Banwarilal Bhalotia College, Asansol
Department of Physics

Based on the syllabus of Kazi Nazrul University for BSc Physics (Hons) 3rd semester the Department of Physics, Banwarilal Bhalotia College, Asansol offers the Skill Enhancement Course. It is a practical based project work. The syllabus is appended below.

SKILL ENHANCEMENT COURSE (SEC-I)

(Evaluation is to be done internally)

Course Name: Electrical Circuit Network Skills

Course Code: BSCHPHSSEC 301

Course Type: **SEC (Practical)**	Course Details: **SEC-1**			L-T-P: **0-0-8**	
Credit: **4**	Full Marks: **50**	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	.....	20	.....

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. *Design and trouble shoots the electrical circuits, networks and appliances through hands-on mode.*
2. *Choose proper devices depending upon application considering economic and technology up-gradation.*

Course Content:

Practical

1. Basic Electricity Principles: Voltage, Current, Resistance, and Power. Ohm's law, Series, parallel, and series-parallel combinations. AC Electricity and DC Electricity, Familiarization with multimeter, voltmeter and ammeter. **(8L)**

2. Understanding Electrical Circuits: Main electric circuit elements and their combination. Rules to analyze DC sourced electrical circuits. Current and voltage drop across the DC circuit elements. Single-phase and three-phase alternating current sources. Rules to analyze AC sourced electrical circuits. Real, imaginary and complex power components of AC source. Power factor. Saving energy and money. **(8L)**

3. Electrical Drawing and Symbols: Drawing symbols. Blueprints. Reading Schematics. Ladder diagrams. Electrical Schematics. Power circuits. Control circuits. Reading of circuit schematics. Tracking the connections of elements and identify current flow and voltage drop. **(8L)**

4. Generators and Transformers: DC Power sources. AC/DC generators. Inductance, capacitance, and impedance. Operation of transformers. **(8L)**

5. Electric Motors: Single-phase, three-phase & DC motors. Basic design. Interfacing DC or AC sources to control heaters & motors. Speed & power of ac motor. **(8L)**

6. Solid-State Devices: Resistors, inductors and capacitors. Diode and rectifiers. Components in Series or in shunt. Response of inductors and capacitors with DC or AC sources. **(8L)**

7.Electrical Protection: Relays. Fuses and disconnect switches. Circuit breakers. Overload devices. Ground-fault protection. Grounding and isolating. Phase reversal. Surge protection. Interfacing DC or AC sources to control elements (relay protection device). **(6L)**

8. Electrical Wiring: Different types of conductors and cables. Basics of wiring-Star and delta connection. Voltage drop and losses across cables and conductors. Instruments to measure current, voltage, power in DC and AC circuits. Insulation. Solid and stranded cable. Conduit. Cable trays. Splices: wirenuts, crimps, terminal blocks, split bolts, and solder. Preparation of extension board. **(6L)**

References/ Suggested Readings:

1. A text book in Electrical Technology - B L Theraja - S Chand & Co.
2. A text book of Electrical Technology - A K Theraja
3. Performance and design of AC machines - M G Say ELBS Edn.

At the commencement of the 3rd semester session a notification with the distribution of students was done for the SEC course. Students were distributed under the supervision of different faculty members according to the following notice assigning different title of the project work to different groups of students.

Department of Physics
B.B. College, Asansol
B.Sc (Hons) Semester-III SEC project Distribution 2023

Electrical Circuit Network Skills

All the 3rd Semester Physics (Hons) students are hereby instructed to consult their supervisor as listed below for their SEC project. All the students have to prepare a project report and submit the same at the time of SEC exam.

Name of the supervisors	Project Title	Name of Students
Dr. P. Ghosh	Design and study of IC regulated 5V D.C power supply	Mr. Surya Maji Mr. Brajesh Upadhyay
Dr. K. Mukherjee	To study the resistors, capacitors and inductors to different types of signals	Mr. Shaswata Ghosh Ms.. Sampurna Banerjee Miss. Indira Mondal
Sri. K. Maji	Conversion of A.C. to D.C by bridge rectifier with capacitor filter	Mr. Ankur Chakraborty Mr. Rohan Saha
Dr. S.Mandal	To study the basic electricity principles	Mr. Yubaraj Chakrabarty Mr. Arnab Dey Mr. Saheb Shaw
Dr. R.K. Roy	Construction of house hold electrical wiring (single-phase)	Mr. Abhinandan Gon Mr. Soumik Mishra
Dr. J. K. Majhi	Conversion of A.C to D.C by full wave rectifier	Mr. Punit Kumar Prasad Miss. Sunita Chouhan
Dr. A. Ghosh	Conversion of Ammeter to Voltmeter	Miss. Abida Naushad Mr. Lalchand Mondal
Dr. S.S. Mandal	Conversion of Voltmeter to Ammeter	Mr. Sweta Bauri Miss. Tanu Yadav Mr. Aman Ansary
Dr. K.K. Dey	Generators and Transformers	Miss. Mamina Sahoo Mr. Ankit Kumar Shaw
Dr A Biswas	Single phase & three phase DC motors	Mr. Joyjit Pramanik Mr. Samim Ansary

UG & PG Dept. of Physics * Asansol West Bengal * B. B. COLLEGE

29/8/2023

H.O.D

Department Of Physics

Head
Department of Physics (UG & PG)
B.B. College, Asansol-713303 (W.B.)

Sixteen students were listed for this project work. After the completion of the course the students submitted their project report. Some sample copies of the reports are presented here.

BANWARILAL BHALOTIA COLLEGE

Banwarilal Bhalotia College

SKILL ENHANCEMNT COURSE- I

TOPIC:-

To study the response of Resistor, Capacitor & Inductor to different types of signals

SUBMITTED BY:-

NAME:- SAMPURNA BANERJEE

Discipline:- B.Sc (Physics Hons.) 3rd Sem

Reg. No :- 10222122034

Course Name:- Electrical circuit and network skill

SESSION :- 2022 - 2025

Examined 22/01/2024

Head & PG Dept. of Physics Asansol West Bengal B.B. COLLEGE

ACKNOWLEDGEMENT

I would like to express my special thanks and gratitude to my teacher Dr. Koushik Mukherjee, who gave me the golden opportunity to do this SEC project, which also helped me in doing a lot of research and I came to know about the response of resistor, capacitor & inductor to different type of signals. I am really thankful to him.

Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this assignment within the limited time frame.

Sampurna Banerjee
Sampurna Banerjee
3rd Semester
Dept. of Physics
Banwarilal Bhalotia College

BANWARILAL BHALOTIA COLLEGE, ASANSOL
AFFILIATED TO
KAZI NAZRUL UNIVERSITY

STUDY OF THE BASIC PRINCIPLES OF ELECTRICITY

By,

ARNAB DEY
REGN. NO- 102221220019
SEMESTER III
B.SC PHYSICS

Examined 22/01/2024

ESTD. 1944

Submitted to
Department of Physics
B.B. College, Asansol

DEPARTMENT OF PHYSICS (PG & UG)

Banwarilal Bhalotia College

Constituent College of the Kazi Nazrul University
Govt. Sponsored (U.G & P.G.)
Asansol-713303, West Bengal, India

ESTD. 1944

TO WHOM IT MAY CONCERN

This is to certify that the project entitled "**STUDY OF THE BASIC PRINCIPLES OF ELECTRICITY**" submitted by **ARNAB DEY** having Registration number **102221220019** for the partial fulfillment of B.SC Semester III in Physics under Banwarilal Bhalotia College, Asansol has been carried out under my guidance and supervision.
I wish her all success in life.

