Handwritten Notes

On

Disease

Disease

Dis + ease.

- **Congenital.** (By gene & chroms)
  - * Aids is not congenital b/2 Sperm + ovum में नहीं होता बल्कि mother से Foetus में Transfer होता है।
- **Acquired.**
  - **Infectious.** ex:- common cold. AIDS.
  - **Non-Infectious** Ex:- cancer → Hormonal disorder. → Vitamin deficiency.

* All communicable diseases are infectious But all infectious diseases are not communicable. Ex:- Tetanus.

Good Humor Hypothesis
1. Blood.
2. phelgm (कफ)
3. Bile (पित्त) → Good.
   → Bad. (Black).

Health

Affected by	Regulated	Affects
1. Infectious.	1. Balance diet.	1. productivity ↑
2. Genetic disorder.	2. Personal Hygiene.	2. prosperity ↑
3. Sedantry life Style.	3. Exercise / yoga.	3. longetivity of life ↑
		4. maternal & Infant mortility Rate ↓.

* prophylaxis → Disease होने से पहले उसके बचाव के उपाय।
* Etiology → Study of cause of disease.
* Epidemology → Mode of Transmission.

⑥ Entry of Pathogen. — Incubation Period. → 1st Symptom Appear

Window period. → Minm duration in which pathogen can be detected in lab.

Normally → W.P > I.P

AIDS → W.P < I.P

→ Antibiotics का Bacteria के Against देते हैं virus पे और कोई Bacteria attack न करे तो Doctor के नहीं। So common cold पहले ही Antibiotic दे देते हैं।

Antibiotics.

Bacteriostatic (Inhibit growth)
Ex:→ Tetracyclin.

Bacteriolytic/Bacteriocidal. (Kill)
Ex:- Amoxycillus.
ciprofloxics.
Streptomysin.

→ first discovered antibiotic → penicilline.
→ " " Bacterial " → ciprofloxics.

Analgesic:→ (painKiller).

Analgesic →
Tissue injury
↓
Release of prostaglandin. (PG)
↓
Stimulate pain Receptor.
↓
Felling of pain.

Ex:→
1. Nimusulide.
paracetamol.
Diclophenac Sodium.
" Potassium.
Aspirin.
opiate derivative (Morphine) → ज्यादा दर्द होने पर

Aspirin

↓

Platelet Aggregation. (जमाव, एकत्रीकरण)

Antipyretic

(Antifebrile)

pyrexia = fever

Entry of pathogen.

↓

Release of Toxin.

↓

Hypothalamus.

↓

Release of prostaglandin (PG)

↓ stimulate.

Temp. Regulating centre activity ↑

↓

Body temp ↑

1.) paracetamol (1st choice of drug)

2.) Nimusulide.

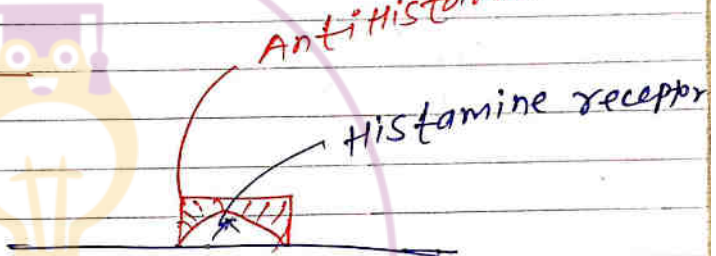
3. Best Method to reduce pyrexia → Sponging.

NOTE:-

* All Antipyretic Acts as Analgesic but all Analgesic (x) does not acts as Antipyretic.
  - SOS
  - " (L)
  - Morphine

* Receptor for morphine on hypothalamus are not present.

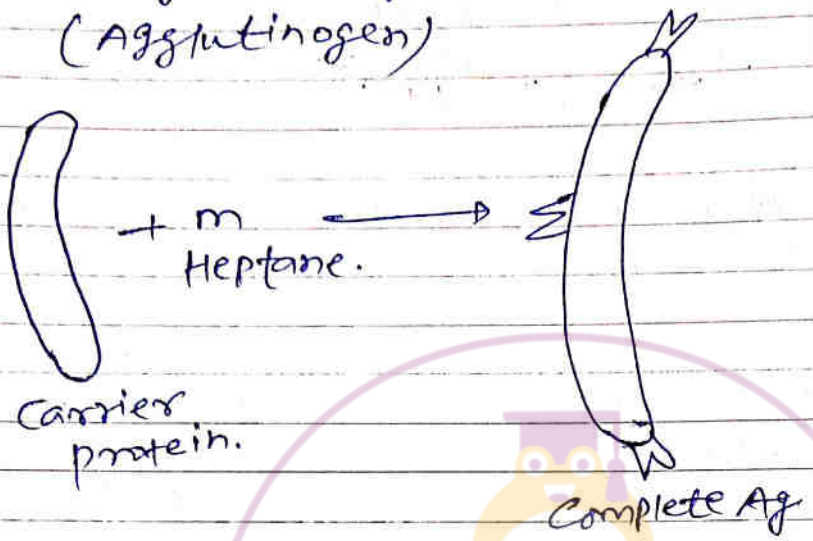
* Antihistaminic (AntiAllergic)



ex:- avil.
→ cetrizin
→ levocetrizin.

* Antibody is glycoproteinous substance.

(1) Antigen → Ag (Agglutinogen)



Ag
- self → Auto-immune disorder.
- Non-self

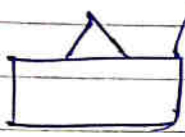
* Ag + Ab = Agglutination.
↓
Serology.

Blood – corpuscle = plasma.
plasma – fibrinogen = serum.
(clotting factor)

performed Ab + serum = Antiserum.

ATS = Anti Tetnus Serum
ADS = " Deptherial "
ARS = " Rabies "
AVS = " Venum "
ASV = " Snake venum.

Toxoid



Exotoxin
↓
Detoxify
↓
used for Antigenic property.
↓
Formation of Ab.

Ex :→
TT = Tetnus Toxoid
DT = Deptherial "
BT = Botulism "
⇑
Claustridium Botulism.
(Food - Poisioning)
⇓
(effect in nervous system)

* Tetnus में हम TT का Injection लगाते है ATS का नहीं emergency में।

Cytokine

1. WBC —Interleukin.→ WBC
2. lymphocyte —Lymphokinin.→ lymphocyte.
3. Monocyte/Macrophage —monokinins→ Lymphocyte.

Immunity

- Innate
- Acquired.

→ 1st & 2nd line of defense.
→ Non-specific.

- Physical.
  - Skin
  - Mucosa.
- Physiological.
  - Fever
  - PH
  - Secretion.
- Cellular
  - Phagocytosis
  - Non-Phagocytosis.
- Cytokine
  - Interferon.
- Inflammation.

→ Glycogen 2% में liver में 2% muscle में store होता है।

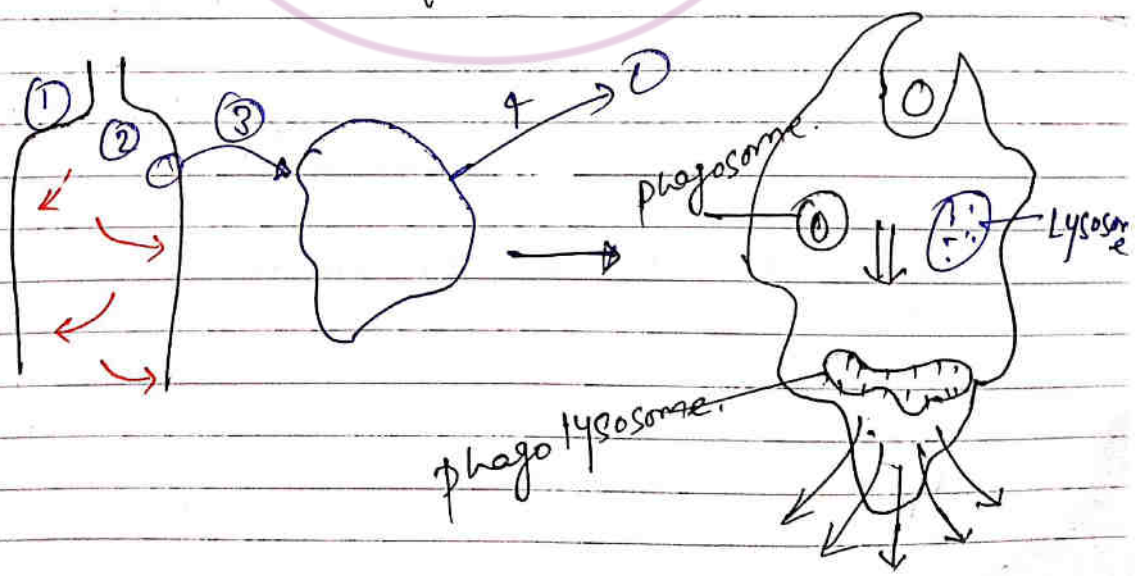
Helicobactor pylori.

Lactobacillus Acidophillus. (In vaginal wall)

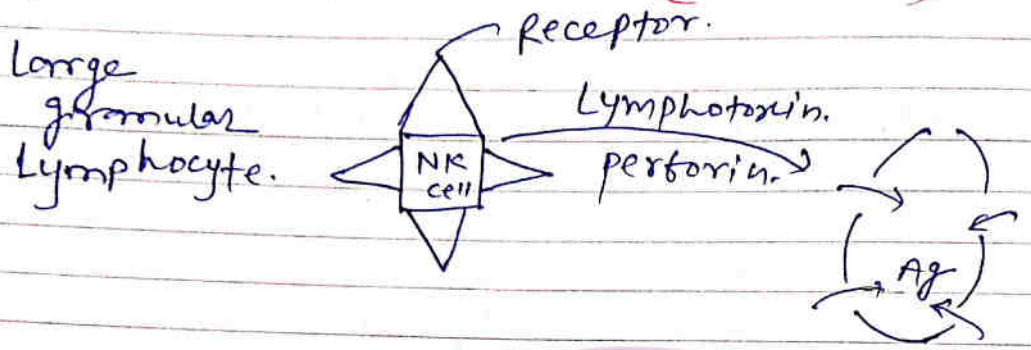
Glycogen → Lactic Acid (4-5 pH)

