

ASSIGNMENTS



AUTONOMOUS

AFFILIATED TO ACHARYA NAGARJUNA UNIVERSITY

ACCREDITED BY NAAC WITH A GRADE

CHALAPATHI NAGAR, LAM, GUNTUR-522034.

| | |
|-------------------|------------------------------|
| COURSE NAME | : PATHOPHYSIOLOGY. |
| COURSE CODE | : PD2-I. |
| PROGRAMME | : II/VI PHARM-D. |
| ACADEMIC YEAR | : 2021-2022. |
| DEPARTMENT | : PHARMACY PRACTICE. |
| ASSIGNMENT NUMBER | : 02. |
| REGISTER NUMBER | : Y20PHD0125. |
| SUBMITTED BY | : P. YAMUNA PRIYA. |
| SUBMITTED TO | : K. SANDEEP SIR. |
| SUBMISSION DATE | : 10-6-2022 |
| REMARKS | : <u>Parkinson's Disease</u> |
| STUDENT SIGNATURE | EVALUATOR'S SIGNATURE |
| P. Yamuna Priya. | <u>14/6/2022</u> |

ASSIGNMENTS

CHALAPATHI INSTITUTE OF PHARMACEUTICAL SCIENCES

AUTONOMUS

AFFILIATED TO ACHARYA NAGARJUNA UNIVERSITY

ACCREDITED BY NAAC WITH A GRADE

CHALAPATHI NAGAR, LAM, GUNTUR-522034



SUBMITTED BY : N. Mukesh Reddy
REGD NO : Y20BPH0576
COURSE NAME : Medicinal Chemistry-I
COURSE CODE : BP402T
PROGRAMME : B.Pharmacy
ACADEMIC YEAR : 2021-2022
SEMESTER : IV
DEPARTMENT : Department of Pharmaceutical Analysis
ASSIGNMENT NO : 01
SUBMISSION DATE : 1-08-22
SUBMITTED TO : MS. A. Aneetha Rani