Supervisor
Dr. Shrabani Mondal
Assistant Professor
Department of Physics
B.B. College, Asansol

BANWARILAL BHALOTIA COLLEGE

AFFILIATED TO

KAZI NAZRUL UNIVERSITY

STUDY OF THE BASIC PRINCIPLES OF ELECTRICITY

By,

YUBARAJ CHAKRABARTY

REGN. NO- 102221220113

SEMESTER III

B.SC PHYSICS

ESTD. 1944

Submitted to

Department of Physics

B.B. College, Asansol

DEPARTMENT OF PHYSICS (PG & UG)

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Asansol-713303, West Bengal, India

ESTD. 1944

TO WHOM IT MAY CONCERN

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I wish her all success in life.

Supervisor

Dr. Shrabani Mondal

Assistant Professor

Department of Physics

B.B. College, Asansol

Banwarilal Bhalotia College, Asansol

KAZI NAZRUL UNIVERSITY

B.B. College

TO STUDY THE RESPONSE OF RESISTOR, CAPACITOR AND INDUCTOR IN DIFFERENT TYPES OF SIGNAL

By,

INDIRA MONDAL

REGN. NO-**102221220083**

SEMESTER III

B.SC PHYSICS

ESTD. 1944

Submitted to

Department of Physics

B.B. College, Asansol

ACKNOWLEDGEMENT

I would like to express my special thanks and gratitude to my teacher Dr. Koushik Mukherjee, who gave me the golden opportunity to do this SEC project, which also helped me in doing a lot of research and I came to know about the response of resistor, capacitor & inductor to different type of signals. I am really thankful to him.

Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this assignment within the limited time frame.

Indira Mondal.

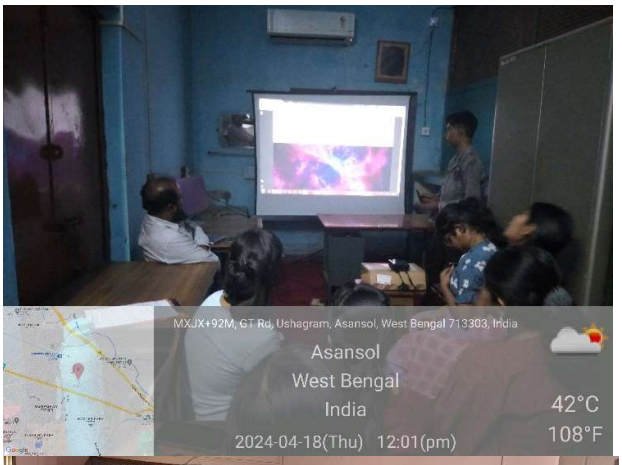
Indira Mondal

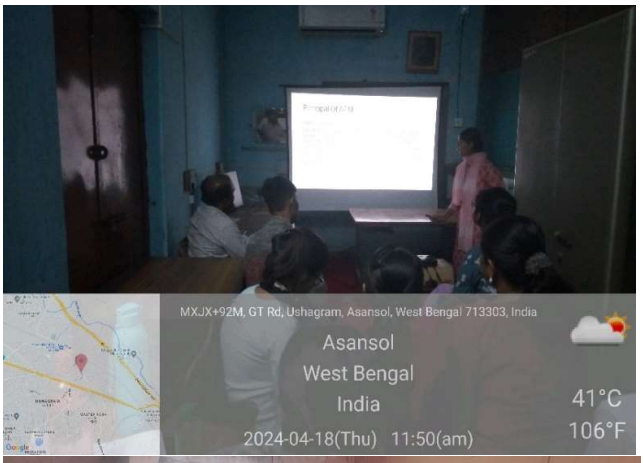
3rd Semester

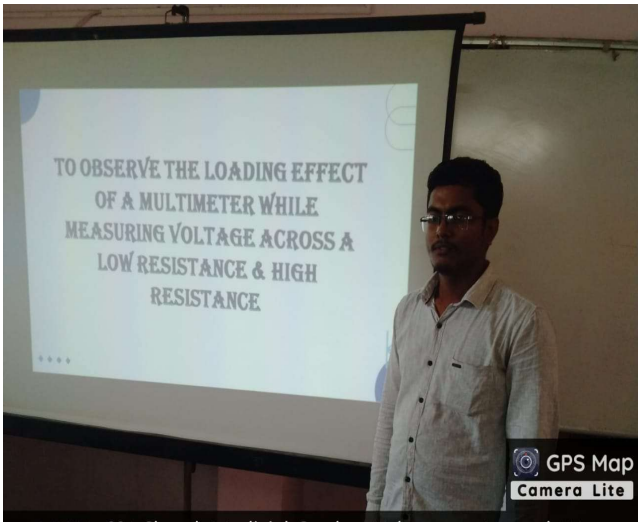
Dept. of Physics

Banwarilal Bhalotia College

During the time of final practical examination, students presented a seminar on the subject of the assigned project work. On the basis of their submitted project report, presentation and a viva-voce they have been awarded marks on that paper. Some glimpses of the students' presentations are shown below.







Speciation And Importance Of speciation

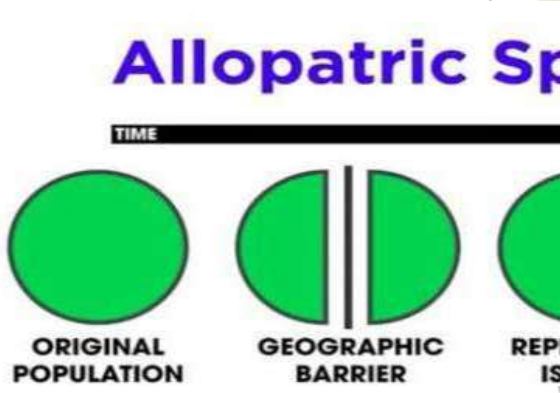
***Speciation*:~**

This process of genetic divergence of gene pools population to form new species is called Speciation. It means a species is a group of organisms that can interbreed and produce fertile offspring. All the organisms of a species share in the same gene pool.

Types of speciation:~

The main 4 Types of speciation are:~

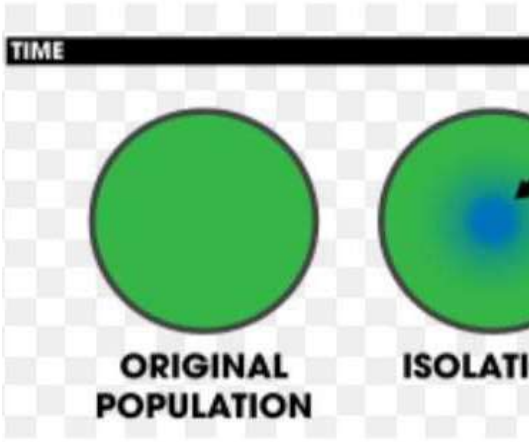
1.Allopatric speciation:~



(G.k allos=other, patris=native land)

The two or more related species that Have disjunct geographical ranges are Called Allopatric Speciation.

Example:~Example of such speciation are Indian lion (Panthera leo persica) and African lion(panthera leo leo).



