

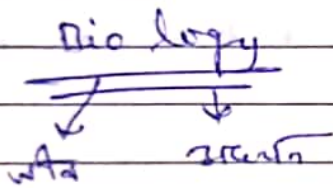
Science
(Scientia) (Latin word)

↓
to know.

→ deal in practical evidence.

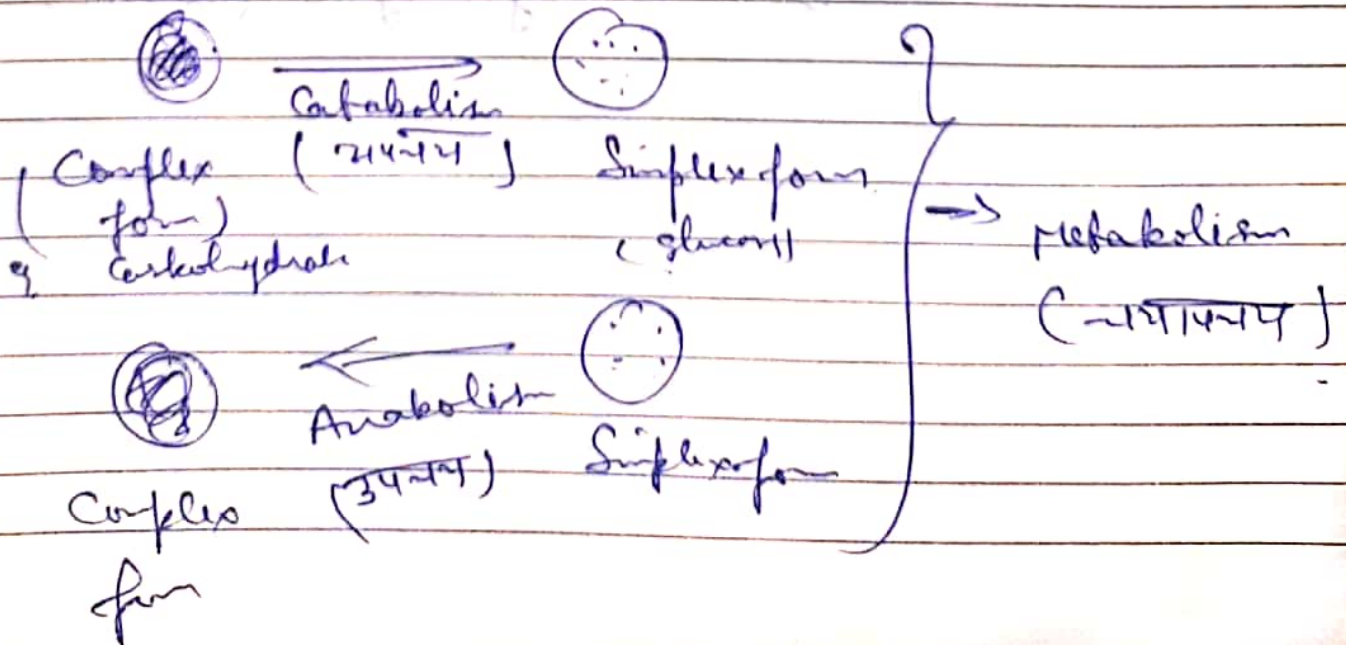
→ Basic Steps of Scientific Study

- | | |
|--------------------|-----------|
| 1. Observation | निरीक्षण |
| 2. Hypothesis | परिकल्पना |
| 3. Experimentation | प्रयोग |
| 4. Principle | सिद्धि |



→ father of Biology is Aristotle "अरिस्तो".

Digestion (पचन) →



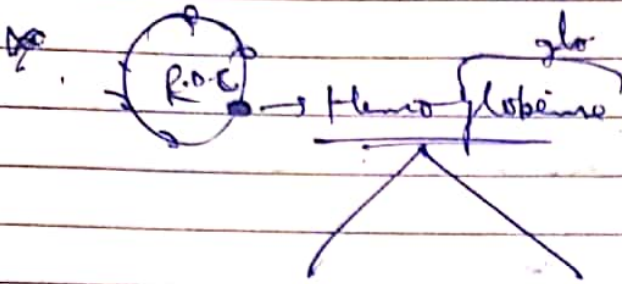
Cockroach \rightarrow white blood,
Octopus \rightarrow blue blood.