Monocyte.
Neutrophil
PMNL
Poly
Morpho
Nuclear
Leucocyte

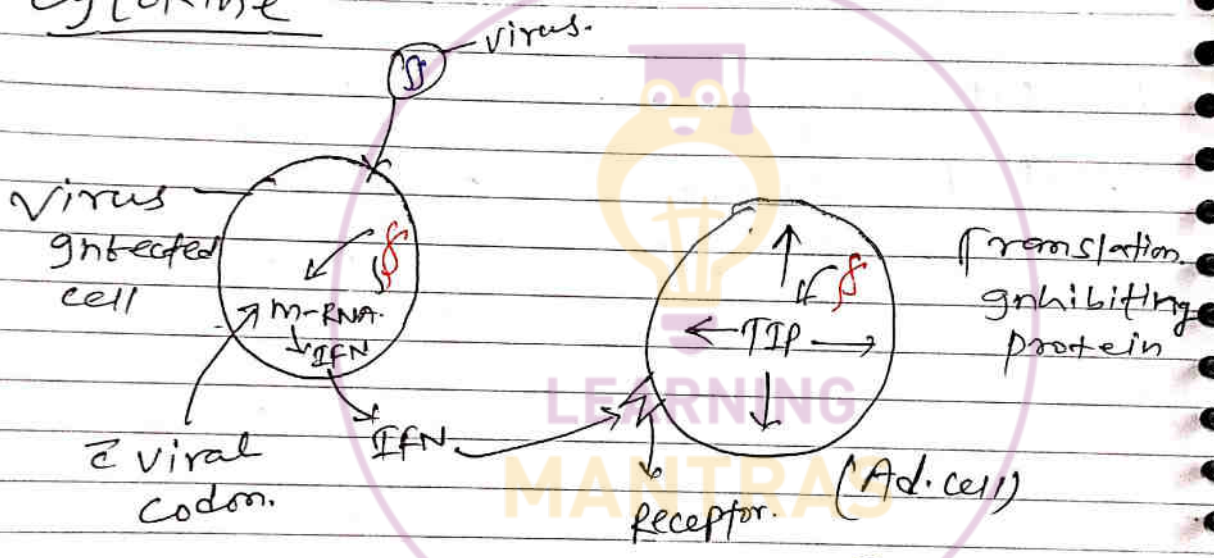
1. vasodilation
2. Adhesion.
3. Dipedesis.
4. chemotaxis
5. phagocytosis
   a. attachement.
   b. Ingestion.
   c. killing.



Natural killer cell (NK cell)



Cytokine

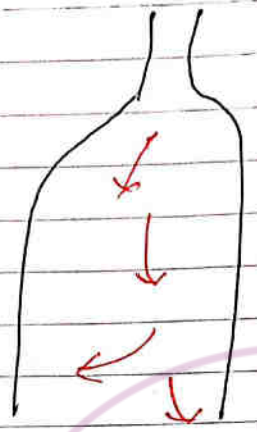


IFN → species specific and virus Non-specific.

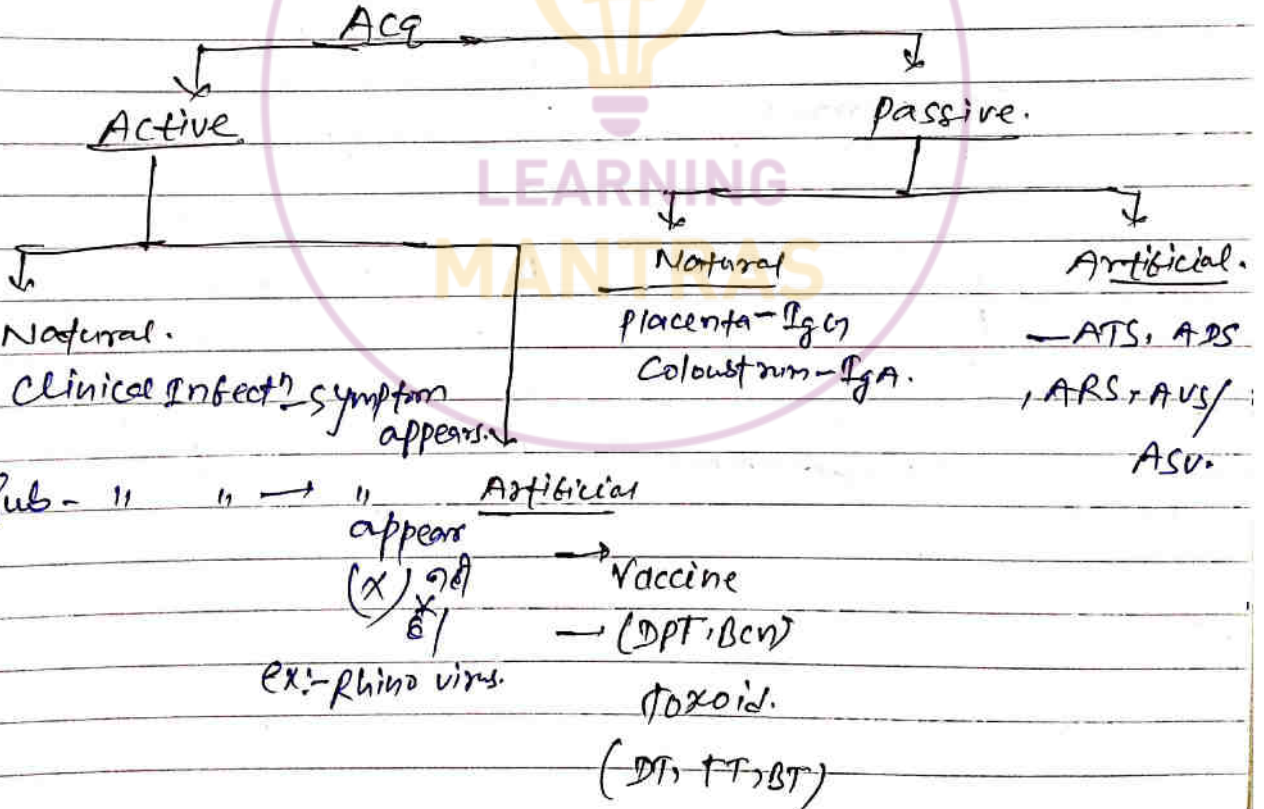
α-IFN = Kaposi Sarcoma.

Fever is Beneficial for ... but we minimize it b/z some enzyme get dehydrate (degenerate) in high temp.