2. *Sympatric speciation*:~

(G.k syn=with, together) sympatric(Same Country) speciation refers to the origin of new species due to the appearance of some biological barrier in the individuals of an initially randomly mating population that live in the same geographic area.

Example:~Example of this type are the figfrog(Rana grylio) and gopher frog(Rana areolata). The former is extremely aquatic, while the latter species is restricted to the margins of swampy areas.

PUNCTUATED EQUILIBRIUM AND PHYLETIC GRADUALISM

PRESENTED BY
MAHRUSH RAHMAN

INDEX:

ACKNOWLEDGMENT:

I would like to express my special thanks of gratitude to our principa college Dr AMITAVA BASU , our HOD of zoology department Dr ARNA GANGULI as well as our assistant professor of zoology department Dr LAHIRY who gave me the golden opportunity to prepare and present wonderful power point presentation on the topic PUNCTUATED EQUIL AND PHYLETIC GRADUALISM . I have done lot of research and I came about so many new things .

I am really thankful to all our assistant professor of zoology departme

Secondly I would also like to thank my parents and brothers who hel a lot in finishing this project within the limited time frame . It helped m increase my knowledge and skills .

THANKS AGAIN TO ALL WHO SUPPORTED

TOPIC: ISOLATING MECHANISM

COMPILED BY : PRIYANKA CHAKRABORTY

1ST SEM M.Sc. ZOOLOGY

BANWARILAL BHALOTIA COLLEGE

ISOLATING MECHANISM

- Factors that prevent gene exchange among population are called Isolating Mechanism.

- Dobzhansky introduced the term ‘ Isolating Mechanism’ to define any agents that hinders interbreeding of group of individuals.

- MAYR restricted this term to sympatric population and defined it as ‘Biological propertise of individuals which prevent interbreeding of populations that are actually or potentially sympatric’ .(This definition excludes geographic barriers)

ISOLATING MECHANISMS

- PREZYGOTIC ISOLATING MECHANISMS
  - HABITAT (ECOLOGICAL)
  - SEASONAL (TEMPORAL)
  - ETHOLOGICAL (BEHAVIOURAL)
  - MECHANICAL
- POSTZYGOTIC ISOLATING MECHANISMS
  - GAMETIC MORTALITY
  - ZYGOTE MORTALITY & HYBRID INVIABILITY
  - HYBRID STERILITY
  - HYBRID BREAKDOWN

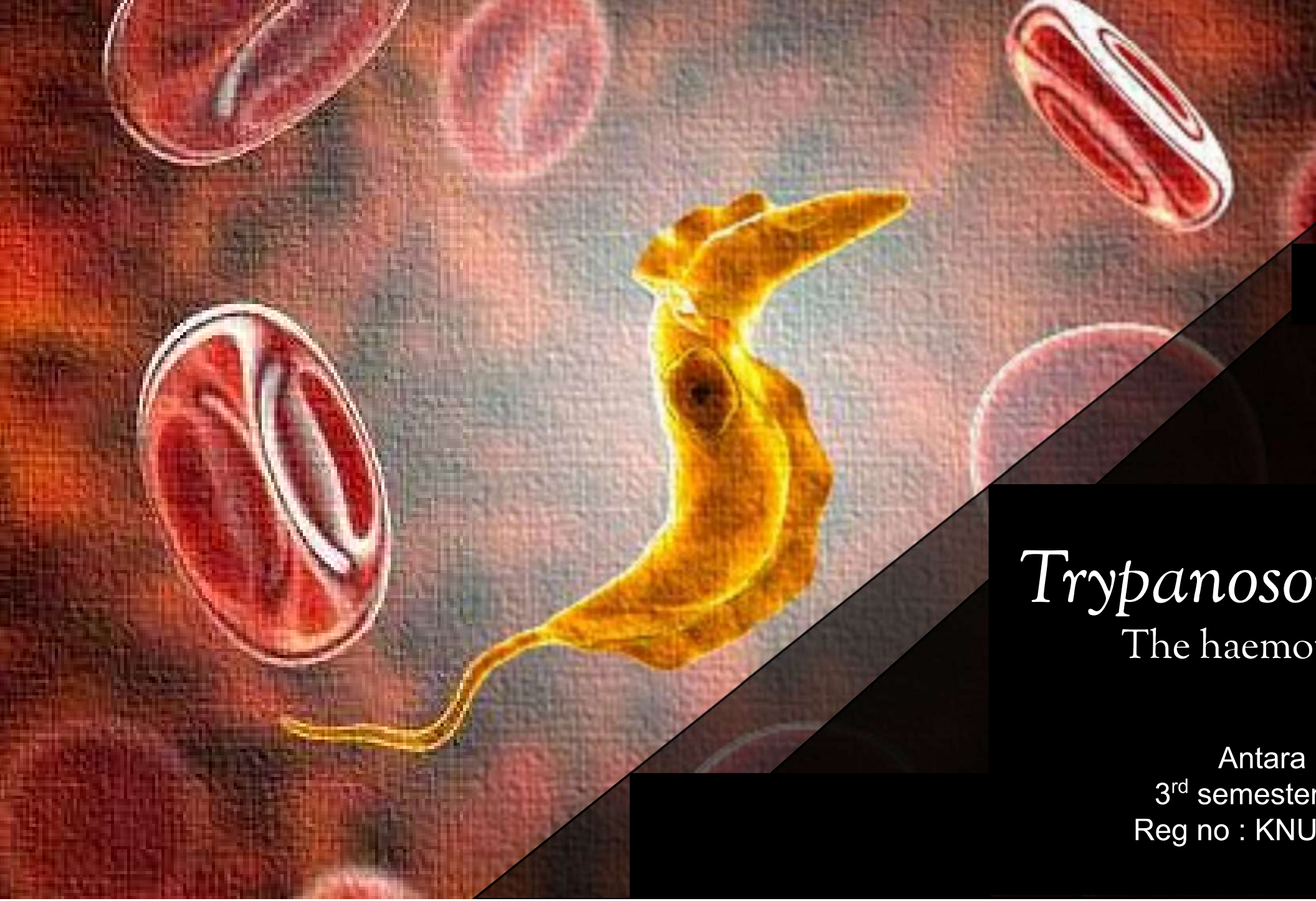
PREZYGOTIC ISOLATING MECHANISM

Isolating mechanisms which operate before fertilization.

HABITAT (ECOLOGICAL ISOLATION)

Potential mates do not meet because they flourish in different habitats.

Eg- species of fly catchers of North America



Trypanoso

The haemo

Antara
3rd semester
Reg no : KNU

INTRODUC
TION

Chagas disease or American trypanos
, the most common cause of i
myocarditis in the world, is caused by th
Trypanosoma cruzi. The disease is name
honor of Brazilian physician , Carlos Ch
he discovered it in 1909. *T. cruzi* is a g
multihost parasite transmitted by triaton
(kissing bug) mainly by contact with fa
urine of infected bug.