Abz Biology Booster.

Page _____ @ubhash

Date _____

Immunity (शक्ति का अभाव)



\rightarrow RBC give red colour to blood \rightarrow It help in transportation of O_2 & CO_2 .

\rightarrow Hemoglobin combine with CO $>$ CO_2 $>$ O_2 .

\rightarrow M.B.B.S \rightarrow Bachelor of Medicine & Bachelor of Surgery

\rightarrow M.S \rightarrow Master of Surgery

\rightarrow M.D \rightarrow Doctor of Medicine.

\rightarrow 1st July \rightarrow Doctor day.

(Dr. Bidhan chandra ray)
(बिहारी चंद्र राय)

\rightarrow 12th May \rightarrow Nurse day.

Florence Nightingale (फ्लोरेंस नाइटिंगेल)

Biology

Male
(A⁺)

Female
(A⁻)

♂

♀

Rh⁺ve

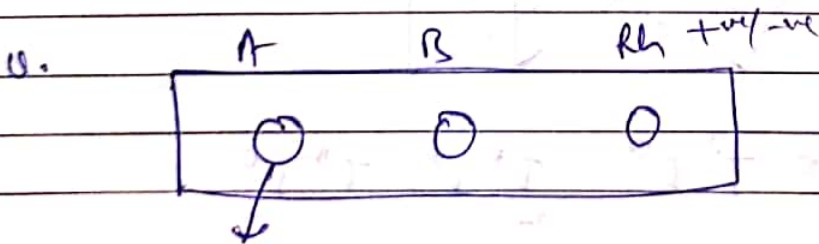
Rh⁻ve

1st baby (will survive)

(So on) (will die)

→ other children will die due to a disease

= Erythroblastosis foetalis (disease)
→ Anti Drug is a Medicine



○ → -ve

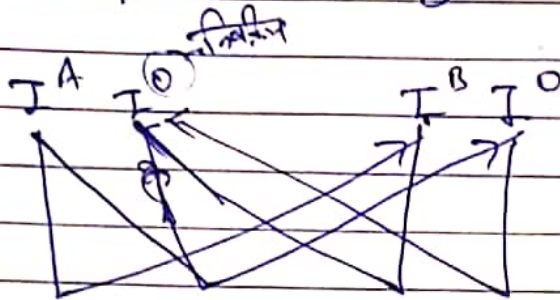
⊙ → +ve

Anti Serum
(Antibody)

A	B	Rh	
⊙	⊙	⊙	= A ⁺
⊙	○	○	= A ⁻
○	⊙	⊙	= B ⁺
○	○	⊙	= B ⁻

03/12/21
gupta

Q. Male A^+ Female B^+

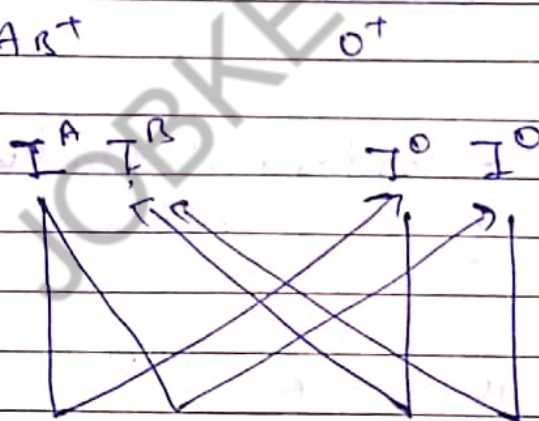


$I^A I^B$ $I^A I^O$ $I^B I^O$ $I^O I^O$

A B A B O → Blood group

Q. Male A^+ Female O^+

admitted base? I^O
 Son 1 A/O
 Son 2 B/A



$I^A I^O$ $I^O I^O$ $I^A I^O$ $I^O I^O$

A A B B

(A)

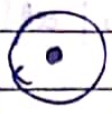
(B)

Blood group

Blood group table.