A. Aneetha Rani
4/8/2022
EVALUATOR'S SIGNATURE

N. Mukesh Reddy
STUDENT SIGNATURE

REMARKS

Prepared well

10/10

A
4/8/22

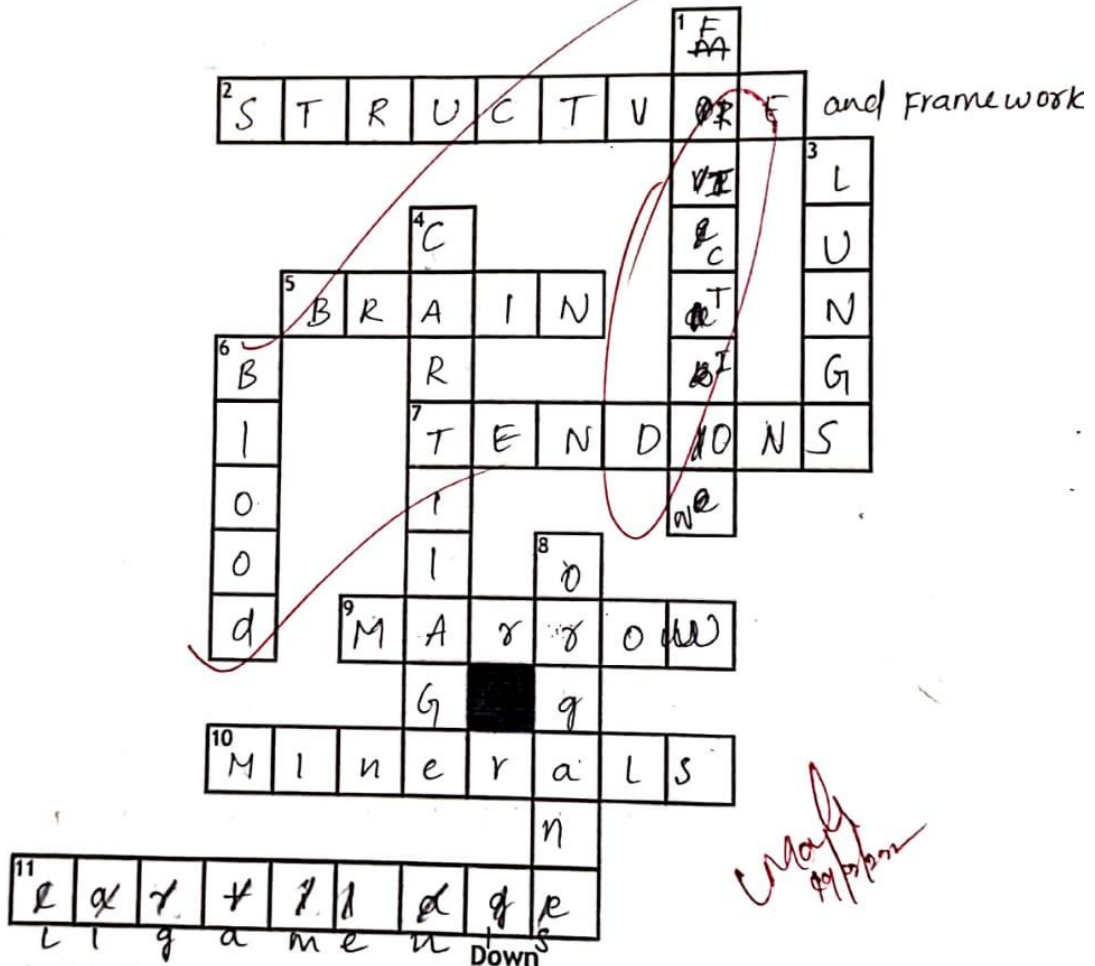
CROSSWORD PUZZLE

M. preethika

Y21 Bp H0542

19/02/2022

Station 2: Functions and Connective Tissues



Across

2. One major job of your skeletal system is to provide a strong moveable capable of movement. *Structure and framework*
5. The brain is protected by the skull.
7. tough bands of tissue that attach your muscle to bones - Tendons
9. What is the soft tissue in the center of your bones? - marrow
10. Bones store minerals, such as calcium and phosphorus.
11. connective tissue that helps connects the bones at each joint - Cartilage
Ligaments

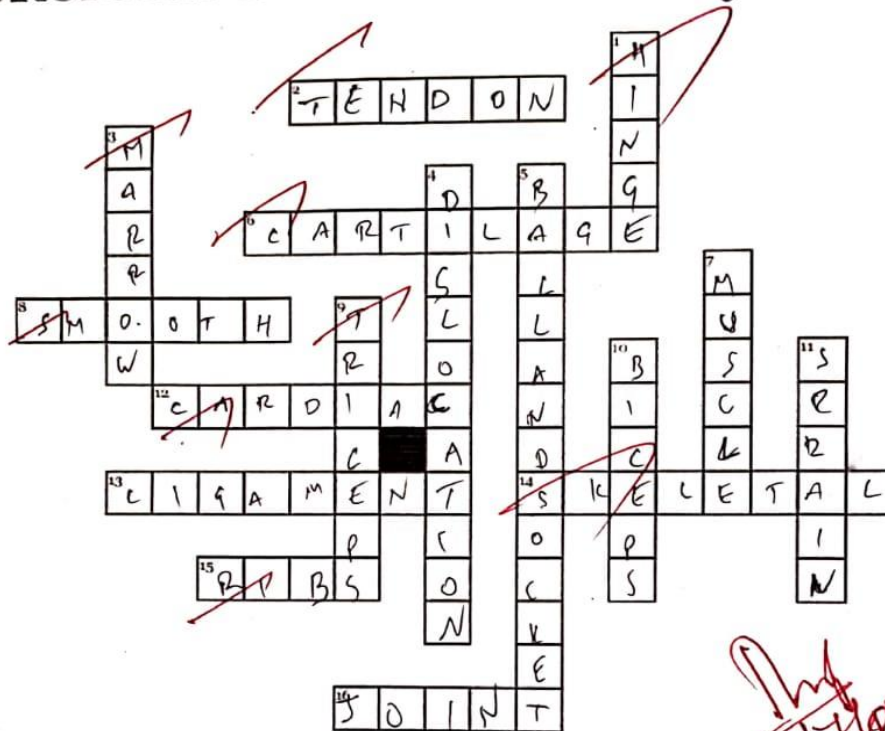
Down

1. Cartilage helps to reduce friction during movement.
3. These organs, which help you breathe, are protected by the ribs. - Lungs
4. Which connective tissue cushions your joints? - cartilage
6. Red bone marrow make millions of Blood cells every day.
8. Another function of the skeletal system is to protect your body's delicate organs.

CROSSWORD PUZZLE

Name: M. Bhargava Reddy Y21BPH020 Date: 17/01/2022

Skeletal and Muscular Systems



Tylosis

Across

- 2. connects bone to muscle
- 6. flexible connective tissue that makes up our nose and ears
- 8. type of muscle that is involuntary; controls breathing, bp, and digestion
- 12. muscle tissue found in the heart
- 13. connects bone to bone

14. type of muscle that is voluntary and striated
15. protects the lungs and other vital organs

- 16. place where bones come together**

Down

1. type of joint found in the knee and elbow
3. helps make red and white blood cells