MORPHOLOGY

The parasite exists in three forms-

A. AMASTIGOTE

- Oval shaped
- Flagellum absent
- Multiplying form

B. TRYPOMASTIGOTE

- Short stumpy form
- Flagellum present
- Non-multiplying form

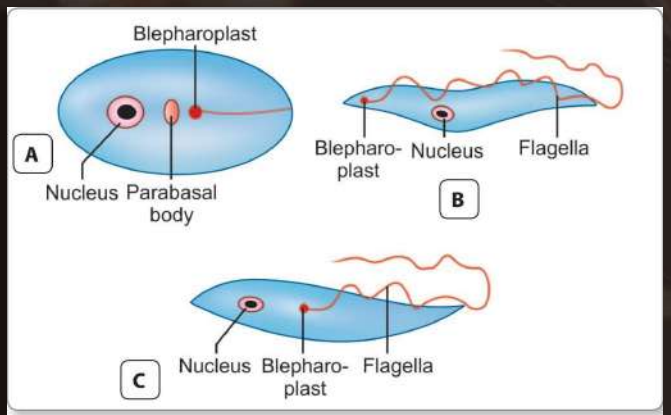


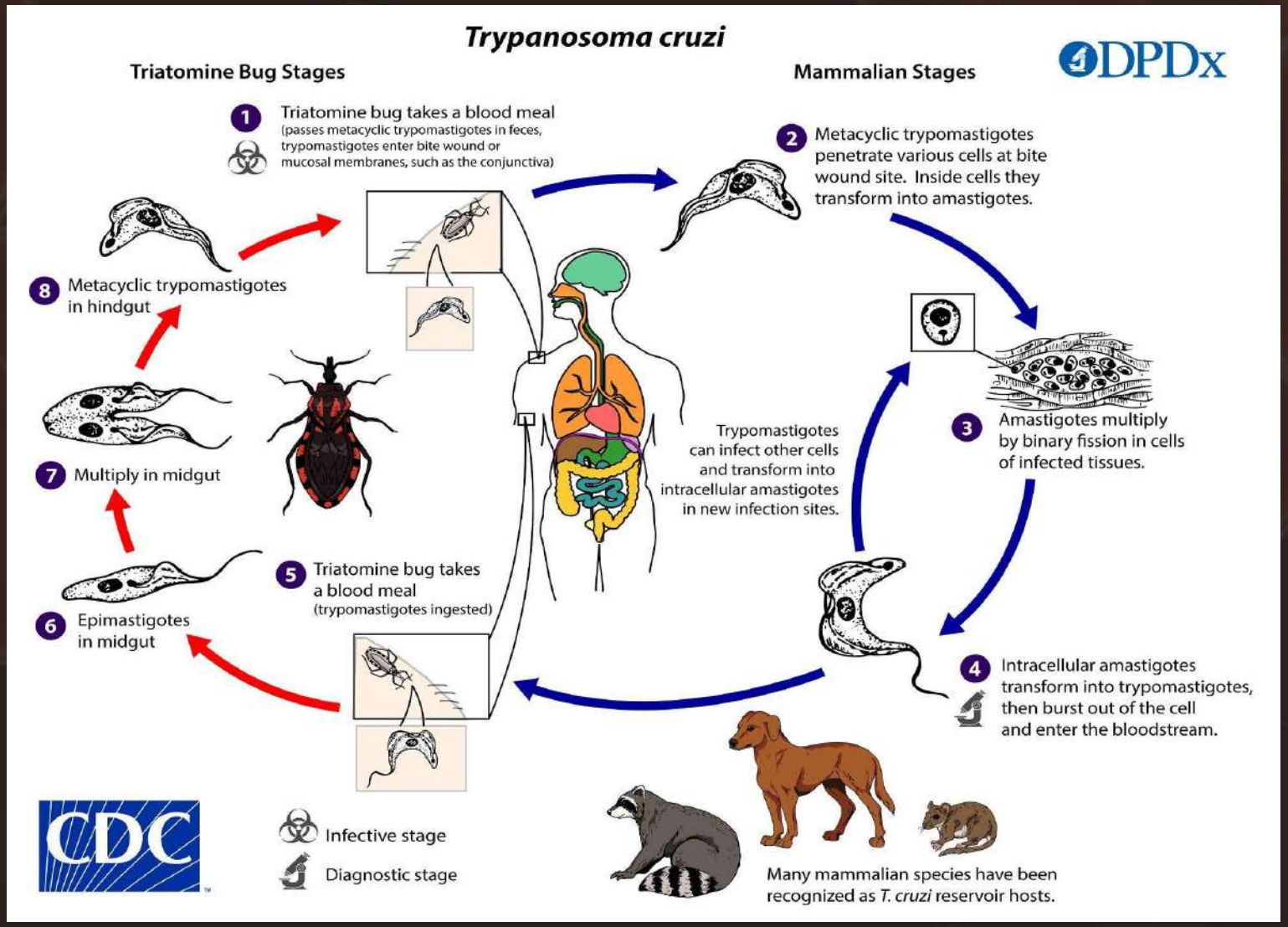
Fig. 5.5: *Trypanosoma cruzi*. **A.** Amastigote; **B.** Trypomastigote; **C.** Epimastigote

C. EPIMASTIG

- Kinetoplast pr
- Undulating mer present
- Divides by binar

LIFE CYCLE

The parasite completes its life cycle in two hosts -



CLINICAL FEATURES

ACUTE FORM

1.Seen in children and infants

2.Subcutaneous lesion, chagoma

3.Painless edema of eye, Romana's sign

CONGENITAL INFECTION

(Intermediate stage)

CHRONIC FORM

1.Seen in adults

2.Heart disorders

3. Neurological manifestations

CONTR

Mainly two drugs are used for trypanosomiasis : **Nifotrimox** & **Benznidaz**

KAZI NAZRUL UNIVERSITY

M.SC 4th SEMESTER ASSIGNMENT OF ZOOLOGY

PAPER: MZGT-401

UNIT- I:DEVELOPEMENTAL BIOLOGY

:NAME OF ASSIGNMENT:

GAMETOGENESIS IN RELATION TO FERTILIZATION IN HUMAN IN LIGHT OF MODERN PROSPECTIVE

NAME: ABDUL JABBAR SK

REG. NO: KNU18000818 OF 2018-2019

ROLL NO :102033200430020

CONTENT OF ASSIGNMENT

- **GAMETOGENESIS**
- **FERTILIZATION**
- **PROTEIN INVOLVED IN FERTYILIZATION**
- **VARIOUS METHODE OF FERTILIZATION TO COMBAT WITH INFERTILITY**