+	+	→	+
-	-	→	-
+	-	→	+

Blood cell types (रक्त कणिकाओं के प्रकार)	Other Name (अन्य नाम)	Function (कार्य)	Amount (मात्रा)	Life-span (जीवन काल)	Nucleus (केंद्रक)
1. R.B.C Red Blood Cell (रक्त कणिका)	1. Red Blood Cell 2. Red Blood Corpuscles (रक्त कणिका कणिका)	R.B.C ↓ Haemoglobin → It give Red color to blood. → 2×10^6 & 10^9 per ml	5 Million per ml	20-120 days	No nucleus Ex cuphins → Canal & LAMA
2. W.B.C White Blood Cell (रक्त कणिका)	1. White Blood Cell 2. White Blood Corpuscles (रक्त कणिका कणिका)	→ It provide immunity by sticking to pathogen	10,000-11,000 per ml	2-4 days	→ have nucleus
3. Platelets (रक्त कणिका)	1. Thrombocyte (रक्त कणिका)	→ It helps in blood clotting (रक्त कणिका कणिका)	4-5 lakh per ml	3-5 days	→ have nucleus



* Animal Tissue (जन्तु तंतु)

↳ group of cell.

↳ group of cell that have similar structure and function is called Tissue.

↳ Richat is a scientist.

Types of Animal Tissue

1. Epithelial Tissue - (तपकला तंतु)
2. Connective Tissue - (समाजक तंतु)
3. Nervous Tissue - (नर्वस तंतु)
4. Muscle Tissue - (पेश तंतु)

1. Epithelial Tissue

↳ surface

↳ They are simple in structure.

↳ They are the only tissue which can grow on other tissue.

↳ They are present at the surface of internal & external organs, eg. liver, skin, (चित).

2. Connective Tissue

↳ They are fiberless tissue.

↳ They are the only tissue which is found in liquid state.

↳ They are most abundant tissue in our body.

सर्वत्र पाया जाणारा तंतु

eg. blood.

Biology.

④

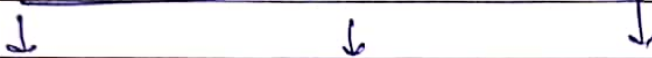
Nervous System (निरुणन तंत्र)

↳ related to Brain

↳ Neuron's → It is functional Unit of Nervous System.

#

Types



(C.N.S.)

Central Nervous Sys

(केंद्रीय निरुणन तंत्र)

(P.N.S.)

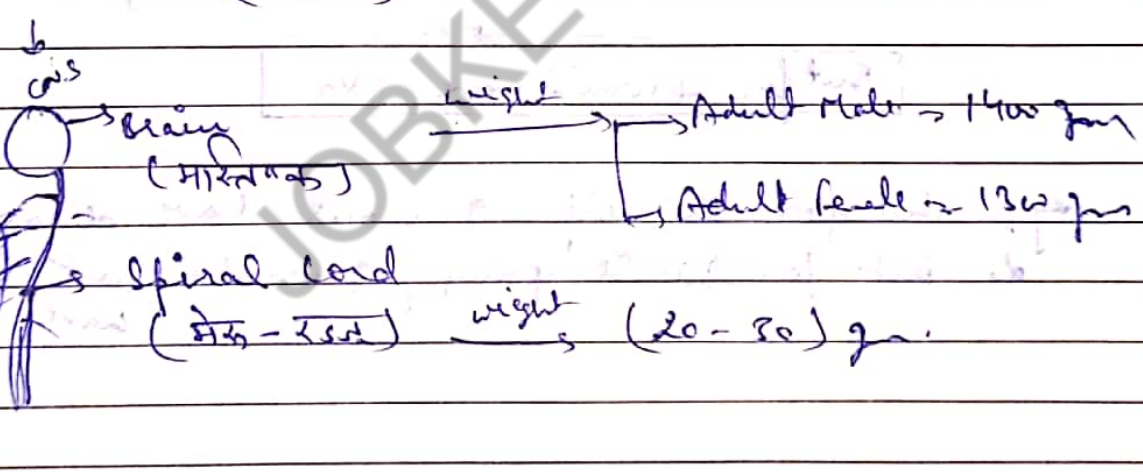
Peripheral Nervous Sys

(परिधीय निरुणन तंत्र)