4. occurs when a bone is forced out of its joint

- ### 5. Joint found in the shoulder and hip

7. only type of tissue that is able to contract

- 9. back of the arm muscles**

- 10. front of the arm muscles**

- 11. occurs when ligaments or tendons are pulled beyond their normal range**

MINOR RESEARCH PROJECT



CHALAPATHI INSTITUTE OF PHARMACEUTICAL SCIENCES

AUTONOMOUS

(Affiliated to ACHARYA NAGARJUNA UNIVERSITY)

Accredited by NAAC with 'A+' Grade and Accredited by NBA (B.Pharmacy)

LIST OF STUDENTS ENROLLED FOR MINOR PROJECTS FOR THE ACADEMIC YEAR 2021-2022

| Sl.No. | Name of the Student | Regd.No. | Course & Year of study | Name of the Faculty (Research Guide) & Research topic |
|--------|----------------------|------------|------------------------|--|
| 01 | P.Ramya Sri | Y19BPH0573 | III B.Pharmacy | T.Joshi Anand Herbal Migrane Balm |
| | B.Harisha | Y19BPH0528 | | |
| | Sk.Sajid | Y19BPH0514 | | |
| | B.Dinesh | Y19BPH0518 | | |
| 02 | K.Swethanjali | Y19BPH0552 | III B.Pharmacy | T.Joshi Anand Herbal Crack Cream |
| | G.Harshitha | Y19BPH0537 | | |
| | D.Pravallika | Y19BPH0503 | | |
| | P.Madhuri | Y19BPH0513 | | |
| 03 | R.Siva Teja | Y19BPH0579 | III B.Pharmacy | T.Joshi Anand Herbal mosquito repellent cream |
| | P.Praveen | Y19BPH0567 | | |
| | P.Narendra | Y19BPH0570 | | |
| | P.Pundarikakshayya | Y19BPH0571 | | |
| 04 | R.Mounica | Y19BPH0582 | III B.Pharmacy | T.Joshi Anand Anti dandruff gel |
| | A.Sivani | Y19BPH0587 | | |
| | T.Lasya Priya | Y19BPH0592 | | |
| | P.Yasaswi Sowbhagya | Y19BPH0602 | | |
| | S.N.R.V.L.Tejaswi | L20BPH0606 | | |
| 05 | K.Sai Lakshmi | | III B.Pharmacy | T.Joshi Anand Herbal Analgesic (Powder) |
| | Ch.Ramya Sri | | | |
| 06 | M.Sravani | Y18BPH0568 | IV B.Pharmacy | T.Sreenu Herbal Hair Oil (Multi-purpose) |
| | K.Harsha Vardhini | Y18BPH0557 | | |
| | K.Leela Lahari | Y19BPH0555 | | |
| | M.L.V.N.Akhila | Y18BPH0562 | | |
| 07 | A.Naga Latha | Y18BPH0571 | IV B.Pharmacy | T.Joshi Anand Herbal Lozenges (Economy) |
| | Sk.Shaheena Sultana | Y18BPH0592 | | |
| | T.Bala Nividha Reddy | Y18BPH0596 | | |
| 08 | T.Naga Sai Sushma | Y18BPH0516 | IV B.Pharmacy | Dr.N.Rama Rao Oral powder of Rivaroxaban |
| | B.Manju Bhargavi | Y18BPH0529 | | |
| 09 | Ch.Sai Deepika | Y18BPH0534 | IV B.Pharmacy | Dr.N.Rama Rao Design and development of herbal formulation to treat Alzheimer's Disease |
| | D.Naga Deepthi | Y18BPH0540 | | |
| | G.Praveena | Y18BPH0546 | | |
| 10 | P.Aiswarya | Y19BPH0574 | III B.Pharmacy | T.Joshi Anand Antidiabetic capsules |
| | S.Leela Lakshmi | Y19BPH0588 | | |
| | B.Sri Lakshmi | Y19BPH0526 | | |
| | V.Sri Gayathri | Y19BPH0596 | | |