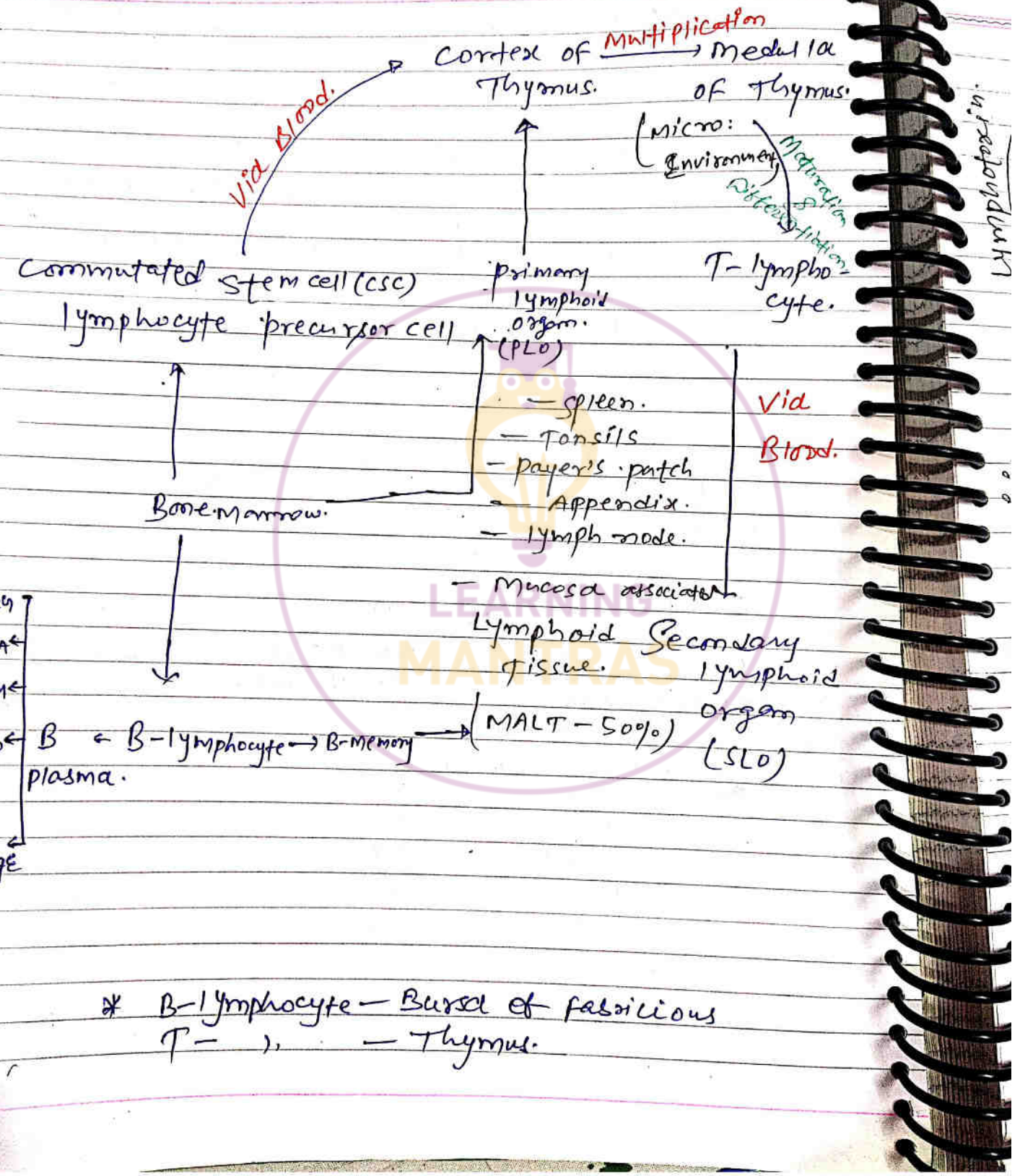
Inflammation



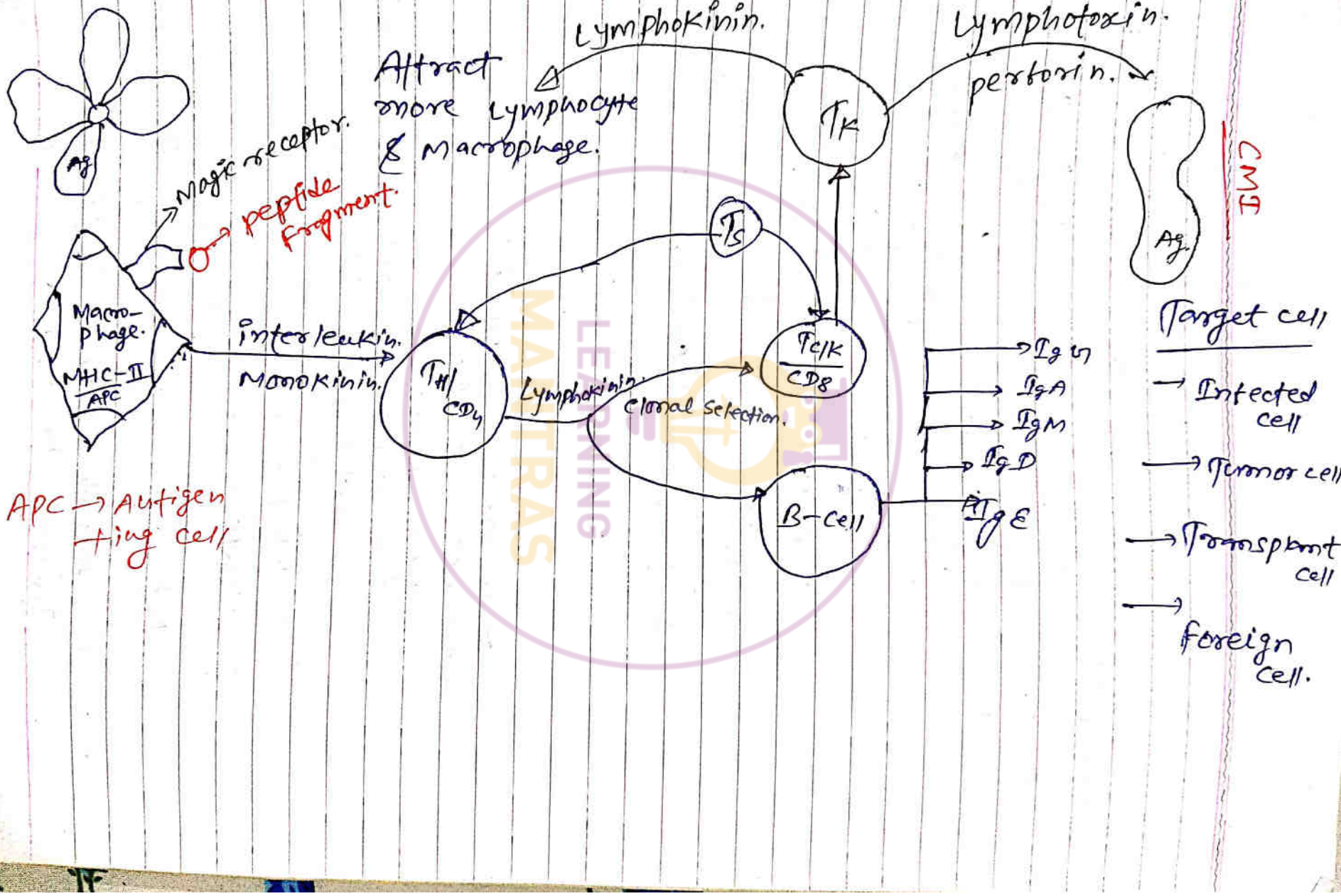
Redness = Rubor.
Temp = calor.
Swelling = Tumor.
Pain = Dolor



Lymphoid organ



* B-lymphocyte — Bursa of fabricious
  T- " — Thymus.



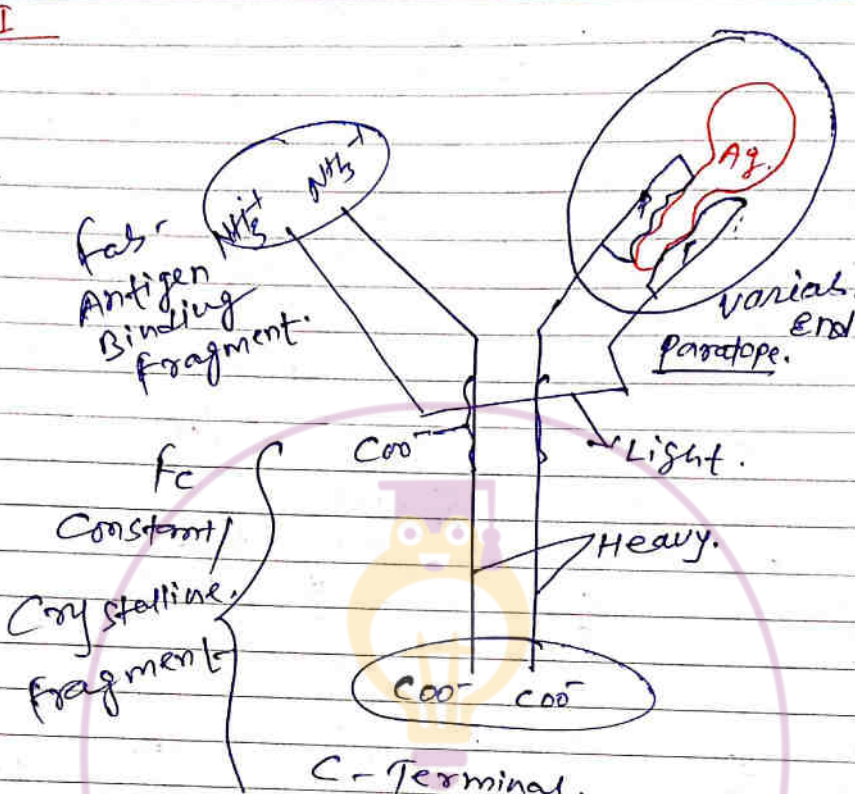
(4)

Polyvalent → Function against serum all pathogen.

AMI

H_2L_2

Disulphide Bond ≃ 16.



Igm :→ gamma-immunoglubiline
→ Conc^n → 75-80%
→ Shape → monomer.
• 2 paratopes available at a time 2 antigen can bind.
→ Mol. wt - 1,46,000 dalton
→ lightest antibody.
→ 1st appeared antiGody (in foetus)
→ It provide Natural passive aquired immunity.

2 month का embryo में Foetus.

+/− (RH Factor).

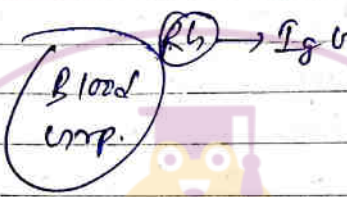
+ve / −ve.

helps in opsonisation.

→ most abundant antibody.

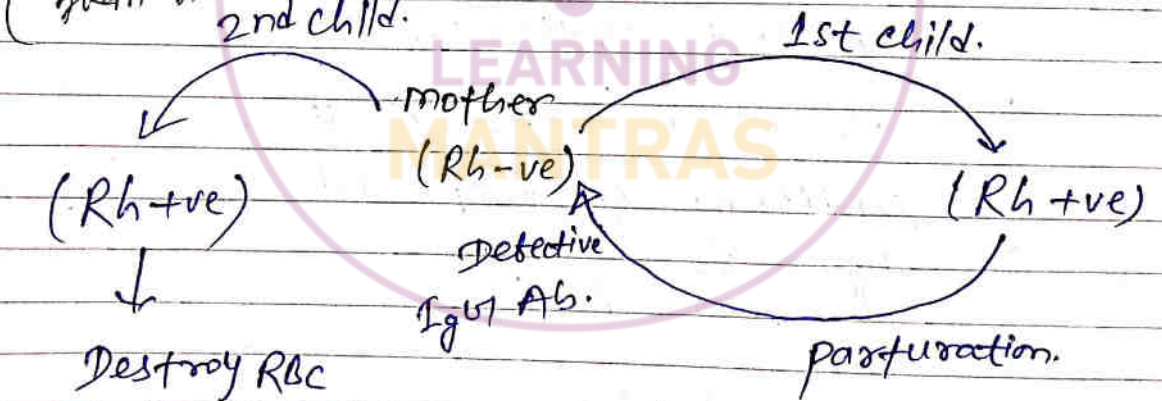
→ Also called universal anti-body.

→ Antibody Against RH factor is type of IgG.



* Erythroblastosis Foetalis :→

(पहला (Rh-ve) ग्रहण no effect.)
2nd child.



Destroy RBC

Haemolytic Anaemia.

1st parturiation = 72 hr = Mother

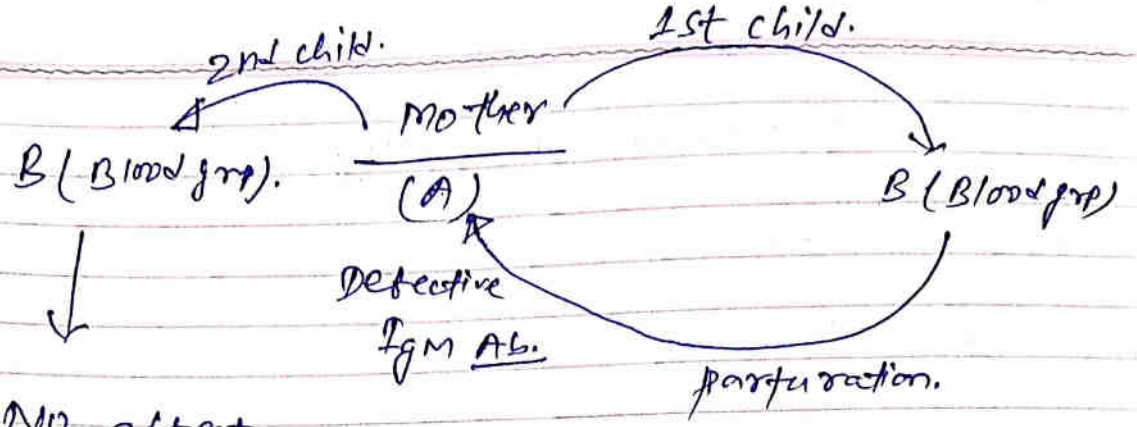
Rhogam injec

(Anti-D) inj.

IgA → α - immunoglobulin.
→ Concⁿ → 10 %.
→ Shape - ~~Diamond~~ Dimer.
paratope → 4
→ Secretary Antibody.

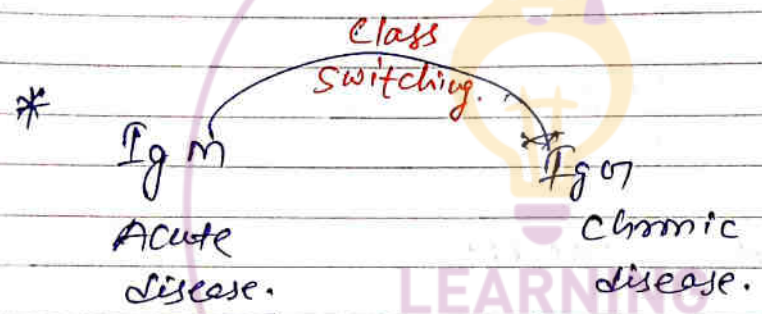
IgM → (μ) Concⁿ → 5 - 10%.
Shape → pentamer.
paratope → 10
mol. wt → 9, 60, 000
Heaviest - antibody.
→ million Antibody.
→ 1st formed Antibody
→ oldest antibody.
→ Helps in opsonisation.
→ Antibody against Blood-group is types of IgM.

(Blood group) ← IgM.



No effect

(BZ can't cross placenta due to heaviest antibody).



* IgD → D - immunoglobin.