GAMETOGENESIS

- **GAMETOGENESIS IS THE FORMATION&RIPENING OF HAPLOID SPERM &OVUM FROM PGC(2n) BY THE PROCESS OF MITOSIS &MEIOSIS**

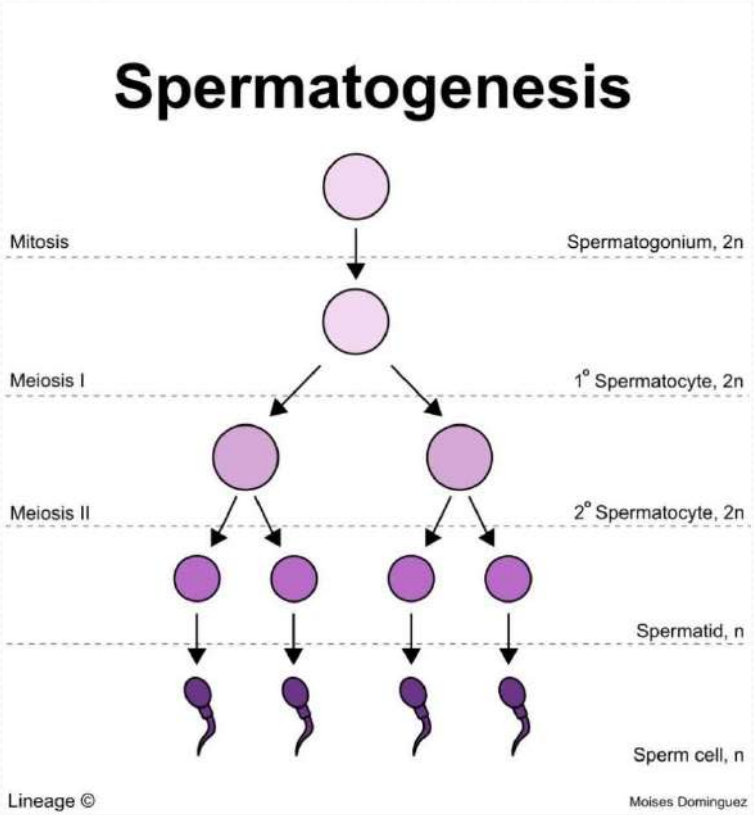
- **IT COMPLETED BY TWO STEPES, 1:SPERMATOGENESIS & 2: OOGENESIS**

SPERMOTOGENESIS

BRIER IDEA

- **SPERMATOGENESIS IS APROCESS BY WHICH AHAPLOID SPERMATOZOOA DEVELOPED FROM PGC(2n) IN THE SEMINIFEROUS TUBULES OF THE TESTIS IN MATURE MALE**

FIG: SPERMSTOGENESIS



Giardia

Content

- Introduction
- Habitat
- Morphology
- Mode of transmission
- Lifecycle
- Pathogenesis
- Control
- Treatment
- Reference

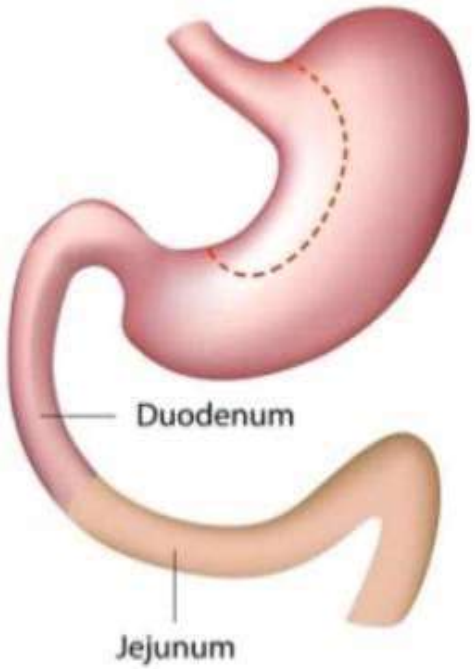
INTRODUCTION

- Giardia is a genus of anaerobic flagellated protozoan parasite of phylum Sarcomastigophora that colonise and reproduce in the small intestine of several vertebrates , causing giardiasis .their life cycle alternates between a swimming trophozoite and an infective, resistant cyst.

HABITAT

HABITAT

- Duodenum & the upper part of the jejunum.
- THE ONLY PROTOZOAN PARASITE FOUND IN THE LUMEN OF HUMAN SMALL INTESTINE.



The Theory of Gradualism and Punctuated Equilibrium

Theory by Niles Eldridge & Stephen Jay Gould

Presented by :- Arghya Roy

Acknowledgement

- I would like to thank u to Dr. Sangita Lahiri , Assistant professor , BB c mam for guiding me in this presentstation.
- I would like to thank u Dr. Arnab Ganguli , HOD of zoology departmen college , sir for helping me to complete the work.
- I am very thankful to Dr. Amitava Basu , Principal of BB college , for h do the work .

Introduction

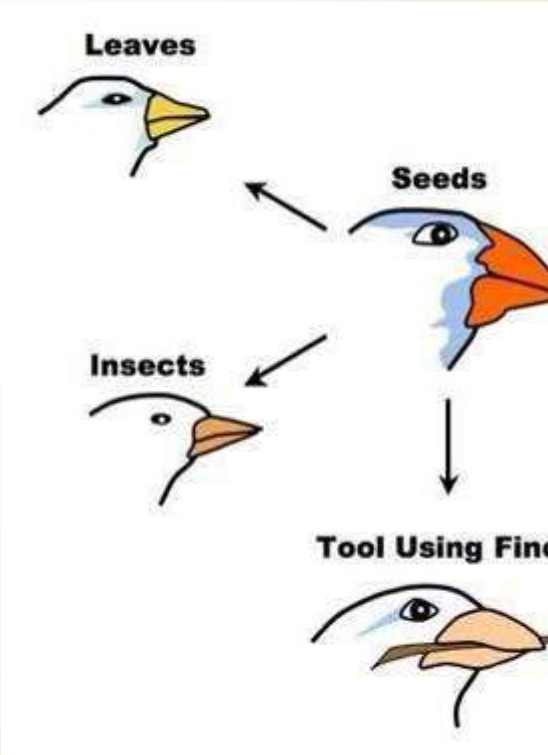
- Gradualism and Punctuated equilibrium are two ways , in which of a species can occur .
- A species can evolve by only one of these or by both.
- Scientists think that species with a shorter evolution evolved mos punctuated equilibrium and those with a longer evolution evolv by gradualism .

