetism:- The attracting of a substance towards the magnetic field, it is called paramagnetic hence

Reason:- presence of unpaired e^- .

Ex:- Fe^{+2} , V^{+1} , Cu^{+2}

Ferromagnetism:- when magnetic intensity of a substance is increased to maximum capacity in a magnetic field, it is called ferromagnetism Reason:- max. no. of e^- s.

Ex:- Cr^+ , Mn^{+2} , Fe^{+3} etc.

Diamagnetism:- when a substance is placed in a magnetic field, if it is repelled against the magnetic field, it is called diamagnetism

Reason:- filled e^- 's

Ex:- Cu^+ , Zn^{+2} , Cd^{+2} etc.

Magnetic moment is calculated by

Spin only formula $\mu = \sqrt{n(n+2)}$

n - no. of unpaired e^- .

Examples / Illustrations Magnetic susceptibility is determined by
Cay's balance method - weight \leftarrow ~~substance~~ - paramagnetic
Paramagnetic - unpaired e^-
Diamagnetic - filled e^-

Additional Inputs

Ferromagnets are used in restrictions
why ferromagnets are permanent reagent as
they do not need magnetic field

Teaching Aids used

PPT presentation

References cited

unified chemistry \rightarrow Dr. op. Agarwal

Student Activity planned after teaching

Memorizing the method for determining
magnetic moment

Activity planned outside the Class Room, if any

Group discussion

Any other activity

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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: B. Jayee Name of the Department: Chemistry
Class: I BBL, NBC, MPC Subject: Organic Chemistry

Name of the Topic: Cause of Lanthanide Contraction

Hours required: 01 hour

Learning Objectives: To study Cause of Lanthanide contraction

Previous knowledge to be reminded:

The gradual decrease in the atomic and ionic size of Lanthanoids with an increase in atomic number.

Topic Synopsis: Cause of Lanthanide Contraction: 1. The Lanthanide contraction is due to the imperfect shielding of one of electron by another in the same sub shell.
2. This successive contraction accumulate and the net effect for all the Lanthanides is Lanthanide Contraction.

Magnetic properties: The La^{3+} and Ce^{4+} have nf^0 configuration and Lu^{3+} has nf^14 configuration. They have no unpaired electron and are diamagnetic. All other f states contain unpaired and are therefore paramagnetic.

The magnetic moment of transition elements may be calculated from the equation: $\mu_s + \mu_L = \sqrt{4S(S+1) + L(L+1)}$.

Actinides or Actinones: The elements in which the extra electron enters sf orbitals of $(n-2)^{\text{th}}$ main shell are known as sf elements, actinides or Actinones. The only first four elements of this series namely Actinium, Thorium, Protactinium and Uranium are in nature. All the other elements are synthesised artificially by bombardments. These elements are known as transuranium elements.
Electronic Configuration: $sf^{1-14} 6d^1 7s^2$

Cerium, Lutetium

Additional Inputs

Poor shielding of nuclear charge

Teaching Aids used

Black Board

References cited

united chemistry - Dr. O.P. Agarwal
Balayoni unified chemistry - Y.R. Sharma
to Ramu Rao.

Student Activity planned after teaching

practice the electronic Configurations

Activity planned outside the Class Room, if any

Learning the uses of as magnetic
properties — Google search,
Youtube.

Any other activity

LESSON PLAN

Name of the Lecturer: B. JOYCE Name of the Department: CHEMISTRY

Class: I M.B.C. & M.P.C. B.B.C. Subject: Inorg. Chemistry

Name of the Topic : BONDING IN METALS

Hours required : 2 hrs

Learning Objectives :
Metallic bond. Learning
Knowing the differences in types of bonding
understanding properties
of metals

Previous knowledge to be reminded :

Resonance, Conductance, electrostatic force.

Topic Synopsis : Theories of Bonding in metals : The metal bond can be defined as "the force that binds a metal atoms to a number of electrons within its sphere of influence is known as metal bond."