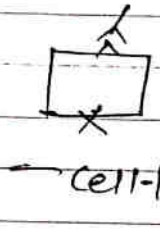
→ Concn → 1-3%.
→ 2 paratops available.
→ Shape - Monomer
→ Activation of B-cell

* IgE → E - antibody
Concn → .05%. (least concn)
Shape - Monomer
2 - paratopes

→ also known as allergic antibody.

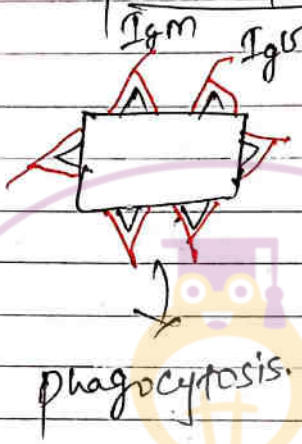
Function :→

Agglutination.



→ cell-lysis.

Opsonisation.



→ phagocytosis.

Neutrilisation

→ Neutrilisation of Toxin.

Acquired > innate.

CMI > AMI > innate.

→ Foreign cell foreign cell.

→ Infected "

→ Tumor "

→ Transplant ".

* Most abbundant antibody in Blood - IgM

" " " → IgG.

Vaccine :→

Principle :— immunological memory.

(2.) First generatn vaccine :→ when whole pathogen in form of weak/live or killed form is injected in our body.

(1.) Live attenuated :→

Like — HCHO

→ β - propiolactone

when pathogen is treated with some chemical, then pathogen is converted in weak posith this process is known as attenuation.

Ex :→ Small-pox. (चेचक)

→ OPV (oral polio vaccine) (Sabine)

→ Rotavirus.

→ BCG (T.B)

→ MMR (Mumps Measles Rubella).

→ pathogen is killed By hot fermentation prbess.

Ex :— Pneumonia.
Influenza.
Rabies.
TAB
IPV (infected polio vaccine)
(Salk)

→ Spread by contaminated food and water

Oral polio vaccine preffere करते है b/c यह body की physiological effect से आता है और stool of child के द्वारा दूसरे में immunity against polio develope करते है।

2nd generation vaccine :-

Desired gene —(vector DNA: Plasmid, Bacteriophage)→ Transgene —(Transferin)→ Transgenic Micro-organism (E.coli, yeast)

Transgenic Micro-organism —(culture media)→ Recombinant protein / Antigenic polypeptide —(extract)→ Vaccine

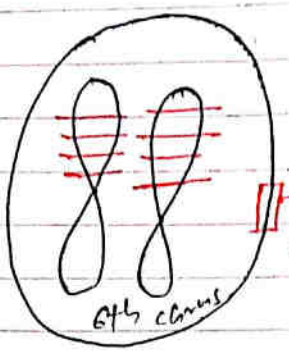
Recombinant DNA Technology
Ex — Hep.B

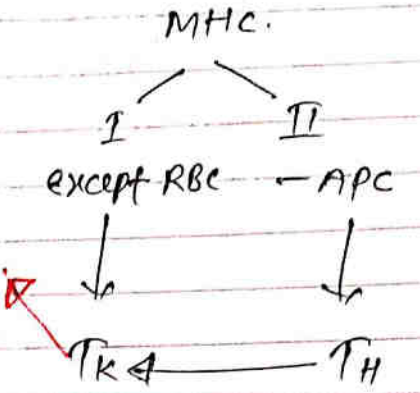
* 3rd generation vaccine is also known as DNA vaccine.

Ex:- Leukemia virus.

HLA

Allele
Haplotype
Gene Arrang.





→ Due to Rebre. Index we can't take other animal cornia. (Avascular) B/2 our eye R.I is different from other animal

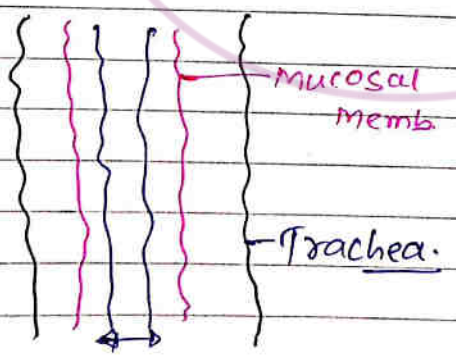
Asthaline → inhaler.

Allergy & Hyper sensitivity.

IgE + mast cell
↓
Histamine.
↓
Vasodilation.
↓
Infection.

Allergen	Antigen
→ AMI	→ AMI & CMI
→ It may be or may not be proteineous	→ It is proteineous.
→ Same species different effect.	→ Same species same effect.

ASThma :→



→ Histamine → vasodilation.
→ Serotonin → Bronchoconstriction.

Symtom :-
1. Difficulty in Breathing.
2. Whistling Sound.
(During expiration)

Treat →
1. Bronchodilator (Salbutamol)
2. Antihistaminic.
3. Steroid.
4. Antibiotics.

2) HEY-FEVER → pollen grain.

Symptom → Running Nose.
→ Fever.
→ Conjuctivitis.

Treat → Anti Allergic
— steroid.

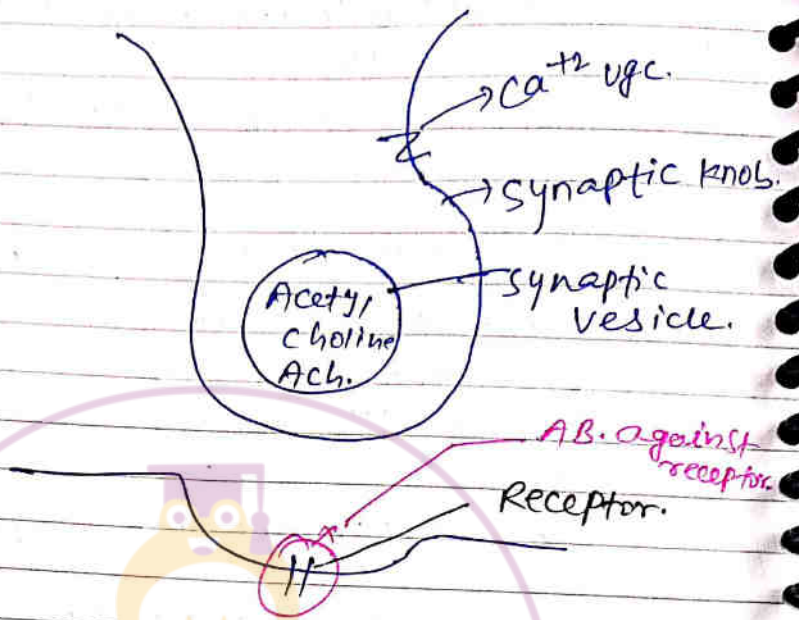
A.S — Sy. BP ↓ (immediatly)

Treat → fast - Normal Saline.
injecn · Adrenaline.
→ Dopamine.
→ Anti histaminic
→ Steroid.

Auto. immune.

TS & TH

MPIHNR



pernicious anaemia.

parietal cell → HCl.
CIF ✗ + vit B_{12}.
(Castle intrinsic factor)

Ab. against CIF

↓

RBC Maturation (✗)

Treat → injection vit B_{12}.

4 - CIF → 4 vit. B_{12}

4 - रोटी → 5 vit B_{12} = 20 vit B_{12}

But when freq ↑.

1 रोटी = 5 vit + 1 roti + 1 roti

4 absorbs vit B_{12}. 4 absorbs. 4 absorbs.

=

IDDM →

Jump ✓ β-cell ← Ab. against
Of pancreas
Glucose.

Normally
1. 80–120 mg/dl.
2. 120–80 mm of Hg.

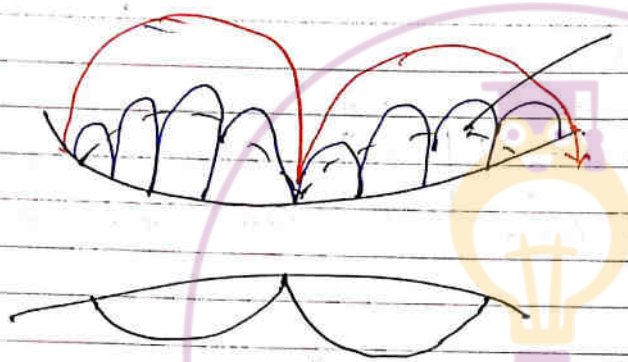
अगर 180 के बाद Glucose ↑ then Kidney can't filter it. and Glucose come through urine.

→ Glycosurea.
Diuresis.
(water loss). → Polyurea
Polydypsia.
Polyphagia.
Ketone bodies → Acetone.
→ Acetoacitic acid.
→ β-hydroxy Butarate
→ Keto-acidosis.

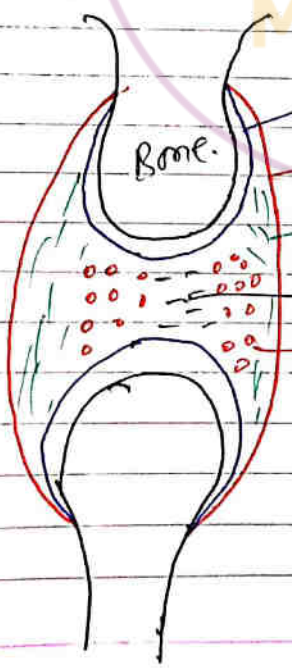
4. Hashimoto disease
Sucide of Thyroid.
Auto immune (Thyroiditis.)
Thyroid cell → Ab. → T4 ↓
(HYPOThyroidism).

5. multiple Sclerosis.

Ab. Against.
myelin Sheath.



* Rhemutoid Arthritis (ગઠિયો વા):→



°His → swelling

Treat → weight कम करना and painkiller drugs. Metronisole

Streptococcus Haemolytics.

→ Igm type Ab = Rheumatic Factor.

* SCID

B-Lympho (AMI) T-Lympho (CMI)

Maturation.

↑

कमी :→ ADA Enz.

Treat → Gene therapy.

Immunomodulater :→

Response → fast
Immunopotent.

Ex:- IL
→ Interferon
→ Antiserum.
→ T.N.F (Tumor Necrosis factor)
(N.K cell, platelet)

Resp – slow.
immunosupressent.
Ex:- Cyclosporin – A.

Genetic disease

Gene-mutation.

Autosome.

Recessive.

1. Phenyl Ketone urea.
2. Alkaptonurea.
3. Albinism.
4. Tay Sach's.
5. Thalessimia.
6. Sickle cell-Anaemia
7. Cystic Fibrosis.

Sex-chroms.

Dominant.

1. Polydactyly.
2. Brachydactyly
3. Achmodroplasia.
4. Hutington chorea.
5. Marfan's Syndrome.

Recessive.

1. G-6-PD.
2. DMD.

Genetic disease

↓

Gene-mutation.

↓

Autosome.

↓

Recessive.

Phenyl Ketone urea.

Alkapton urea.

Albinism.

Tay Sach's.

Thalessimia.

Sickle cell-Anaemia

Cystic Fibrosis.