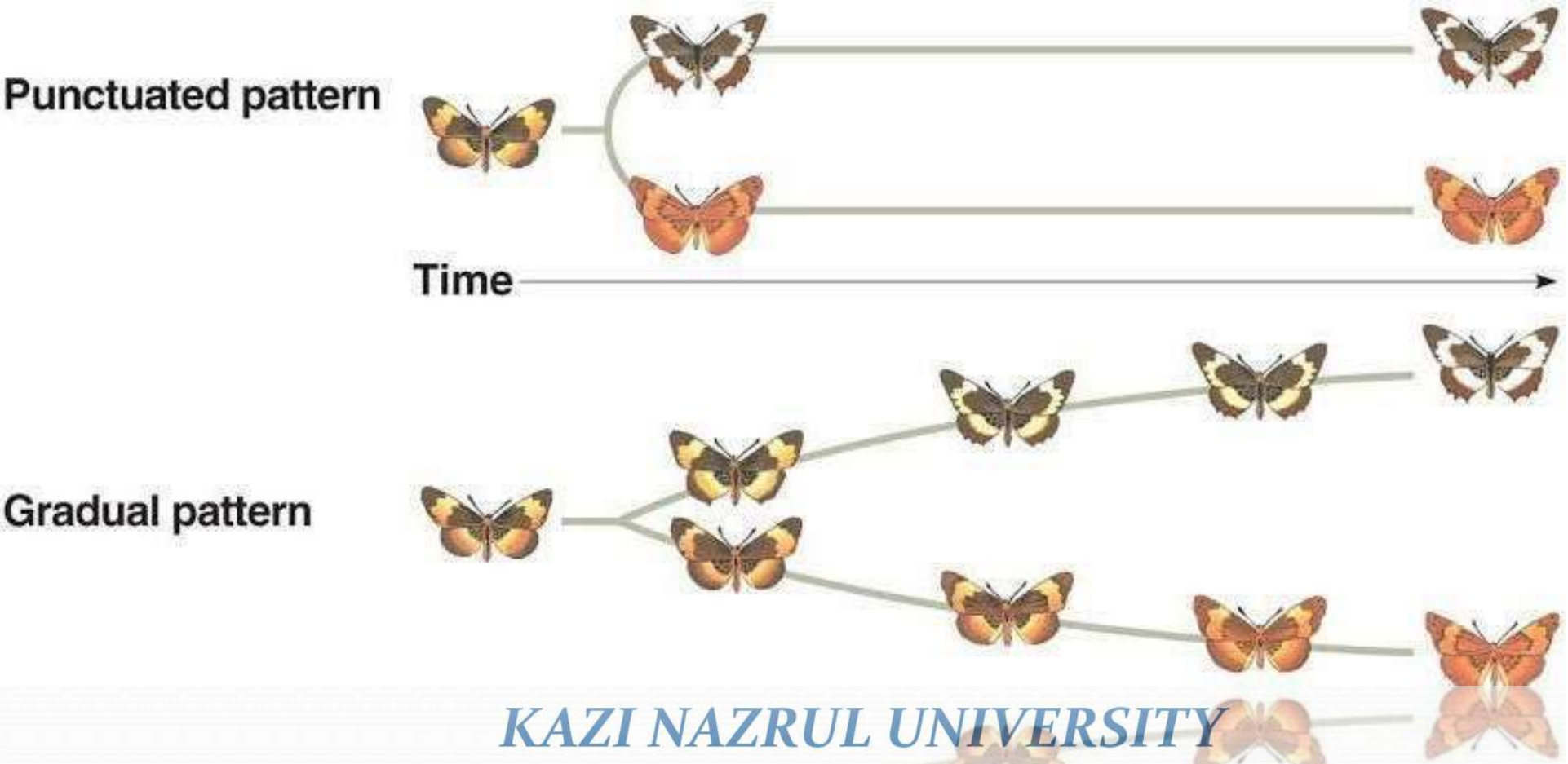
Gradualism

- Gradualism is the theory that change occurs over time.
- To use large words , gradualism is a theory proposed by **James H**
  1795 that states profound change in the product of cumulative
- It is a selection and variation that happens more gradually . Ove
  period of time it is hard to notice .
- Small variations that fit an organism slightly better to its environm
  selected for : a few more with more of the helpful trait survive an
  more with loss of the helpful trait die .
- Very gradually , over a long time population changes . Change
  constant & consistent .

Examples of Gradualism

- Galapagos Turtles & Galapagos Finches





KAZI NAZRUL UNIVERSITY

Topic: Gradualism & Punctuated Equilibrium

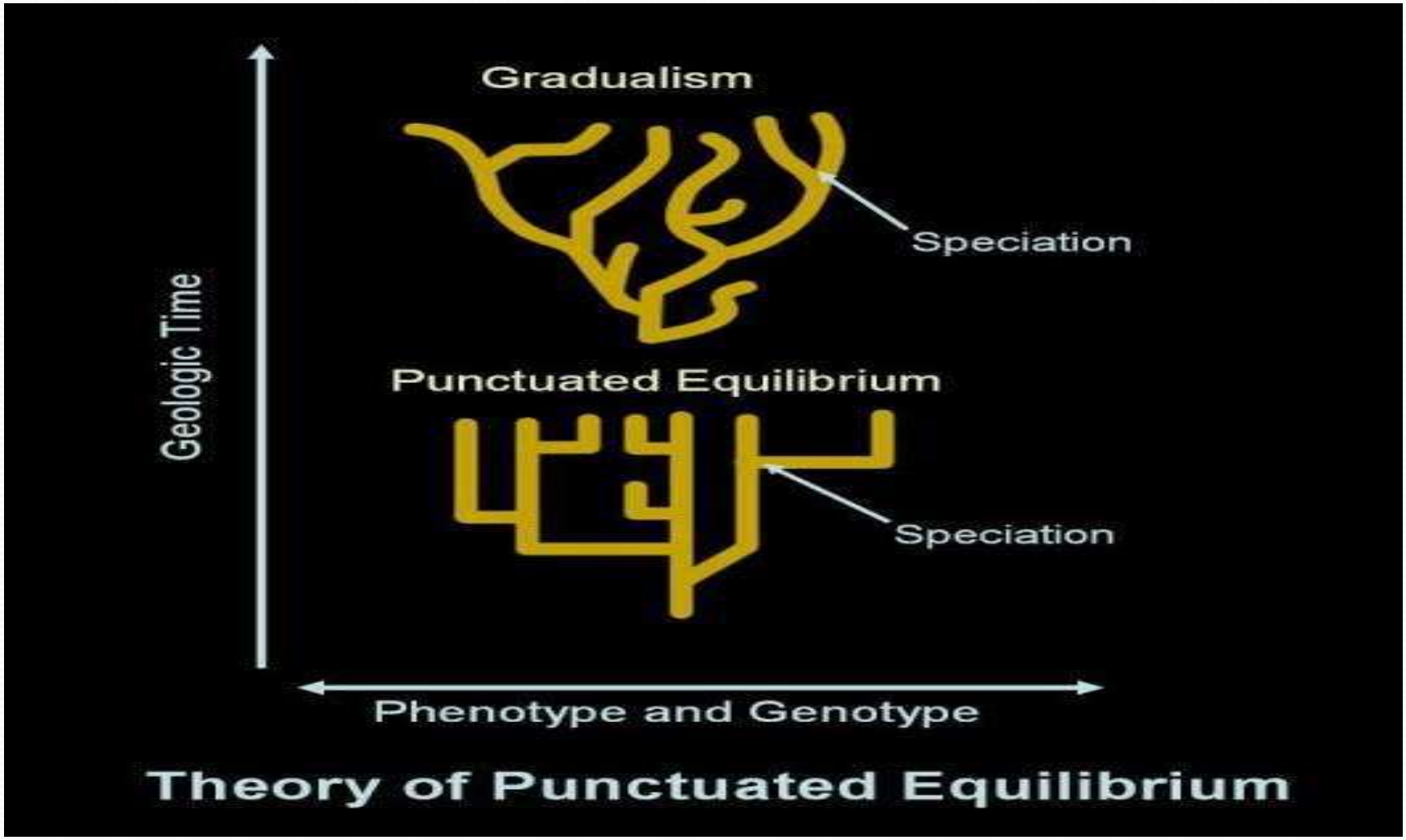
Presented By : Juli Chakraborty

PG 1st Semester , Department of Zoology

GRADUALISM & PUNCTUATED EQUILIBRIUM

- **INTRODUCTION :-** Gradualism and Punctuated Equilibrium is the theory in evolutionary biology which explain how evolution actually works.
- **GRADUALISM :-** Charles Darwin's original theory of natural selection that populations change gradually over time. Small changes are passed from each generation onto the next.
- **PUNCTUATED EQUILIBRIUM :-** A pattern of rapid evolutionary change in the phenotype of a lineage separated by long period of little change.

TWO ALTERNATIVE VIEWS OF THE PROCESS OF DIVERSIFICATION



KEY POINTS

- Punctuated Equilibrium refers to a pattern of change in the fossil record .
- Evolutionary change is concentrated in speciation events.
- Once Species appear in fossil record they will become stable. This lack of substantial changes over millions of years called stasis.
- The absence of missing links is neatly explained by theory.
- Gradualism works with anagenesis and Punctuated Equilibrium works with cladogenesis.