(A.N.S.)

Autonomous Nervous System

(स्वतंत्र निरुणन तंत्र)



Brain → Contains 70% oxygen & glucose
 ↳ Brain is most blood rich part

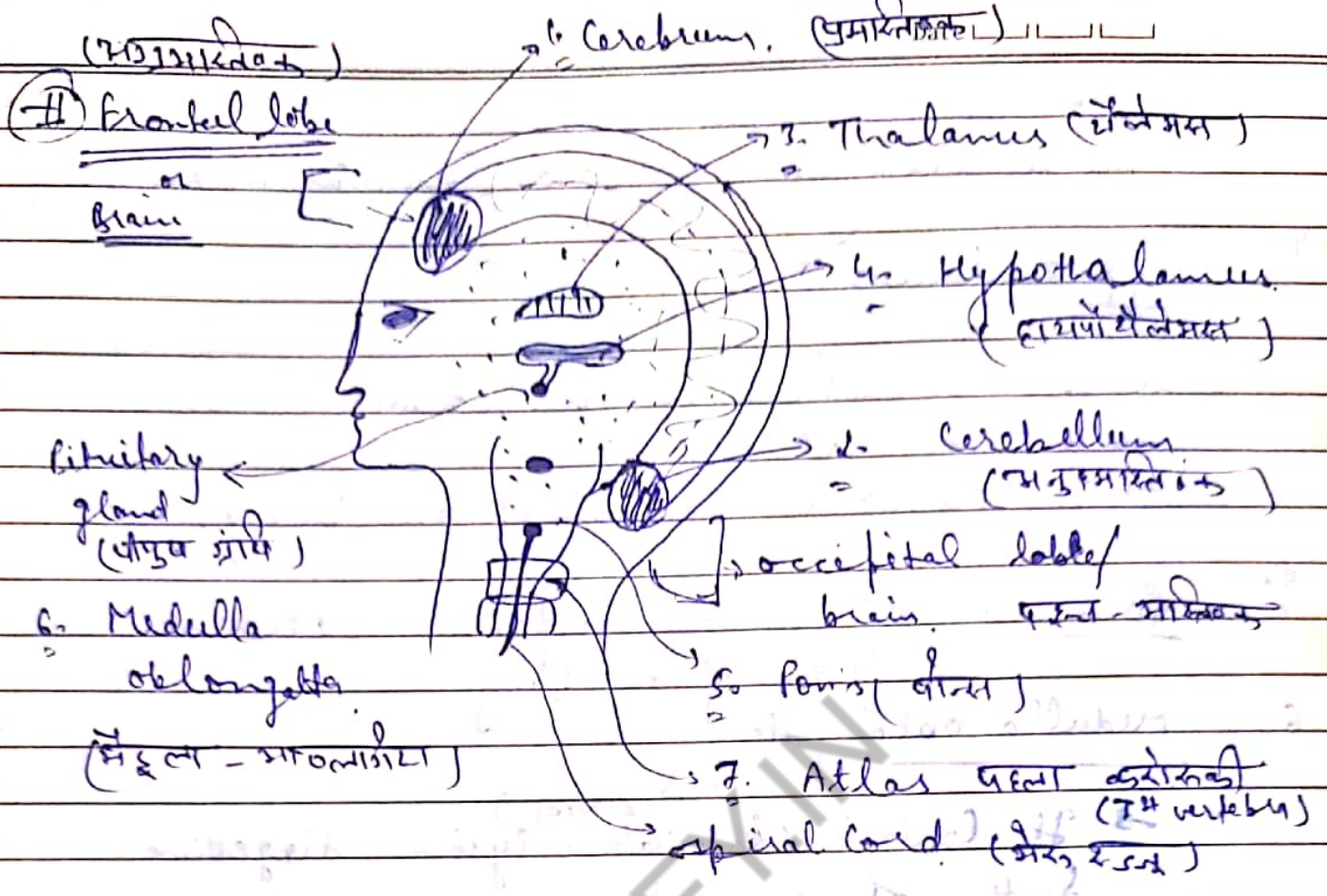


Fig. Human Brain

Brain disorder (मानसिक रोग)

1. Paralysis (लेकना)
2. Epilepsy (शिर्ष)
3. Hallucination (भ्रम)
4. Schizophrenia (सिजाफ्रिया) (अलग जेहन)

- # 1. Cerebrum → Biggest part of brain
 → It is the most active part of brain
 → It control all voluntary actions (eg. writing)
2. Cerebellum → It is smallest part of brain
 → It control movement of our body (आंद)
- It also balance our body

3. Thalamus (कवचांत)