Sex-Chroms.

↓

Dominant.

1. polydactyly.
2. Brachydactyly
3. Achmodroplasia.
4. Hutington chorea.
5. Martan's Syndrome.

Recessive.

1. G-6-P.D.
2. DMD.

Chromosomal mutation.

↓

Autosomal.

1. Down Syndrome.
2. Edward " .
3. patau's " .
4. cri-du-chat " .

Sex-Chroms.

1. Kline bilter's Syndrome.
2. Tumor's " .
3. Supermale. "
4. superFemale " .

improper enzymes name.

Phenyl Ketone Urea. ← × Phenyl alamin ✓ Hydroxylase.

Phenyl alamin Amino-Acid (PAAA)

↓

Black urine disease ← Homogentisic oxidase. ← Tyrosine —Tyrosinase×→ melanin. (Albinism).

↓

Homogentisic Acid. (Alkaptone)

Tay sach's :→

✓ (Lysosomal enzyme ka, asit).

Conjugated fat. —✓N-AHA.→ Simple fat.

Thalessemia

Codley's Anaemia.

$\alpha_2 \beta_2$

α-chain = 16th chr. HBA2 — HBA2, HBA1 — HBA1 = α thal.

β > α

β-chain = 11th chromo. HBB — HBB = β-Thal.

TAT ~~T~~AT TAT

TAT ATT AT

Frame shift Mutation.

Microcytic RBC

Surface Tension.

Normal RBC (Biconcave) Shape

For Homozygous

Treatment

→ ~~BT~~ - ~~BT~~ Blood transfussion

→ or Bone-marrow Transplantation.

Sickle-cell anaemia

→ autosomal recessive disease.

β-chain = 11th chroms – (1)–(2)–(3)–(4)–(5)–(6)–(7) =)

(6) Glutamic acid.
(Replace by)
↓
Valine.

Normal RBC.

Sickle RBc.

Plasmodium falciparum
↓
Resistant.

Cystic fibrosis

→ Gene fnt on 7 chroms. due to expression of gene fibrous protein form which deposite in different Body parts & lungs.

Autosomal dominant

Polydactyle:→ No. of digits increase. More finger in hand or legs.

Brachydactyly:- Size ↓ decrease (small).

Achondroplasia:→

Due to expression of gene chondrocytic protein is not found due to this person Become Dwarf.
(Assymatrical dwarf)

Hutington Chorea:→ 4th gene mutation on Both chroms due to mutation secretion of GABA ↓es and involuntry contraction starts in Volontary muscles. (नाचना हुआ शरीर से)

Marfan Syndrome.

Bone	eye	Heart
Long extrimities. Arachnodactyly	Myopia.	Bicupsid prolapse.

G-6-PD

Glucose 6 Phosphate Dehydrogenase.

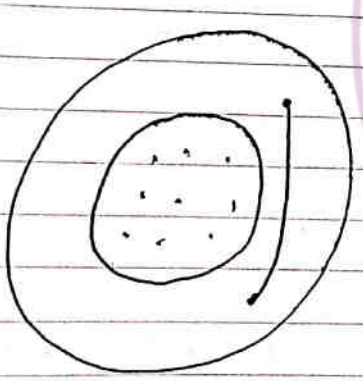
RBC

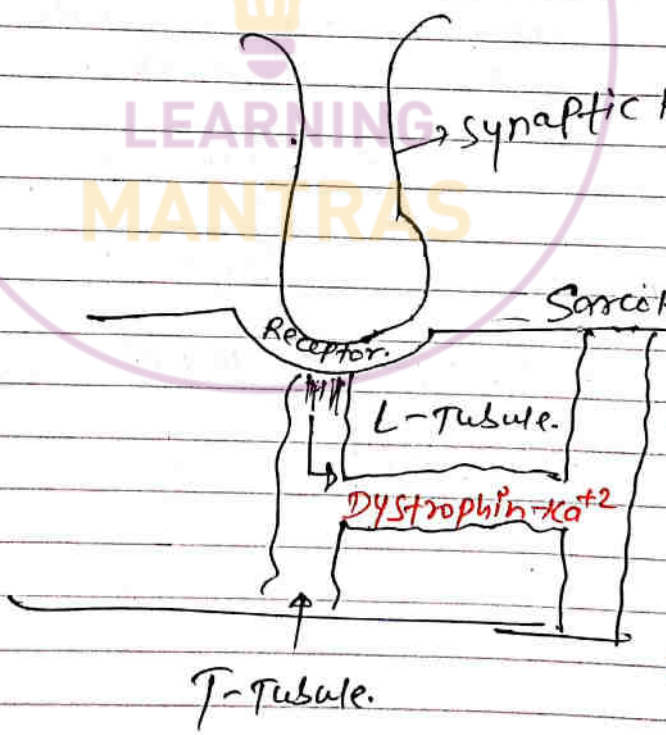
G-6-PD
Stability of RBC.

Irritant

→ penicilline.
→ sulpha.
→ quinin.
→ fava (बेसारी बीज)
↓
favism

DMD

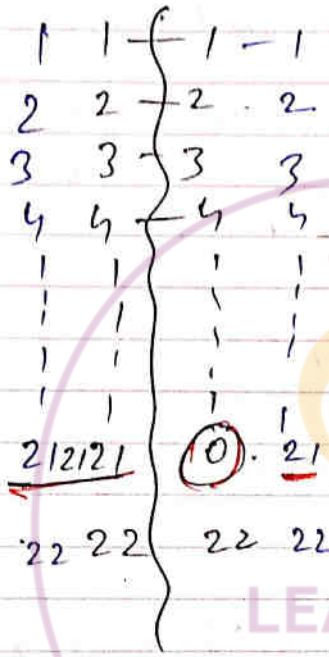




Chromosomal Mutation:-

Trisomy > Monosomy > Tetrasomy.

Most affected organ = Brain.



Down-Syndrome.

21st Chrm. Trisomy.

Incidental rate = 750 @/1

most common.

Abnormal ovum + Normal sperm. (or) Abnormal sperm + Normal ovum.

Down-syndrome. (male + female) दोनों को हो सकता है

Autosomal: डाउन पाताउ इंडवार्ड्स को पटाओ और जिली को खिलाओ।
21 18

Symptom: →
→ Short height
→ flat forehead.
→ flat nose.
→ extra epicanthal fold in eye lid.
→ furrowed tongue.
→ cardiac defect.
→ palm/ simian crisis.
→ Doesn't perform Routine work.

Test → Chorionic Villus Sampling.

Edward (18th chroms.)

I.R = 8000 − 1

Symptoms

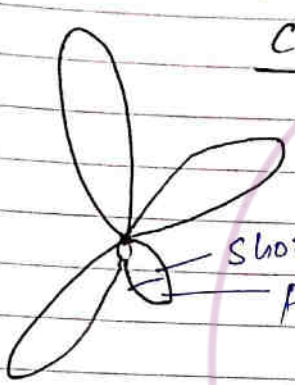
1. micropthalamic.
2. micro cephalic.
3. microagnathus.
4. can perform Routine work.

Patau's Syndrome.

13th → Trisomy.
1 in 5000 – 1

1. Microopthalamic.
2. Microcephali
3. Cleft palate.
4. Mentally Retarded.

Can perform routine work.



Cri-ju-chat

5th chrms.

short arm.
partial deletion.
↓
Laryngeal defect.

Klinefelter

(Male)

♀ 22+xx
22+x

♂ 22+y
22+xy

Barr body
Total no of X chrms – 1.

Trisomic = 47 = 44+xxy BB=1

Tetrasomic = 48 = 44+xxxy BB=2

Sym →

1. Hypogonadism.
2. Gynacomastia.
3. Impotent. (संभोग)
4. sterile.

Turner syndrome [in Female].

♀ 22+x
22+0

♂ 22+0
22+x.

Monosomic = 45 = 44+x0 BB=0

44+y0 (नहीं बनेगा) B/2 x नहीं है For the formath of vital organ.

Sym :→

Supermale

♀ 22+x

♂ 22+yy.

44+xyy BB=0

Hint

44+xy

22+x 22+y

22+x 22+x

22+0 22+yy

By disjunction method.

Symp :→ Muscular develop.
Macrogenitosomy.
Aggressive.
Criminal bent of mind.
Highly fertile.

Superfemale Syndrome.

♀ 22+xx

♂ 22+x

44+xxx BB=2.

Symp → Feminine ch. ↑
M.C irregular.
Highly fertile.

Bacterial

D – Dysentry.
D – Dipth.
P → pertusis.
T → Tet.
P → Pneumonia.
P → Plague.
T → Typhoid.
T → Tuberchlosis.
C – Cholera.
L → Leprosy.

Dysentry (पेचिश)

C.A (causing agent) = Shigella Dysentric.

MOT (Mode of transmiss) = Contaminated food & water.

SOI (Symptom of infect) = Intestine.

Symptom → Stool with mucous with Blood clot.

Treat → Electrolyte
Antibiotics.
or normal saline.

ગળતોળુ / ઘંટોળુ

2. Diptheria (કંઠરોહિણી)

C.A = Corynebacterium Dip.
MOT → Droplet Infection.
Airborne.
SOI = Upper respi. Tract.
Symm = Difficulty in Breathing.
= Suffocation.
Test = Schick Test.
Throat Swab Test.
Treat → Prop. = DPT.
(Diptheria, pertusis, Tetnus).
Treat → ADs
(Antibiotics)

3. pertusis

C.A – Bordetella pertusis.
MOT = Droplet (Air Borne)
SOI = U.R.T.
Sym = Coughing Bouts
Cough Vomit.
Treat prop. → DPT Vac.
Treat → Strong Cough Suppressant.
→ Codein Syrup.
→ Antisiotics.

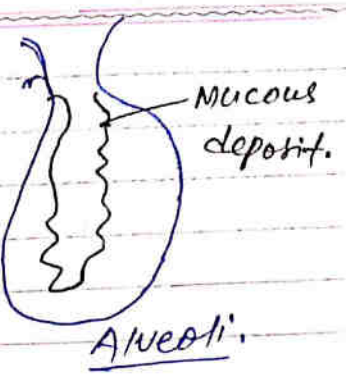
whooping cough
100 day cough.
ખાલી ખાંસી
તાળી ખાંસી
ડબકા ખાંસી

4. Tetnus C.A = clausfridium tetany.
Lock Jaw. Anaerobic facultative bact.
→ 8th day disease. Dust & Rust
→ धनुस्तम्भ Toxin = Tetno spasmin.
SOI = Voluntary muscle.
I.P = 6 — 10 day
↳ 8th day disease.

Sym → Jaw lock - Risus sardonicus.
Bow shape = opisthotonous posith.
Mortality rate = 40-50%
Treat → prop - DPT
Treat = ATS
TT.