MINOR RESEARCH PROJECT

| | | | | |
|----|----------------------------|-------------|-------------------|---|
| 11 | B.Meghana | Y19BPH0527 | III B.Pharmacy | T.Joshi Anand |
| | S.Hari Krishna | Y19BPH0544 | | Herbal Tooth Decay |
| | R.H.Kowtina | Y19BPH0545 | | Pain Relief Gel |
| | K.Phanindra | Y19BPH0549 | | |
| 12 | P.Vikash | Y20MPHRA469 | II M.Pharmacy | Y.Koushik Ging Pure (Immune Booster) |
| 13 | K.Ramya Haritha | Y19BPH0556 | III B.Pharmacy | T.Joshi Anand |
| | P.Rupanjali | Y19BPH0577 | | Anti acne herbal |
| | N.Akhila | Y19BPH0560 | | cream |
| | K.Vaishnavi Devi | Y19BPH0554 | | |
| | R.Bhanu | Y19BPH0581 | | |
| 14 | M.Tarani | Y18PHD0115 | IV Pharm.D | G.Siva Bharath |
| | G.Kavya | Y18PHD0107 | | Organic candle |
| 15 | K.Sireesha | Y18PHD0109 | IV Pharm.D | Asiya Begum |
| | B.Arnica | Y18PHD0101 | | Herbal Hand Sanitizer |
| 16 | V.Haritha Devi | Y21mphpy447 | I M.Pharmacy | T.Sreenu |
| | P.Chaitanya Sai | Y21mphpy446 | | Herbal pain balm |
| 17 | G.Sai Pravallika | Y19BPH0535 | III B.Pharmacy | T.Joshi Anand |
| | J.Nithisha | Y19BPH0547 | | Lipbalm |
| | Ch.Sai Kiran | Y19BPH0530 | | |
| | J.Badrinath | Y19BPH0548 | | |
| 18 | B.Satish | Y19BPH0519 | III B.Pharmacy | T.Joshi Anand |
| | A.Phanindra Kumar | Y19BPH0502 | | Natural Hair Dye |
| | D.Naga Nitish | Y19BPH0533 | | |
| | G.Suresh Kumar | Y19BPH0541 | | |
| 19 | G.Geethika | Y19BPH0534 | III B.Pharmacy | T.Joshi Anand Herbal Cream for Dark Circles |
| 20 | Y.Preeti | Y19BPH0600 | III B.Pharmacy | T.Joshi Anand |
| | Sk.Ashrafunnisa | Y19BPH0584 | | Facial Cream |
| | Y.Revathi | Y19BPH0604 | | |
| | Sk.Moina | Y19BPH0586 | | |
| 21 | P.Meghana | Y19BPH0566 | III B.Pharmacy | T.Joshi Anand |
| | K.Leela Lahari | Y19BPH0555 | | Transdermal patches for Menstrual cramps |
| | V.Akhila | Y19BPH0595 | | |
| | Y.Lasya Chowdary | Y19BPH0601 | | |
| 22 | D.Swetha | Y19BPH0532 | III B.Pharmacy | T.Joshi Anand |
| | A.Sravani | Y19BPH0516 | | Joint Pain - Neutraceutic al |
| | K.M.Amruthavarshini | Y19BPH0550 | | |
| | P.Sreya | Y19BPH0568 | | |
| 23 | Ch.Priyanka | Y19BPH0529 | III B.Pharmacy | T.Joshi Anand |
| | Ch.Supriya | Y19BPH0531 | | Immuno booster capsules |
| | K.Ravi Teja | Y19BPH0551 | | |
| | K.Sasidhar | Y19BPH0553 | | |
| 24 | V.Gayathri | Y19BPH0515 | III B.Pharmacy | T.Joshi Anand |
| | B.Sai Hanumanthu Harish | Y19BPH0520 | | Herbal Cough and Cold Syrup |
| | G.Navya | Y19BPH0538 | | |
| | G.Surekha | Y19BPH0541 | | |
| 25 | V.Yogaswi | Y19BPH0594 | III B.Pharmacy | T.Joshi Anand |
| | V.Karthikeya | Y19BPH0505 | | Dry Shampoo |
| | B.Rohitha | Y19BPH0521 | | |
| | R.Navya Pavani | Y19BPH0580 | | |