→ It control hot and cold Sensation of our body.

4. Hypothalamus

→ It is center of emotion (भाव)

→ It store old memories

→ It maintain temperature of our body.

5. Pons → It control respiratory (श्वसन) System of our body.

6. Medulla oblongata

→ It control circulatory system, digestive system of our body (परिसंचरण)

7. Atlas → It is the first vertebra on which head rotate

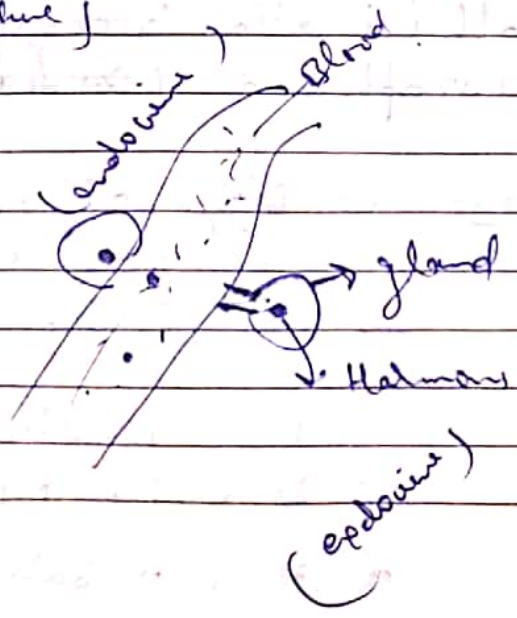
Endocrine System

(अंतः स्रावी तंत्र)

(glands) → (पेचलक जैव संरचना) (ग्रन्थि)

(secrete)

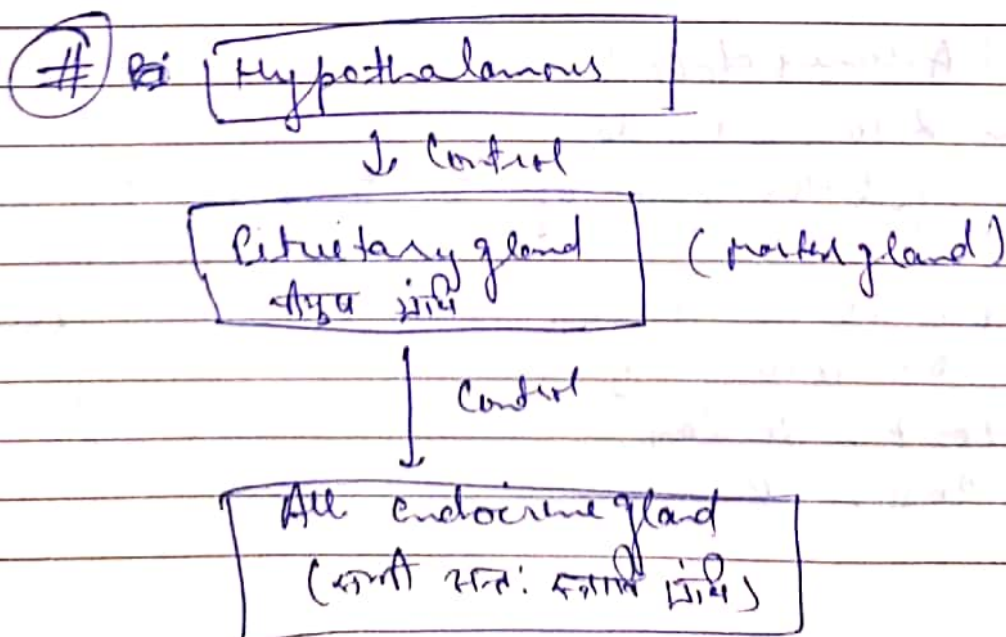
Hormones (chemicals)