(5.) pneumonia.
C.A = Streptococcus pneumonia.
Diplococcus pneu ".
✱ Haemophilus influenzae.
MOT = Droplet (Air Borne)
SOI = Lower R.T.
Sym = Gas exchange ↓
lips & eye turn Bluish
or greyish Appearance
→ fever, Headache.

Treat- Prop ∃ Pneumococcal Vac.
Treat → Antibiotics.



6. Plague (Black death). → Vector Borne disease.

Rat

Rat Flea - Xenopsulla cheopsis.

Pasturella pestis / Yersinia " .

Symp → Lymph node = Bubonic plague.

1st SOI → Lymphoadenopathy.

2nd SOI → Lungs = Pneumatic plague.

Treat → Antibiotics. (Tetracyclin).

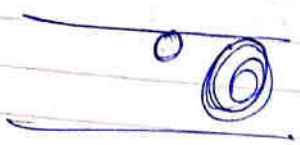
7. Typhoid Enteric fever आंत्रीय ज्वर

C.A → Salmonella Typhi.

MOT → Contaminated Food & water.

Foeco · oral route.

SOI → Small intestine.



⇒ constipation
Abdominal pain.
fever.
(High grade fever)

98.6 ⌐ 99 ⌐ 99.415 ⌐ 100 ⌐ 100.415 39 – 40°C.

→ Ladder step pattern.
→ (Red spot).
Rose spot.

Test → widal test.
(Ag – Ab)

Treat → prop → TAB vacc. (Typhoid-A. Bacilli)
Treat → Antibiotics.

T.B →

C.A → Mycobacterium Tuberculosis.

MOT → Droplet (AirBorne)

SOI → L.R.T (Lungs)

Sym → productive cough.
Yellow sputum.
Bloody sputum.

Test → X-Ray (chest)
→ Sputum test.
→ Mountax test.

prop → B.C.G

Treat → DOTS. Min = 6th month...
Maxm = 18th Month.

Leprosy
(कुष्ठ रोग), कोढ़

C.A → Myobacterium Laprae.

MOT → contagious disease.

I.P → 2-5 Year Bac. (Longest)

Viral I.P → 5-10 " " (ACOS)

SOI → Peripheral Nerveous System.

Sym → Inflammation on peri. Nervos.
+ foamy changes in skin & formation of Nodules.
→ Necrosis of tissue.

Test → Lepromin Test.

Treat → MDT (Multi-drug therapy)

(Rifampasin + Dapsone + Ofloxacin + Minocyclin)

Cholera :→ हैजा.

C.A → Vibrivo Cholarae.

MOT → Foeco-oral route.
Contaminated food & water.

SOI → Intestine.

Sym → Diarrhoea.
(Rice water stool).
B.P ↓

Treat → ORS., saline (if necessary)

Virus - Disease

P - Polio
I → influenza.
D → Dengue.
C - common cold.
C - Chikungunia.
C - Chicken pox.
M - Mumps.
M → Measles.
R - Rabies.
Swine.
Hepat-B -

① Polio :→

C.A → polio virus.
pico RNA Virus.

MOT → pico-oral route.

SOI → central Nervous System.

Symptom → Fever, Vometting and damaging of Motor neuron of spinal cord (Grey matter).

prophylaxis → polio vaccine.

② Influenza :→

Ortho Myxo virus.

MOT → Droplet.

SOI → upper respiratory tract.

Symptom → ~~Antigenic Shift~~. Sneezing, coughing Fever, hoarseness of voice, running nose

→ shows Antigenic Shift & Drift →
(Change in posith of Antigen and Structure of Antigen.).

prophylaxis - flu vaccine.

Female Mosquito ↓ oocyte के development के लिए RBC ~~का~~ Formation की जरूरत होती है।

Vector Borne

↓

Female Aedes Aegypti Mosquito.

Dengu

→ (Haemorrhagic Fever)

→ (Break Bone fever)

C.A = Arbovirus.

Family

↓

Flavivirus.

S.O.I = platelet.

1,50,000 – 4,00,000/mm³

Sym → Fever, Joints pain.

Vomitting, Nausea.

Test → Tourniquet Test.

→ CBC (Complete Blood Count)

→ AS. (IgM & IgG).

Chickungunia.

C.A = Toga virus.

S.O.I → joints.

Sym → severe pain in joints & fever.

Common-cold.

SOI → upper respiratory tract.
(Throat, nose, not lungs).

Sym → Sneezing, Coughing, Running nose.

Chicken-pox (छोटी माता)

C.A → pox-virus.

MOT → Droplet infection.

Symptom: → Formation of Red spots develops in vesicle and Fills with watery secretion

↓

Rupture of vesicle & Formation of scale.

↓

Removal of scale count Any scar.

Mumps (गलसुआ).

C.A → paramyxo virus

M.O.T → Droplet

SOI → Parotid gland.

Non-suppurative inflammation.

↓

pus (X) नहीं बनना।

Parotid.

↓

Male → Testis → Orchitis (Swelling)

Female → ovary → Ovaritis.

Prophylaxis → MMR

Measles (खसरा)

M.O.T → Droplet.

3rd day → Formation of Red brown spot. (Koplic spots) on oral mucosa.

4th day → Formation of vesicle behind ear then pass on to Forehead.

5th day - Subsidation of ves.

prophylaxis → MMR.

dead person tissue का check - autopsy.

(Neuron में Negri bodies पाया जाना) व्यक्ति के मरने पर।

Rabies (Hydrophobia)

C.A → Rhabdo virus
Lyssa "
Street "

SOI → central nervous system.

Treat → Rabipur → Human diploid cell Culture vac.

Symptom → 1. laryngeal spasm.
2. Fear from water.
3. Negri bodies found in neuron of dead person (autopsy).

(जहाँ पहले कुत्ता ने वहाँ काटा है वहाँ detergent (soap) से धोयें (Clearly.) then goes to hospital.

Swine flue.

C.A → H1N1 virus.

MOT → Droplet inf.
SOI → L.R.S (Lungs)
Sym → pneumonia like
Treat → Temiflue
AIIMS
(Free supply by govt)

SARS

Severe Acute respiratory syn.

C.A → corona virus.

Hepatitis

Infectious

HEV
Hepato
Entero
Virus

→ Hep. A, B, C, D, E.

Hep A, C, D, E
Gen - SS RNA.

Hep - B
Gen - DS DNA.

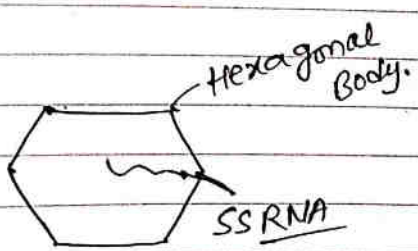
Hep-A

- Epidemic Hep.

MOT → Cont. Food & Water.

Gene - SS RNA.

I.P → 2-6 week.



Non-infectious.

↓

CBD Blockage.

Common Bile duct.

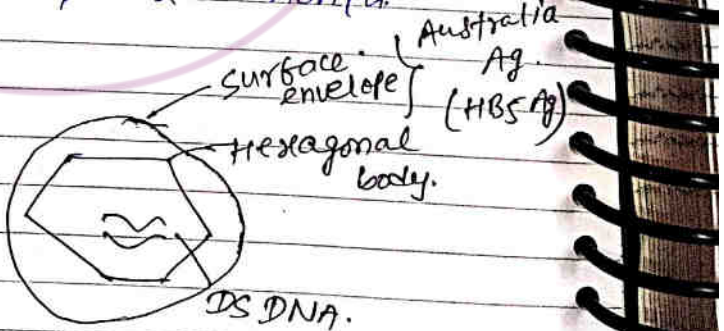
Hep-B

- Serum Hep.

MOT → Blood Transfusion & STD

Gen - DS DNA.

I.P - 2-6 months.



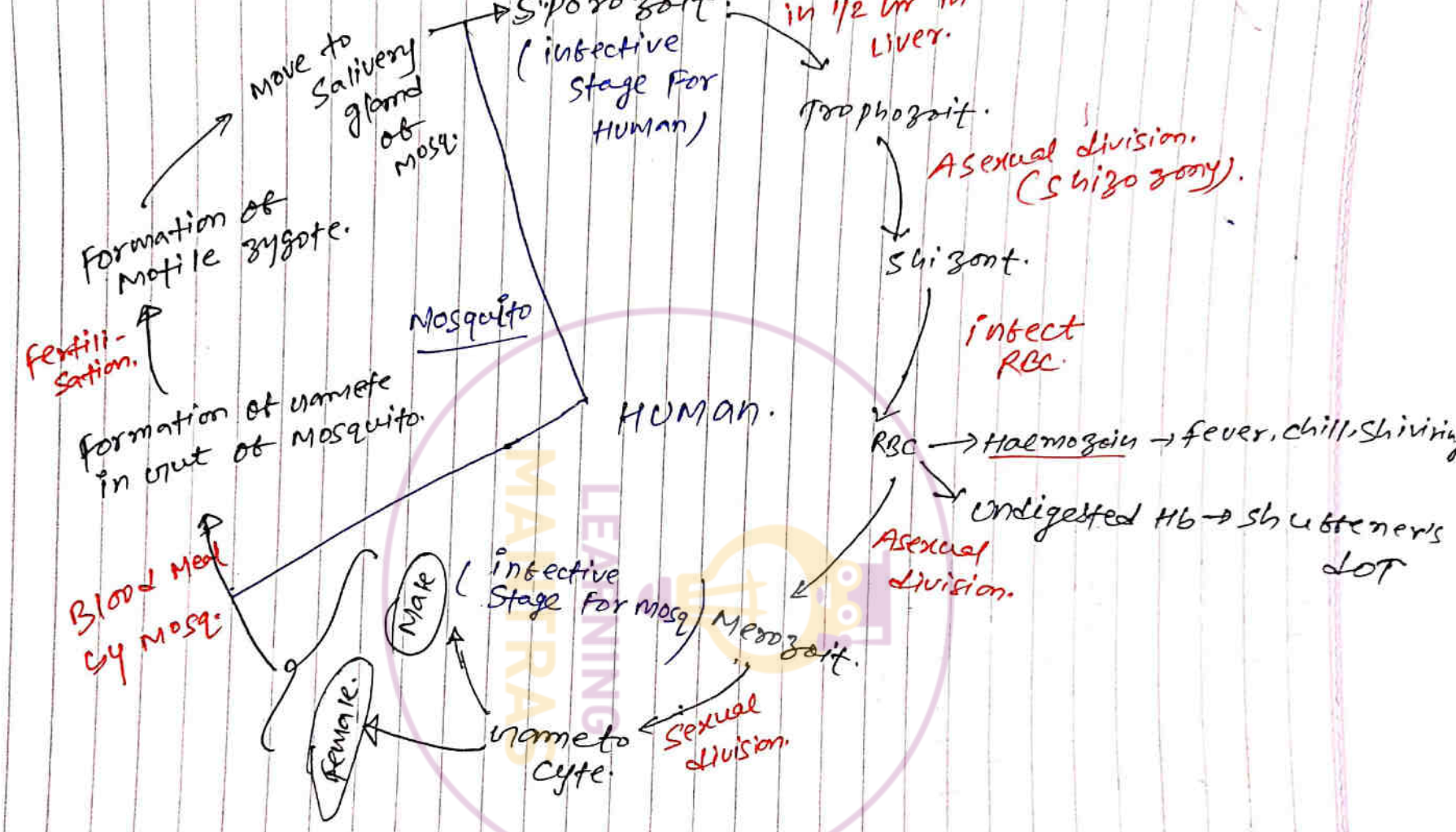
1. इसी disease में Rest ज्यादा कहते हैं।
2. इसमें carbohydrate ज्यादा मत खाइए।
ex:- Sponge (स्पंजगुल्ला) Not आलमारी
: not proteineous and fatty oily Food.