MINOR RESEARCH PROJECT

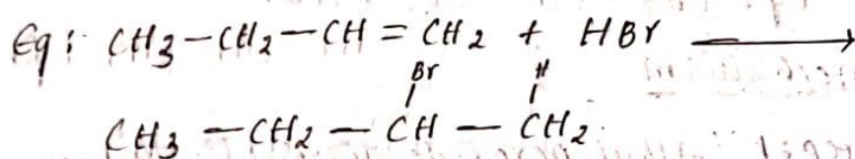
| | | | | |
|----|-------------------------|------------|-------------------|------------------------------------|
| 26 | G.Namitha | Y19BPH0542 | III B.Pharmacy | T.Joshi Anand |
| | K.Anudeepthi | Y19BPH0508 | | Body Scrub |
| | K.Maina deepika | Y19BPH0509 | | |
| | P.Sri Lakshmi | Y19BPH0565 | | |
| 27 | K.Nataraja Rao | Y19BPH0562 | III B.Pharmacy | T.Joshi Anand |
| | N.Narasimha Rao | Y19BPH0563 | | Anti dandruff hair oil |
| | U.Anil | Y19BPH0593 | | |
| | Sk.Azees | Y19BPH0585 | | |
| | K.Vishnuvardhan | Y19BPH0507 | | |
| 28 | B.Satish | Y19BPH0519 | III B.Pharmacy | T.Joshi Anand Herbal Pain Oil |
| 29 | G.B.N.Siva Sai Teja | Y19BPH0523 | III B.Pharmacy | T.Joshi Anand |
| | G.Nitesh | Y19BPH0564 | | Herbal |
| | V.N.V.Sainadh Reddy | Y19BPH0597 | | psoriasis ointment |
| | V.Karthikeya | Y19BPH0505 | | |
| 30 | J.Badrinath | Y19BPH0548 | III B.Pharmacy | T.Joshi Anand Herbal Mouth wash |
| 31 | P.Sree Geetha Vaishnavi | Y19BPH0569 | III B.Pharmacy | T.Joshi Anand |
| | P.Naga Bhargavi | Y19BPH0578 | | Bitter tonic syrup |
| | N.B.Tripura Sundari | Y19BPH0561 | | |
| | M.V.Sonu | Y19BPH0559 | | |
| 32 | G.B.N.Siva Sai Teja | Y19BPH0523 | III B.Pharmacy | T.Joshi Anand |
| | G.Nitesh | Y19BPH0564 | | Herbal ringworm ointment |
| | V.N.V.Sainadh Reddy | Y19BPH0597 | | |

SLIP TEST

7/7/22 Pharmaceutical Organic Chemistry Y21PHD0122.

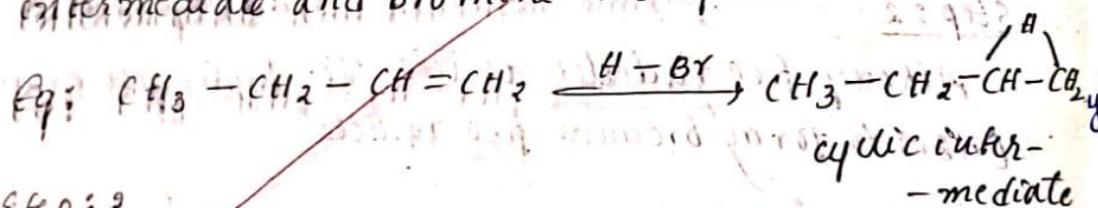
1: Markovnikov's Rule

When an addition of unsymmetrical reagent to an unsymmetrical Alkenes, the positive part of the reagent become attaches to the reagent double bond carbon atom which is having greatest no of hydrogen atom.



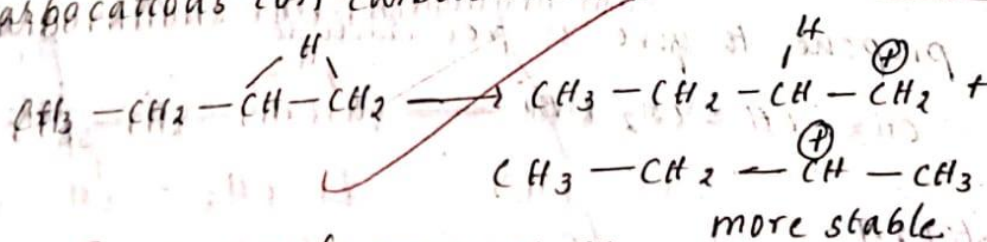
Mechanism

1: Step: 1 formation of π complex giving cyclic intermediate and bromine nucleophile.



Step: 2

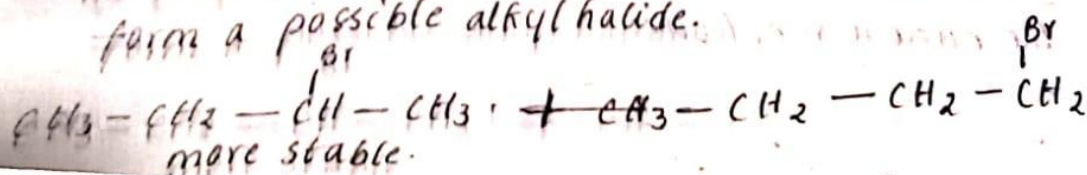
The cyclic intermediate capable of forming a two carbocations (a) carbocation ion.



Br^\ominus attaches to more stable carbocation.

Step: 3

The carbocation ion reacts with the nucleophile to form a possible alkyl halide.



SLIP TEST

6/07/22

Slip Test-1.

Y20BPH0551.

J. Manawini.

Q.1. Partition Coefficient influence Biological Activity - An Example

Q.2. Classical Bioisosterism and its application - 1 Drug Molecule

Q.3. Importance of Optical isomers on Biological Activity - An Example.

Q.4. Ionisation of Drug in relation to P^H - Explain.

Q.5. Physicochemical Properties of Drug - An Overview.