KAZI NAZRUL UNIVERSITY.

M.SC 2nd SEMESTER

ZOOLOGY

ASSIGNMENT

SUBMITTED BY → SOURAV CHATTERJEE.
ROLL NO → 402190133 2043027.
REG NO. → KNU 1900 3268.

TOPIC → VACCINE

M.SC ZOO PAPER (MZGT) 203
UNIT 2 : IMUNOLOGY.

VACCINE :→

• WHAT IS VACCINE ?

A Substance used to Stimulate the production of antibodies & provide immunity against one or several disease, prepared from the causative agent of a disease, its products, or a Synthetic Substitute treated to act as an antigen without including the disease.

Vaccines Stimulate the immune System to develop long lasting immunity against antigens from Specific pathogens.

• WHAT IS VACCINATION ?

Vaccination is the most common method of preventing infection of microorganisms especially bacteria, Viruses etc.

Immunization triggers an immune System response by which the vaccine develops long term protection (immunity) that would normally follow recovery from naturally occuring infections.

• HOW VACCINE WORK ?

The goal of all vaccines is to elicit an immune response against an antigen So that when the individuals is again exposed to the antigen, a much Stronger Secondary immune response will result. Vaccines contain the Same antigens that are found on pathogens that cause the associated disease.

But exposure to the antigens in vaccine is controlled. By priming the immune system through vacination, when the vaccinated individuals is later exposed to the livers pathogens in the environment, the immune system can destroy them before they can cause disease. Thus there are two way of acquiring immunity to a pathogen - by natural infection & by vaccination. Natural infections & vaccines produce a very similar end result - immunity - but the person who receives a vaccine does not endure the illness & its potential life-threatening complications. The very low risk of an adverse event caused by a vaccine greatly outweigus the risk of illness & complications caused by natural infection. The following pages will discuss in further detail the attributes of vaccine & the characteristic causes for adverse events.

- **TYPES OF VACCINES** ⇒ There are many types of vaccine, categorized by the antigen used in their preparation. Following types of vaccines are mainly found:
  A. Live attenuated (LAV) ⇒ Example ⇒ BCG, OPV etc.
  B. Inactivated (Killed antigen) ⇒ Example ⇒ WP, IPV etc.
  C. Subunit (purified antigen) ⇒ Example ⇒ aP, HiV, HepB
  D. Toxoid (inactivated toxins) ⇒ Example ⇒ TT, DpT etc.

- **COMPONENTS OF A VACCINE** ⇒ Vaccines include a variety of ingredients including antigens, stabilizers, adjuvants, antibiotics, & preservatives. They may also contain residual by-products from the production process. Knowing precisely what is in each vaccine can be helpful when investigating adverse events following immunization (AEFIs) and for choosing alternative products for those who have allergies or have had an adverse event known or suspected to be related to a vaccine component.

- **IMPORTANCE OF VACCINATION** ⇒ There has been confusion & misunderstanding about vaccines. But vaccinations are an important part of family & public health. Vaccine prevent the spread of contagious, dangerous, & deadly diseases. These include measles, polio, mumps, chicken pox, diptheria & HPV.
  The first vaccine discovered was the small pox vaccine. Small pox was a deadly illness. It killed 300 million to 500 million people around the world in the last century.

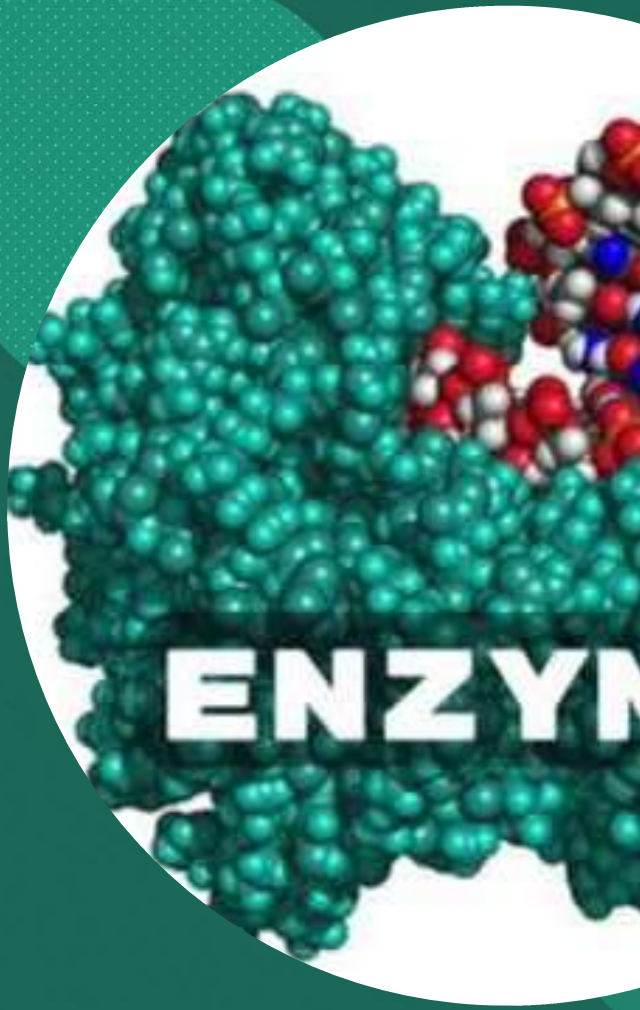

EN

ENZYMES

- Definition

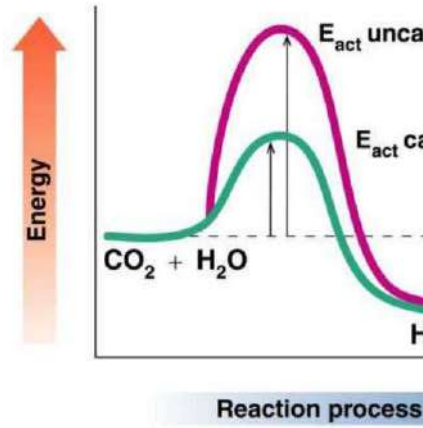
- Enzymes are proteins that function as biological catalysts. A catalyst is a substance that speeds up a chemical reaction but isn't changed by the reaction.

- Enzymes catalyse all aspects of cell metabolism.