Treat. Serum Bilirubin & enzyme SGPT.
Serum glutamic pyruvic Transaminase.
(5-40 IU)

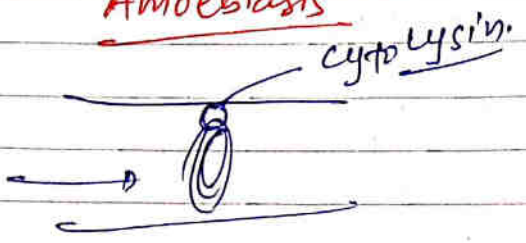
MALARIA

(sexual) Primary host = human.

(asexual) Sec. host → Mosquito.



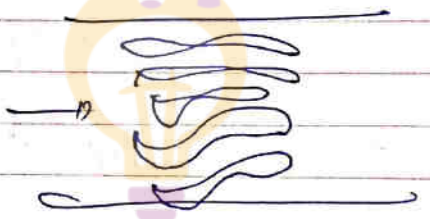
Amoebiasis



Treat → Metronidazol.
Metrogyl - 400.

Ascariasis

A. Lumbricoids.



Treat → Chenopodium.
Albendazole.

Filariasis

effect lymphatic vessels of the lower limbs.

Gonorrhoea: →

Symptom → vaginal discharge.
+
Yellow creamy pus.
+
Painfull Urination & Burning sensation. (Burning micturation)

Treat → Ciprofloxacin

* **Genital herpes:** →

Symptom: → vaginal discharge.
+
Burning mic.
+
Fever + chill.

Latent → H.S. Sacral plexus.

Treat → Antiviral.

अगर ज्यादा दिन तक रहेंगे than causes Skin Carcinoma (Cancer)

* Genital wart :- H.P.V
(Human papilloma virus)

Sym → Genital perineum
Cauliflower like warts (मस्सा).

→ May causes cervical carcinoma.

* Syphilis :- French pox.

primary Stage.
Destructive sore.
(घाव)
Hard ridge.
↓
Hard chancre.
(शैंकर)

Sec. Stage.
Lesion.
↓
GUMMA

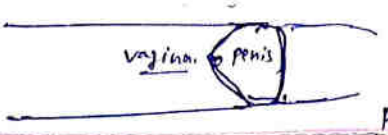
* Trichomoniasis (in female).

Sym :- Vag. Discharge.
+ Yellow creamy pus.
+ Foul smell + Itching.

अगर eye में लगा है By towels or other से than Causes → Trachoma.

AIDS 1st time occur in monkey then in america of seen in homo-sexual male.

AIDS



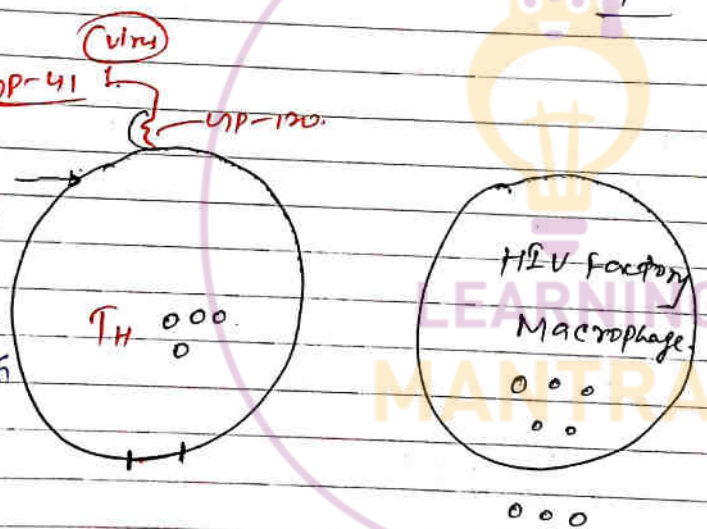
due to Fricty since Female part ऊपरी है so, male से female में AIDS होने का % ज्यादा होता है। comparatively female to male.

MOT :-

1. Sexual route.
2. parental ".
3. Transplacental route.

⇒ Transplantation = Mother to Foetus.
= placenta = 35%

⇒ posthatal = Mother to Neonate
= Milk = 20%.

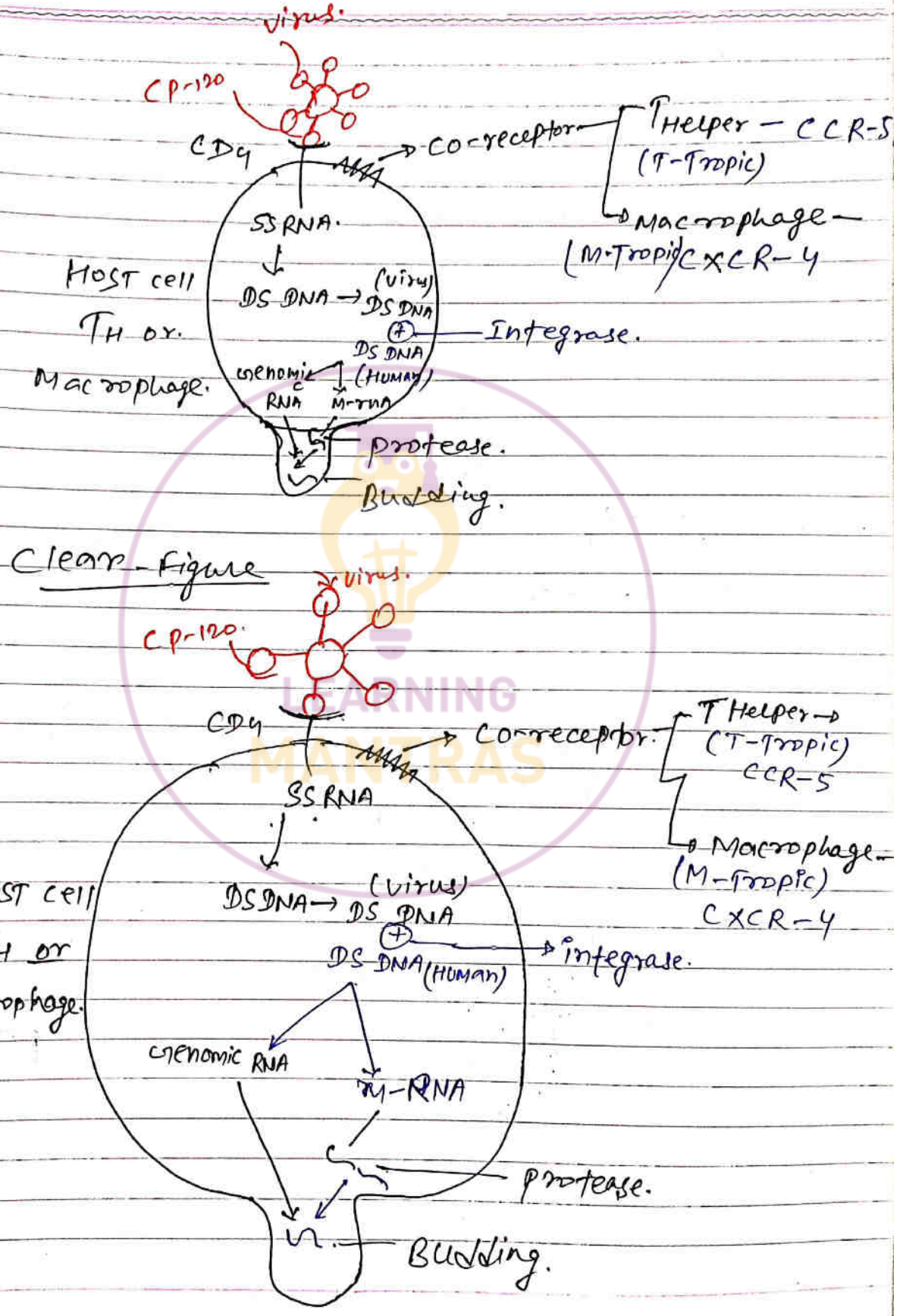


Helper में regeneration नहीं होता एक बार receptor destroy हो गया।

Regeneration Capasility.

It has Singal stranded RNA = 2 Strand (not double)

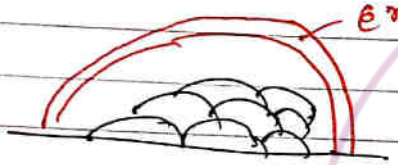
1. R.T ⇒ 2
2. Integrase.
3. protease.



$\frac{T_H}{T_K} = \frac{CD_4}{CD_8} = \frac{2}{1} = \frac{1}{1}$ $= 900 \times 10^6$/cit.
200×10^6/cit.

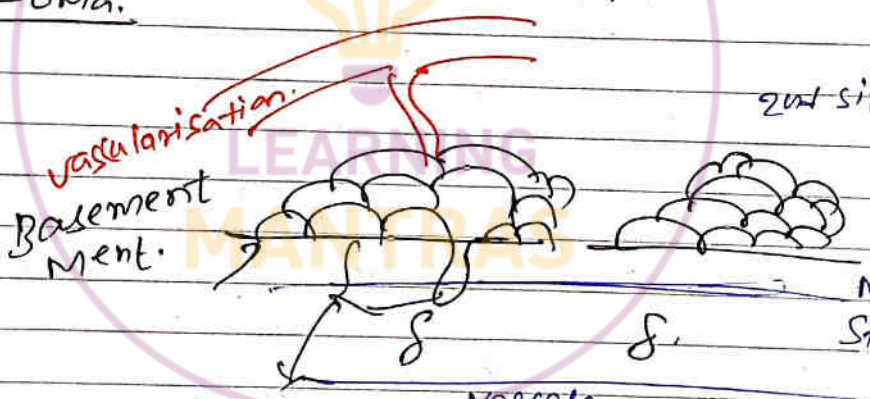
* Main cause OF death in AIDS
= T.B

Benign



Subtik-oma.

Malignant.



insite
Invagination.