Answers:-

1A) Partition Coefficient is more, it implies the more lipophilic character.

Partition Coefficient is given by Distribution Rat

$K_{ow} = \frac{\text{Concentration of drug in organic Phase}}{\text{Concentration of drug in aqueous layer}}$

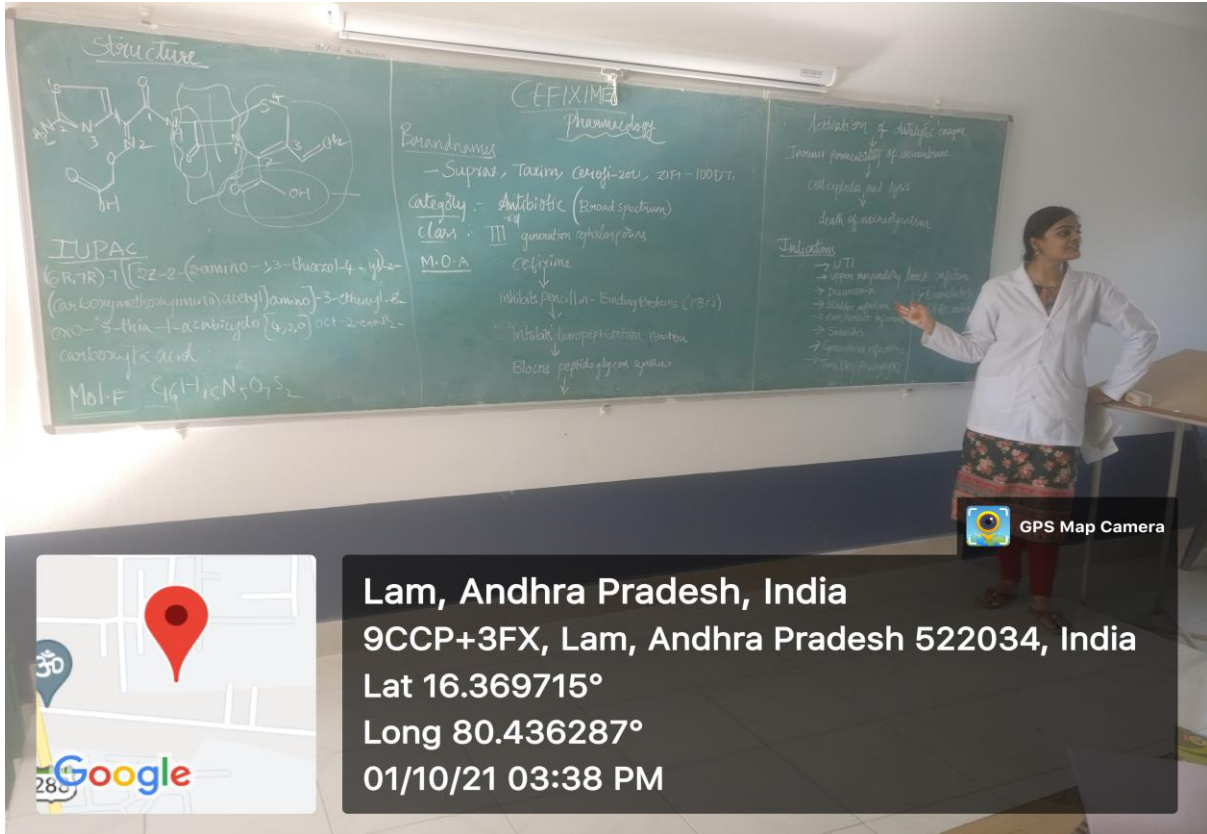
→ More the partition Coefficient, More the lipophilic character.

Ex:- n-Octanol and Water System.

→ More lipophilic character helps in Easy Pass of drug into the Cell.

→ Equal Quantities of both the organic & Aqueous Layer is taken and amount of drug distributed is Calculated.

STUDENT SEMINAR



Structure

Chemical structure of Cefixime is shown. IUPAC: (6R,7R)-7[(2Z-2-(amino-1,3-thiazol-4-yl)-2-((carboxymethylamino)acetyl)amino)-3-thienyl-2-oxo-5-thia-1-azabicyclo[4,3,0]oct-2-en-9-ylidene]carboxylic acid. Mol. F: $C_{16}H_{15}N_5O_7S_2$.

Pharmacology

Brand names
- Suprax, Tazim, Cefixi-200, ZIF-1000, etc.