Following are the main theories put forward to explain the metallic bond.

- (i) Electron sea model (Free electron theory).
- (ii) valence bond theory (Pauling resonance theory)
- (iii) Band theory (Molecular orbital theory).

Electron Sea model (Free electron theory).

- (i) All the atoms in a metal have several unoccupied electron orbitals in their outer shells.
- (ii) So, they lose some of their valency electrons and form positive ions called metal nuclei.
- (iii) These free moving electrons are said to be delocalised, so the metal can be thought to be of metal cations immersed in a sea of electrons and hence this model is referred to as an electron sea model.
- (iv) Electrons pull the cations towards themselves from all directions and thus hold the cations close.

Examples / Illustrations valence Bond theory Crawling's Resonance theory :-
An Alternative approach of the metallic bond, on the basis of valence bond theory was developed principally by Pauling. According to this theory, the bonding b/w metallic atoms is covalent with resonance.

Additional Inputs

water - melon model of atom in its ionic state

Teaching Aids used

OTP & Black board

References cited

unified chemistry - Kalyani publications
unified chemistry - Jai Prakash publications

Student Activity planned after teaching

Free electron model Flexi
Bands of conduction, Forbidden and non conduction in Li atom anechar.

Activity planned outside the Class Room, if any

Li element and its use as battery - Google search

Any other activity

PRINCIPAL

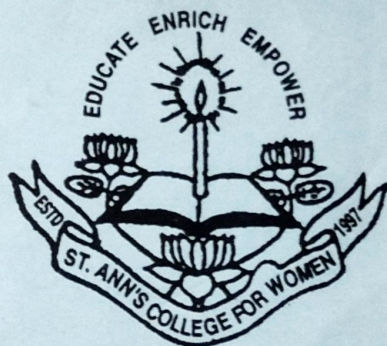
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Signature of the Lecturer

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GORANTLA - GUNTUR



LESSON PLAN

2019 - 2020

I, III & V - SEMS

Name of the Lecturer..... R. SHARON ROSE

Department..... COMMERCE

LESSON PLAN

Name of the Lecturer: R. Sharon Eze Name of the Department: Commerce
Class: 2nd Yr. Com (L) Subject: CG

Name of the Topic: Latitude & Longitude.

Hours required: 03.

Learning Objectives: Learn about Equator / imaginary line
Northern Hemisphere, Southern Hemisphere.
North pole, South pole.
Identification of Time, seconds & minutes etc.

Previous knowledge to be reminded:

Attention about Equator
Imaginary circle etc.

Topic Synopsis:

Latitude — when earth rotates itself, it is called Rotation; & it is called Axis.

The axis of north edge is called North pole &
The axis of south edge is called South pole.

Equator divides the earth into two equal parts.

The area between Equator & North pole is called Northern Hemisphere & South pole & Equator is called Southern Hemisphere.

Longitude are called Meridians, which comes from Latin word. So they are called Greenwich Meridians.

Development of Theories also —

Examples / Illustrations

Calculation of Time by Longitude
Calculation of Place by Latitude.

Additional Inputs

Designing of Longitude & Latitude

Teaching Aids used

Black Board

References cited

Commercial Geography: V. Sreedhar.

Jai Bharat - By Dr. H. Sreenivaraulu.

Student Activity planned after teaching

Question & Answer session

Activity planned outside the Class Room, if any

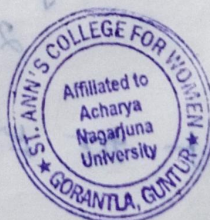
Google search about the

Theories of the Earth.

Any other activity

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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: R. Sharon Raje Name of the Department: Commerce
Class: III B.Com / V IOT Subject: CG

Name of the Topic: Indian - forestry.
Hours required: forestry features & functions.

Learning Objectives: To learn about the need of forestry in the world

Previous knowledge to be reminded: Attention about what is forest.
What are the things available in the forests.
What it contains & how it is developed.