(very fatal)

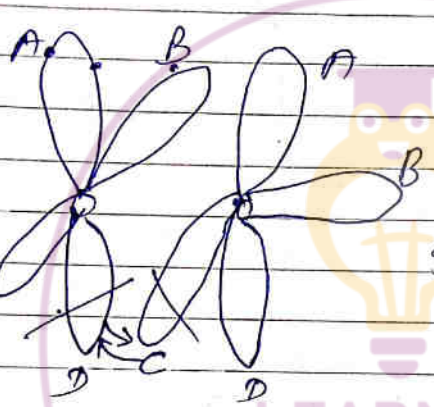
— Carcinoma.
— Sarcoma
∴ leucamia.

Lymphoid

- Lymphocyte.

Ex:- Burkitt's Lymphoma.

Reciprocal translocation b/w non-homologous posith on 14th & 8th.



Myeloid

→ Apart from lymphocyte

ex:- CML - chronic myelogenous leukem

→ R.T b/w non-homologous posith on 22th & 9th ch.

9t is homologous

Type

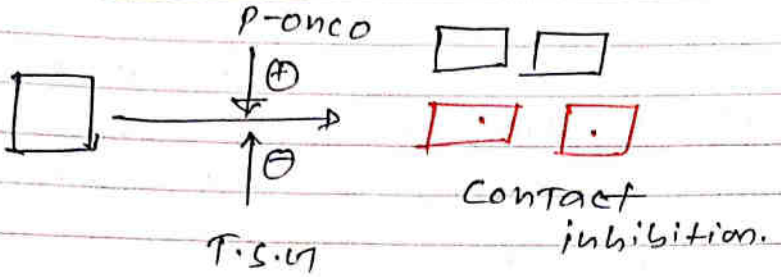
(1) proto oncogene (P-onco)

(2) cellular oncogene (C-onco)

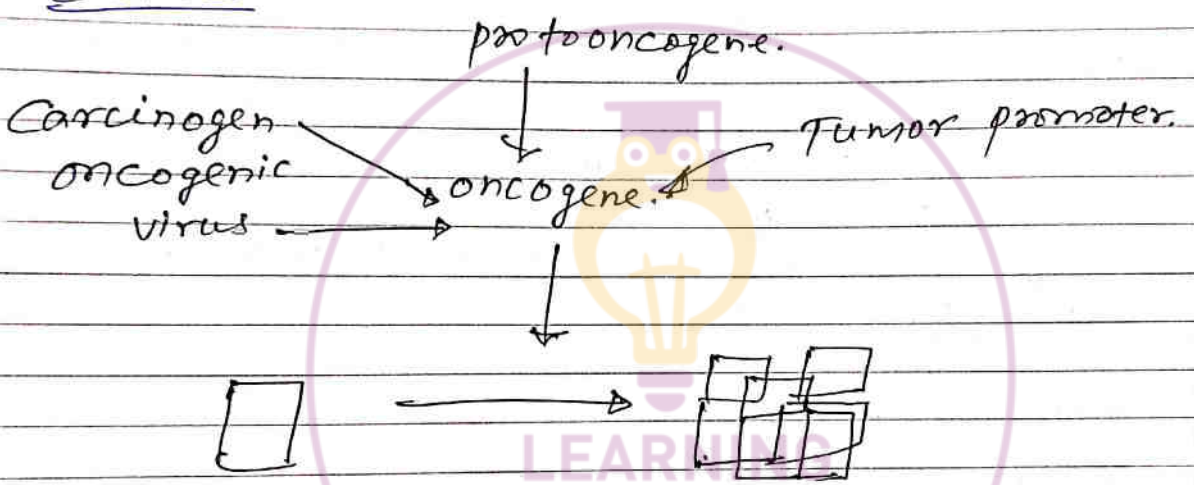
(2) Tumor Supressor gene (T.S.G)

(3) Gene Related programmed cell death (Apoptosis) (sucide gene)

Normal



Cancer



Causes :→

1. Chemical

A. N-Nitro sodium Ethelene.
B. Art. sweetner. (Slice, Maja) goda.
C. DES.
D. Dye.

2. Physical

A. Radiath (x rays, γ-rays)
B. Sharp teeth.
C. Foreign cancer.

Oncogenic virus

DNA → 1. Herpes simplex virus = Skin carcinoma
2. Human papilloma " = Cervical "
3. Hepatitis B " = Liver "
4. Epstein Barr " = Lympho Sarcoma

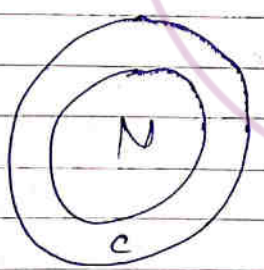
RNA → HIV — Kaposi Sarcoma.

Treat :-

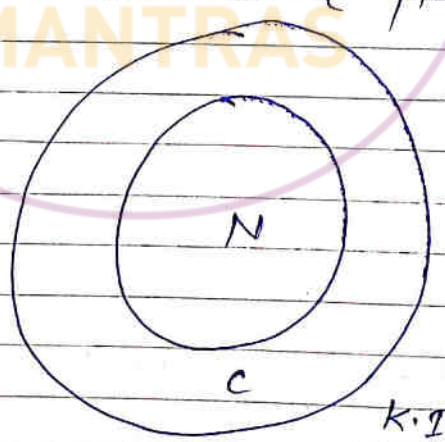
* 1st line of Investigat^n → IL and Interpoxy
2nd " " " → Organ specific.

3rd - Blood Sample = Tumor Marker.

Biopsy : KI = $\frac{\text{Vol. of nucleus}}{\text{Vol}^m \text{ of (cyto plasm - Nucleus)}}$



K.I < 1



K.I > 1

Drugs

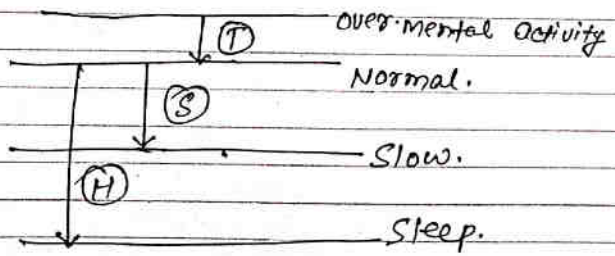
(Psycotropic)

① Depressent

- Tranquilliser.
  - → Barbiturate.
  - → Benzodia. zopine.
- Sedatives & Hypnotics.
  - → Benzodiazapine.
  - → Alprozolam.
  - → Valium.
  - → Thalidomide. (Foecomalia - No formation of digits in foetus.)
- Opiate (fruit) Derivative.
  - → Morphine (Pain Killer) By Acetylisation
    - White, colourless Crystalline products.
  - → Heroin (Smack)

Receptor - CNS & GIT

Brown Sugar — Heroin + Chalk powder + ZnO_2 + Strychnine.



.25mg

Dop Test For Athlete Before perform

→ Stimulant.

- Caffine.
  - 1 cup Tea → 50mg
  - 1 cup Coffee - 100 mg.
- Cocaine.
  - Coke
  - → Crank.
  - → Erythro xylum coca.
  - Native of South America.
  - Interfere secretion of Dopamine.
  - Cause - Euphoria.
  - Excess - Hallucinogen.
- Amphetamine
  - → Alpha Methyl Phenyl Ethyl Amine.
  - → Anti sleep pill (pep-pill)

→ Hallucinogen

(Psycodelic). (vision producing drug)

- LSD
  - Lysergic acid Diethyl Amide.
  - → By Fungi Claveceps purpura.
- Atropa.
  - Belladona & Datura.
- Cannabinoids
  - → Cannabinus Sativa.
  - → Receptor
  - → Cardiovascular sy
  - Ex:- Sutt { Bhang, Ganja.
  - Resin Latex { Charas, Hashish, Marijuana.

Speed ball → Heroin + Cocaine. (Dep. + Stimulant)

* 1st effected part of brain → Cerebrum.
* most affected → cerebellum.

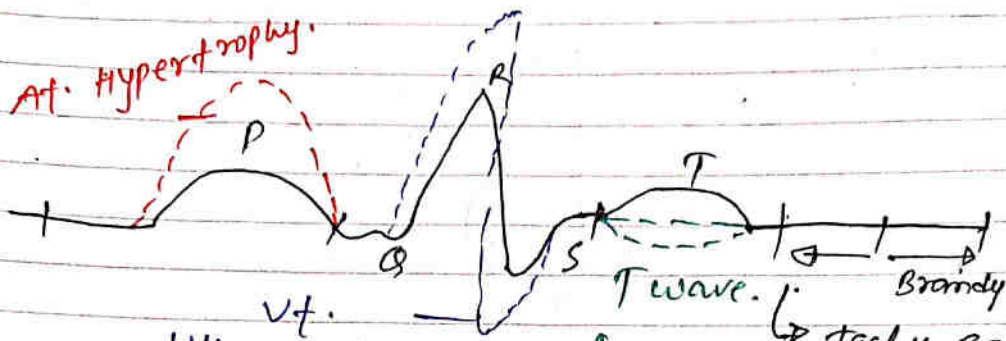
	Bronchitis	Asthma	Emphysema	pneumonia
Site →	Bronchi	Bronchi	Alveoli	Alveoli
Symp-	- Cough (Dry cough) → No obstruction of Air way	→ Difficulty in breathing always air way obstruction due to mucous deposit.	→ Destruction of Alveolar wall & Symptom are pneumonia like.	→ No Gases exchange.

→ alcohol 100% observed by stomach and go into Blood.

Alcohol
↓ Alcohol dehydrogenase.
Acetal dehyde. (Toxic) → (Hangover)
↓ Acet. Dehydrogenase.
Oxydase.
(Heat)

Promotor. → Fat deposit in liver. → Fatty liver.
↓ Liver Fibrosis.
Liver Cirrhosis.

E.C.G



= Acute Myocardial Infarction (AMI)

↓

Myocardial Ischemia.

P-wave = At. Depolarisation = Systole.

QRS — " = Vt. " — = Systole.

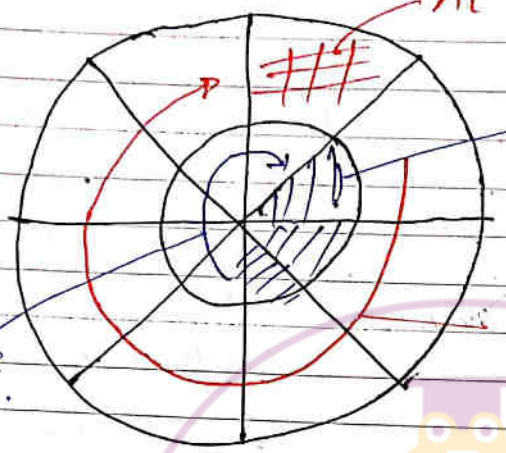
T — " = Vt. Repolarisation = Diastole.

At. Systole = .1 sec.

At. Diastole = .7 "

Vt. Systole = .3 "

Vt. Diastole = .5 "



= .4 sec.

Joint diastole