Enzymes as Biological Catalysts

- Enzymes are proteins that increase the rate of reaction by lowering the energy of activation
- They catalyse nearly all the chemical reactions
- taking place in the cells of the body
- • Enzymes have unique three-dimensional shapes that fit the shapes of reactants (substrate)

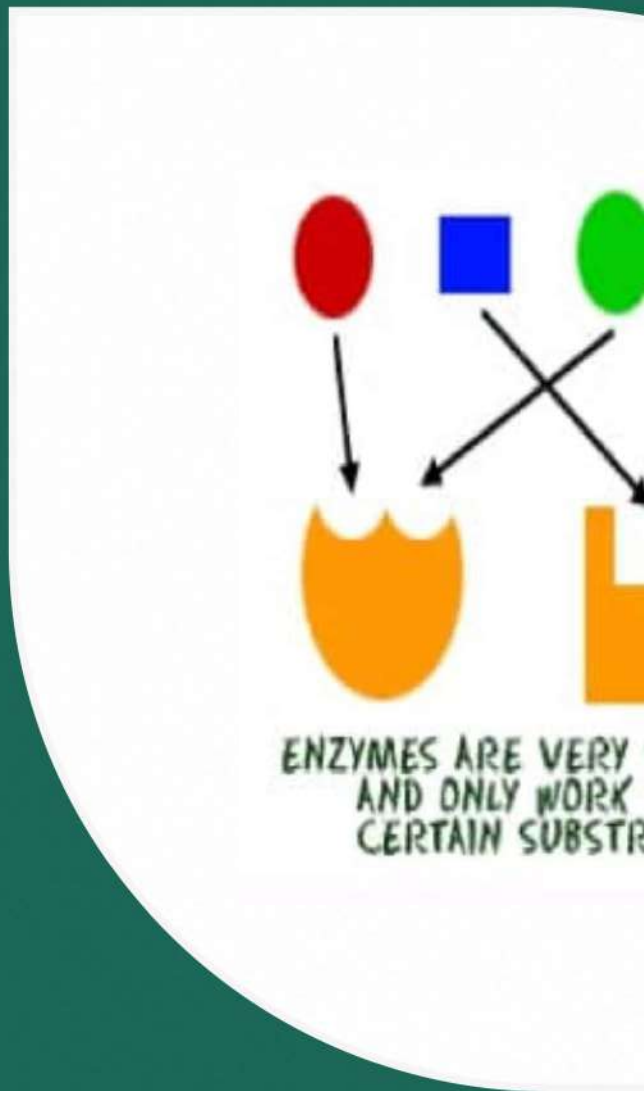


PROPERTIES OF ENZYMES

- Enzymes are highly specific to the reactions they catalyse
- They alter or speed up the rates of chemical reactions that occur in a

cell.

- They remain unchanged after a chemical reaction.
- They are affected by temperature.
- They are affected by pH.
- They catalyse reversible reactions.



ENZYMES

AND ITS

IMPORTANCE

Enzymes are biocatalysts – catalysts of life.

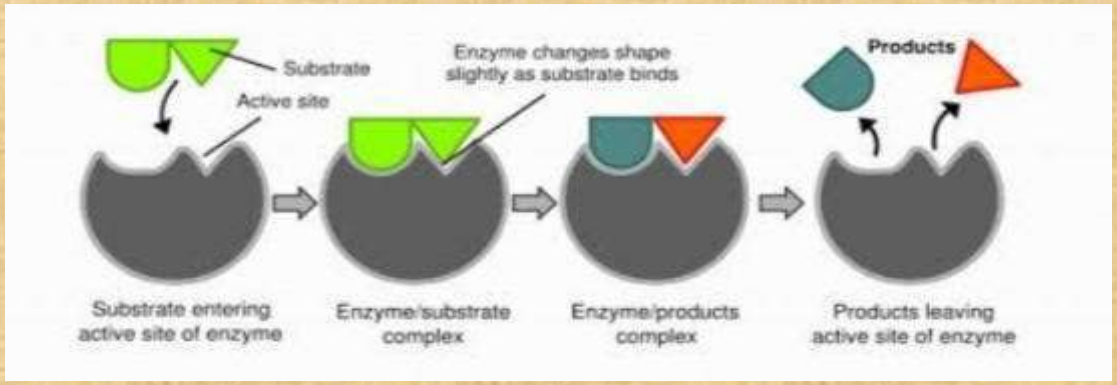
Enzymes are substances acts as a catalyst to bring about specific biochemical reaction by lowering activation energy.

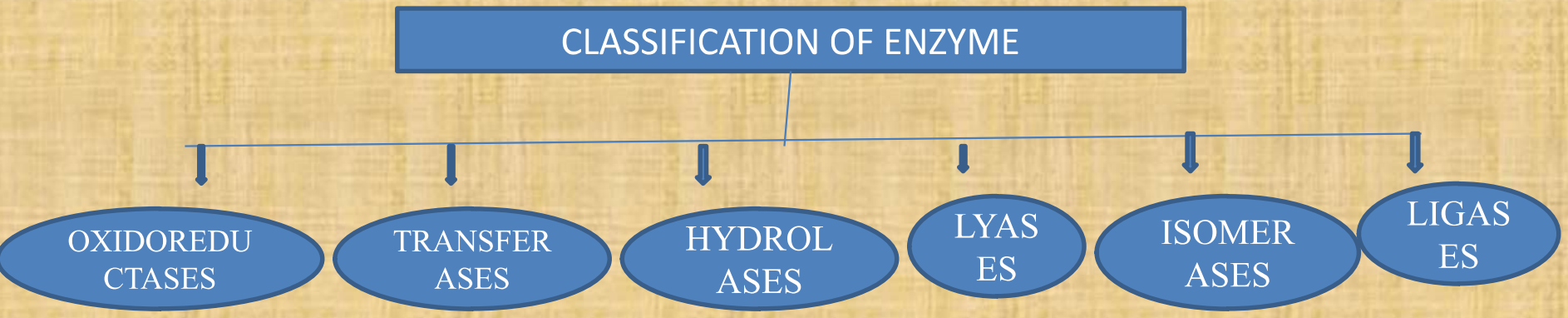
Some features of enzymes are—

- *Required in minute amounts.*
- *Protein in nature.*
- *Acts as catalyst but itself does not change after reaction ends.*
- *Functions specifically i.e. only catalyzes one kind of substrate.*
- *Molecular weights ranging from about 12000 – more than 1 million.*
- *Affected by temperature and pH.*

A simple enzymatic reaction might be written

$$E+S \longleftrightarrow ES \longrightarrow E+P$$





1. **OXIDOREDUCTASE** : Oxidation ⟶ Reduction [$AH_2 + B \rightarrow A + BH_2$]
   Ex : Alcohol dehydrogenase
2. **TRANSFERASES** : Group transfer [$A – X + B \rightarrow A + B – X$]
   Ex : Hexokinase
3. **HYDROLASES** : Hydrolysis [$A – B + H_2O \rightarrow AH + BOH$]
   Ex. Lipase
4. **LYASES** : Addition ⟶ Elimination [$A – B + X – Y \rightarrow AX – BY$]
   Ex. Aldolases
5. **ISOMERASES :** Interconversion of isomers [$A \rightarrow A'$]
   Ex. Triose phosphate isomerase
6. **LIGASES :** Condensation [$A + B \longrightarrow A – B$]
   Ex. Glutamine synthatase

IMPORTANCE

Thousands of enzymes in the human body exist to perform around 5000 different functions. Enzymes play important role in metabolism , diagnosis and therapeutics.

- *IN METABOLISM :*
  - *Digestive enzymes help in the initial stage of food break down. The most important digestive enzymes are –*
  - *Amylase – Produced by salivary glands, small intestine and pancreas. They help in break down starch into simple sugar.*
  - *Lipase – Found majorly in the small intestine, stomach and pancreas. Help in breaking down oils and fats into fatty acids and glycerols.*
  - *Protease – Produced by the small intestine, stomach and pancreas. Help in break down proteins into amino acids.*
  - *Pepsin – Secreted by the stomach to break down proteins into peptides, or smaller groupings of amino acids.*
  - *Trypsin – Activates additional pancreatic enzymes such as carboxypeptidase and chymotrypsin.*