Topic Synopsis:

Forests is a place, where living & non-living things are exist in the place — it is a place attached to the village boundaries.

Features

1. Spacious Land.
2. Non-interference of human beings.
3. Bio-diversity.
4. Tri-people's existence

Functions of forests

1. Productive Function.
2. Protective Function.
3. Recreation Function.
4. Ancillary Function.

2⁵ Examples of Indian Forests.
Nallamalla forests. } mentioned
Rampachodavaram forests }

Additional Inputs

Teaching Aids used

Powerpoint Presentation.

References cited

Kalyani Publications, by D.R. Khullar


Student Activity planned after teaching

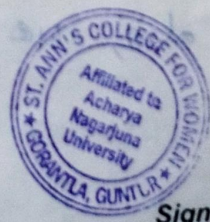
Slip Text

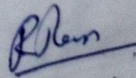
Activity planned outside the Class Room, if any

given seminar topic
on types of forests.

Any other activity


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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: R. D. Horon Rose

Name of the Department: Geography

Class: III

Subject: CG

Name of the Topic :

Rights & Acts, of forests.

Hours required :

03

Learning Objectives :

To learn about what are the rights of tribal people towards forest.

Previous knowledge to be reminded :

Mention about how to improve forests, what is Afforestation & what is deforestation etc.

Topic Synopsis :

Forest Rights Act - 2006 :-

This act is also called Panchayat & Community Forest People's Living Act. This act is meant for welfare of tribal, people lives in hill areas etc.

This Act provides three types of rights :-

1. Land holding Rights
2. Consumption Right
3. Forest Conservation Right.

Chipko Movement & Forest Conservation Act
Compensatory Afforestation Fund Management
Authority.

Measures to protect forests :-

1. Urban Forest Programme.
2. Agricultural Forest Programme.

Example: Chipko Movement.

Additional Inputs

Various Acts related to Forest Rights are mentioned.

Teaching Aids used

Black Board.

References cited

Kalyani Publisher.

Student Activity planned after teaching

Question & Answer.

Activity planned outside the Class Room, if any

Google search for Forest rights Act.

Any other activity



Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: R. Sharan K. P. C. Name of the Department: Commerce

Class: B.Com / B.Economics Subject: CPA

Name of the Topic : Cost Accounting - Meaning

Hours required : 04.

Learning Objectives :

to learn about meaning of Cost Accounting.
Limitations of Cost Accounting.
Objectives of Cost Accounting etc.

Previous knowledge to be reminded :

Mention about various types of costing,
Like uniform costing, Marginal costing,
Standard costing, Historical costing, Direct
costing, & Absorption costing.

Topic Synopsis :

⇒ features, objectives & functions of Cost Accounting.

⇒ Scope, Advantages & Limitations of Cost Accounting.

⇒ Relationship between Cost, Management & Financial accounting.

Cost Sheet & Statements of Costs.

Calculation of Prime costs, Works Costs, Cost of production & Calculations of Total Costs & Costs of sales.

Examples / Illustrations

Problem taken as calculation of Prime Cost,
Waste Cost, & other costs & finally calculation
of Cost of Sales

Additional Inputs

Practising Problems in Text Book

Teaching Aids used

Black Board

References cited

Kalyani Publishers by S.D. Jain.
K. L. Narang

Student Activity planned after teaching

→ Question & Answer Session

Activity planned outside the Class Room, if any

— stip Test

Any other activity

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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: R. Sharon Roy Name of the Department: Commerce

Class: B.Com (Gen. & Hrs) Subject: Cost Accounting

Name of the Topic: Methods of Pricing Issues.

Hours required: 10

Learning Objectives:

To study about the Issue of Materials.

Previous knowledge to be reminded:

Mention about various levels of materials & to control the inventory.

Topic Synopsis:

- FIFO — First-in-First out.
- LIFO — Last in First out.
- Weighted average Method.
- Simple Average Method.
- Base Stock Method with FIFO & LIFO.
- Market Price Method.