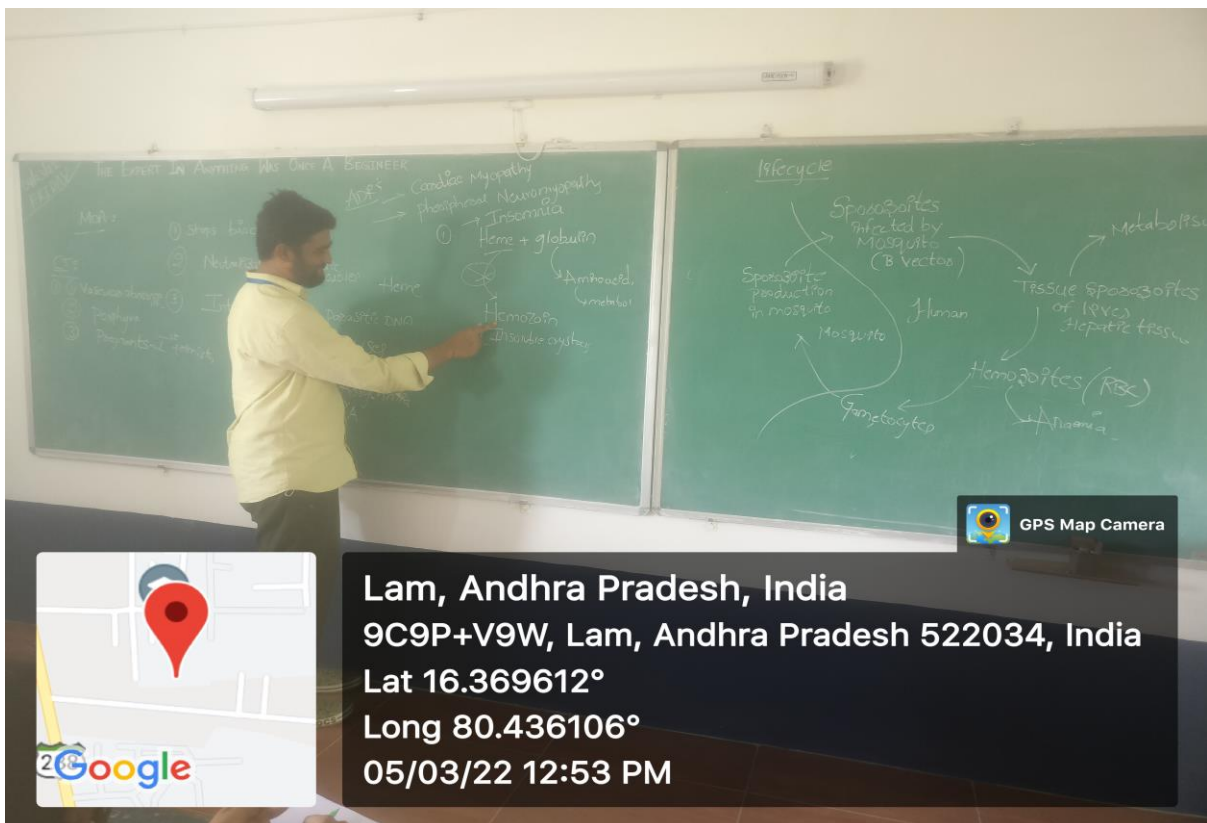
Category - Antibiotic (Broad spectrum)

Class - III generation cephalosporins

M.O.A Cefixime inhibits penicillin-binding proteins (PBPs) in the cell wall synthesis of bacteria, leading to cell lysis and death.

Indications
- UTI
- Acute otitis media
- Acute sinusitis
- Acute tonsillitis
- Acute pharyngitis
- Acute bronchitis
- Acute pneumonia

Lam, Andhra Pradesh, India
9CCP+3FX, Lam, Andhra Pradesh 522034, India
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Life cycle

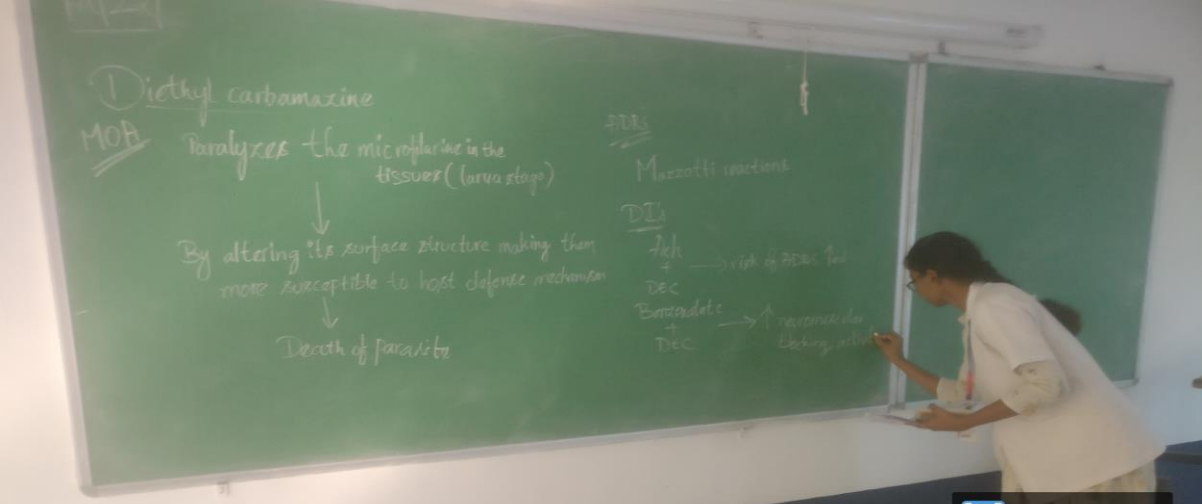
The life cycle of Plasmodium is shown, involving the mosquito and human hosts. Sporozoites are injected by the mosquito into the human host, where they develop in the liver, then in the red blood cells (RBCs), and finally in the spleen and bone marrow. The cycle then returns to the mosquito when it bites the human host.