→ Problems & Illustrations in FIFO, LIFO, Simple/weighted Average, Base Stock etc.

Additional Inputs

Problems on LIFO
FIFO
Weighted average method gives.

Teaching Aids used

Black Board.

References cited

— Kalyani — Publishers,
Technical Publications

Student Activity planned after teaching

— Slip-Test
Assignment.

Activity planned outside the Class Room, if any

Doing Problems.

Any other activity

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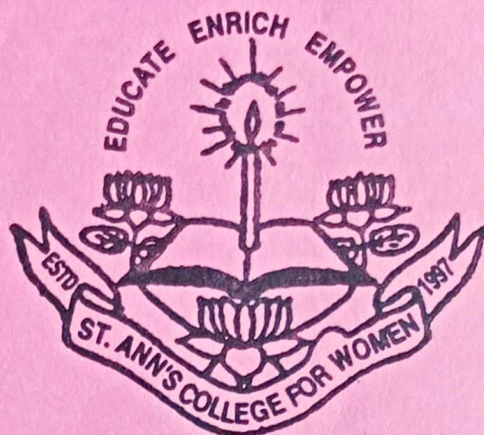


Rohana

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LESSON PLAN

2018 - 2019.

Name of the Lecturer D. V. Ramana

Department Computer Science

LESSON PLAN

Name of the Lecturer: D.V. Ramana Name of the Department: Computer Science

Name of the Topic : number system : Binary, hexa & octa numbering system.

Hours required : 2 hrs

Learning Objectives :

* working with binary numbers.

Previous knowledge to be reminded :

* computers are electronic machines that operate using binary logic

Topic Synopsis :

* converting a Binary number to Decimal form.

- In binary no., all the columns are powers of 2.

- converting a Hexa decimal no. to Binary form.

Octal number system :-

	Fourth Digit	Third Digit	Second digit	first digit
Decimal	10^3	10^2	10^1	10^0
Binary	2^3	2^2	2^1	2^0
octal	8^3	8^2	8^1	8^0

Examples / Illustrations

ex: 1101 into decimal no.

$$\begin{aligned}\text{Decimal number} &= 1 \times 2^3 + 1 \times 2^2 + 0 \times 2^1 + 1 \times 2^0 \\ &= 1 \times 8 + 1 \times 4 + 0 \times 2 + 1 \times 1 \\ &= 8 + 4 + 0 + 1 \\ &= 13\end{aligned}$$

Additional Inputs

Teaching Aids used

Black board.

References cited


* Referenced by REENA THAREJA.

Student Activity planned after teaching

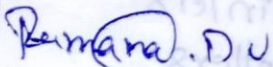
* conversions on Binary number system.

Activity planned outside the Class Room, if any

Any other activity


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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: D.V. Ramana Name of the Department: Computer Science

Name of the Topic : Types of software

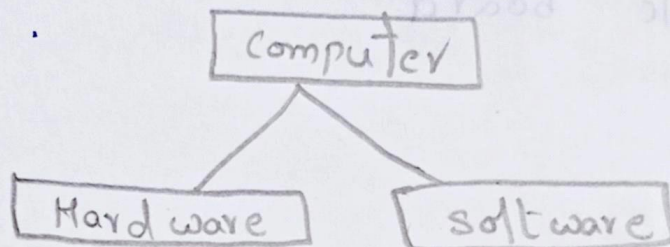
Hours required : 2 hrs

Learning Objectives :

- * computer software
- * computer hardware

Previous knowledge to be reminded :

* Basically computer system is made up of these two terms.



Topic Synopsis :

* computer H/w is nothing but collection of actual physical components of system. so the input, storage, processing, c.p.u, output devices are hardware.

* software is a program.

* program is a set of instructions.

* A computer software can be broadly classified into four categories;

① system software

② Application software

③ Firm ware

④ Live ware.

Examples / Illustrations

Assembly language program → **Assembler** → Machine language Program.
High level language program → **compiler** → Machine language Program.
High level language program → **Interpreter** → Machine language program.

Additional Inputs

Teaching Aids used

Black board

References cited

* Referenced by vikram Gupta *

Student Activity planned after teaching

* Assignment of software & its types *

Activity planned outside the Class Room, if any

Any other activity

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Ramana. D V
Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: D.V. Ramana Name of the Department: Computer Science

Name of the Topic : Page layout & Back grounds in photoshop

Hours required : 1 hr

Learning Objectives : * width & Height
* color Modes
* Back ground

Previous knowledge to be reminded :

Topic Synopsis : *

pixels
<input checked="" type="checkbox"/> inches
centimeters
Milli "
Points
Picas
columns

* If you did not select & choose to create a custom size, then this is where you can type in your desired document width & height.

* color Modes:-

Bitmap
Grayscale
<input checked="" type="checkbox"/> RGB color
Lab color

* color mode allows you to choose what mode & bit you wish to use for your new document.

* Back ground contents :-

<input checked="" type="checkbox"/> white
Back ground color
Transparent

* This allows you to determine the color of your background layer choosing white.

Examples / Illustrations

Additional Inputs

Teaching Aids used

ppls & Black board.

References cited

* Referenced by V.S.N. Kumar

Student Activity planned after teaching

* create your visiting card

* Design a passport photo

Activity planned outside the Class Room, if any

Any other activity

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Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: D.V. Ramana Name of the Department: Computer science

Name of the Topic: working with tool Box:- Pen, eraser, brush

Hours required: 1 hr

Learning Objectives:

* Tool Box

Previous knowledge to be reminded:

* Some tools in the Tools panel have options that appear in the context sensitive options bar.

Topic Synopsis:

(M) Marquee tool -		- Move Tool (V)
(L) Lasso tool -		- Magic Wand (W)
(C) Crop tool -		- Knife (K)
Healing Brush -		- pencil / paintbrush (B)
(S) clone stamp -		- History Brush (Y)
(E) Eraser -		- Gradient tool / paint bucket (G)
(R) Blur tool -		- Dodge and Burn tool (O)
(A) path Component selection -		- Type tool (T)
(P) pen tool for drawing paths -		- Line tool / Rectangle (U)
Notes (N) -		- Eyedropper (I)
(H) Hand Tool -		- Zoom (Z)
Foreground color -		- Switch colors (X)
		- Background color
		- Quickmask mode (Q)
		- Full screen mode (F)
		- Jump to image Ready

Examples / Illustrations

Additional Inputs

Teaching Aids used

* ppt | Black board

References cited

* Referenced by V.S.N. Kumar

Student Activity planned after teaching

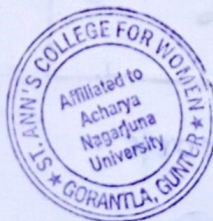
* convert color photo to black & white photo.
* Background change.

Activity planned outside the Class Room, if any

Any other activity

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Ramana . P . V
Signature of the Lecturer

LESSON PLAN

Name of the Lecturer: D. V. Ramana Name of the Department: Computer Science

Name of the Topic: How to create add, noise, brush, light effects

Hours required: 2 hrs.

Learning Objectives:

*noise filters.

Previous knowledge to be reminded:

- know the Filter Menu.

Topic Synopsis: * The noise filters add (or) remove noise,

(or) pixels with randomly distributed color levels.

* This helps to blend a selection into

the surrounding pixels.

* noise filters can create unusual textures

(or) remove problem areas, such as dust & scratches.

* To reduce noise while preserving edges
based on user settings affecting the overall
image (or) individual channel.

* clumps pixels into a solid color in
a polygon shape.

Examples / Illustrations

Additional Inputs

giving the notes

Teaching Aids used

pply | Black board

References cited

Referenced by v.s.n kumar

Student Activity planned after teaching

practice the Filtery & add

Activity planned outside the Class Room, if any

Any other activity

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