Clinical manifestations

The clinical manifestations of malaria are listed, including fever, chills, sweating, headache, muscle aches, and fatigue. The cycle of symptoms is shown as a repeating pattern.

Lam, Andhra Pradesh, India
9C9P+V9W, Lam, Andhra Pradesh 522034, India
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STUDENT SEMINAR



Diethyl carbamazine

MOA Paralyzes the microfilariae in the tissues (larva stage)

↓

By altering its surface structure making them more susceptible to host defense mechanism

↓

Death of parasite

Mazzotti reaction

DI

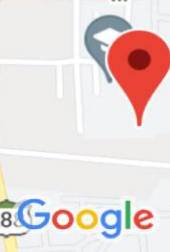
↓

DEC → Swelling of B cells

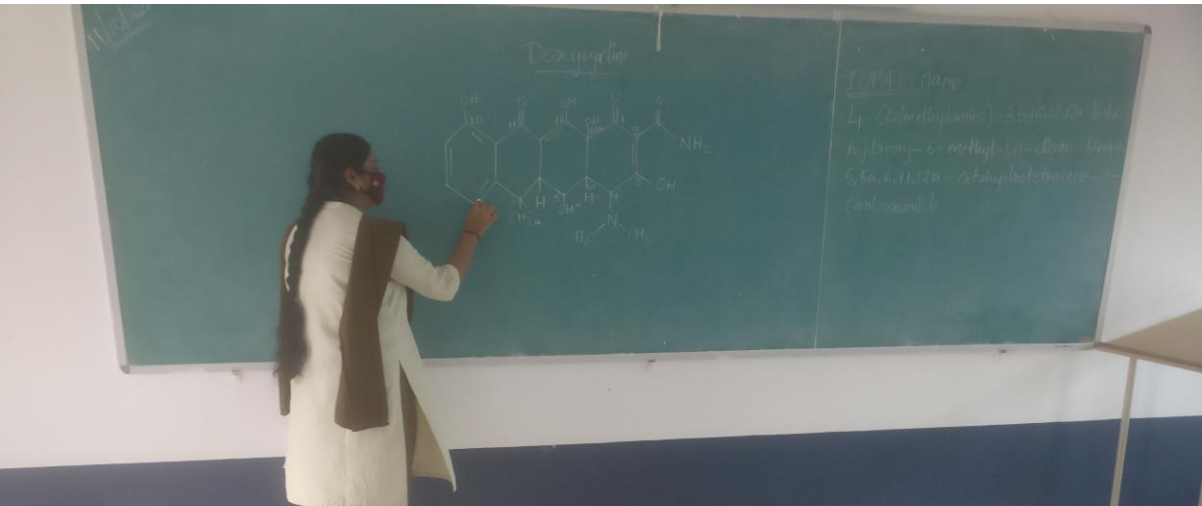
↓

↑ macrophage killing activity

GPS Map Camera

 Google

Lam, Andhra Pradesh, India
9C9P+V9W, Lam, Andhra Pradesh 522034, India
Lat 16.369669°
Long 80.436404°
19/02/22 04:12 PM



Doxycycline

CC1=C(C(=O)NC2=C(C(=O)N(C)C)C(=O)N(C)C2)C(=O)N(C)C1

Tetracycline

Lys (dimethylammonium)-2,5,6,10,12a

Lys (dimethylammonium)-2,5,6,10,12a

Lys (dimethylammonium)-2,5,6,10,12a

Lys (dimethylammonium)-2,5,6,10,12a

Lys (dimethylammonium)-2,5,6,10,12a

GPS Map Camera

Lam, Andhra Pradesh, India
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Lat 16.369694°
Long 80.436304°
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