Types of gland.

↓	↓	↓
Exocrine gland (बहिः स्रावी ग्रंथि)	Endocrine gland (आन्त. स्रावी ग्रंथि)	Mixed gland (मिश्रित ग्रंथि)
* They have duct नालिका युक्त ग्रंथि	* They lack duct (नालिका विहीन ग्रंथि)	* They have many functions.
eg. Salivary gland (लार ग्रंथि)	eg. Thyroid gland (अण्ड ग्रंथि)	eg. Pancreas (अग्नाशय)

- Note :
1. "liver" is the largest gland of our body.
 2. Skin is largest organ of our body.
 3. Biggest endocrine gland is "thyroid gland".
 4. Smallest endocrine gland is "pituitary gland".



Pituitary gland

Type I,

Mammary glands	→ L.H	(Luteinising hormone)
Testes & ovaries	→ F.S.H	(Follicle stimulating hormone)
Thyroid	→ T.S.H	(Thyroid & " ")
Bones & Muscles	→ G.H	(Growth Hormone)
Adrenal gland	→ A.C.T.H	(Adreno cortico tyrosine hormone)
Kidney	→ A.D.H	(Anti-diuretic hormone)

CST - France - 1959

①

Biology

1. Thyroid gland (गण्ड ग्रंथि)

Thyroid gland
↓ release

Thyroxine hormone (It maintains Normal Metabolism of our body)

→ Disease कमी करी के Goitre "बौल गण्ड" नाम की कमी होती है (Iodine).

#	↑↑ <u>Hyperthyroidism</u>	↓↓ <u>Hypothyroidism</u>
	⇒ gigantism अधिका	⇒ Dwarfism (कमिया)

2. Parathyroid gland (परागण्ड ग्रंथि)

↓ release ↓

<u>Parathyroid hormone</u>	<u>Calcitonin hormone</u>
⇒ both maintain level of " <u>Calcium</u> "	

↓ ↓ Calcitonin
(Calcium की कमिया)

→ diseases → कमी की होती है
↳ "weakening of bone"

↑↑ Calcium
(Calcium की अधिका है)
Calciumoxalate (पथरी)
Calcium → भारी कमी की होती है

2

4.

Pancreas (अणुनासाय)

gland of digestion

release

Insulin
Hormone

glucagon

β-cell α-cell

→ glucose $\xrightarrow{\text{insulin}}$ glycogen

glycogen $\xrightarrow{\text{glucagon}}$ glucose

→ insulin at amt of glucose
atamt ↓ (glucose ↑↑)

→ glucagon at amt of
glucose atamt ↑ (glucose ↓↓)

→ Disease ⇒ Diabetes Mellitus
(शर्करा)

⇒ glucosia

5.

Testis (वृषण)

- found in Males.
- found in pair

Testosterone hormone.

- ↳ It helps in sperm formation
- ↳ It bring secondary sexual characteristics in Male of (वृष, अणु)

6.

Ovaries (शुक्राणु)

- general found in double pair
- single in birds

Estrogen

Progesterone

3

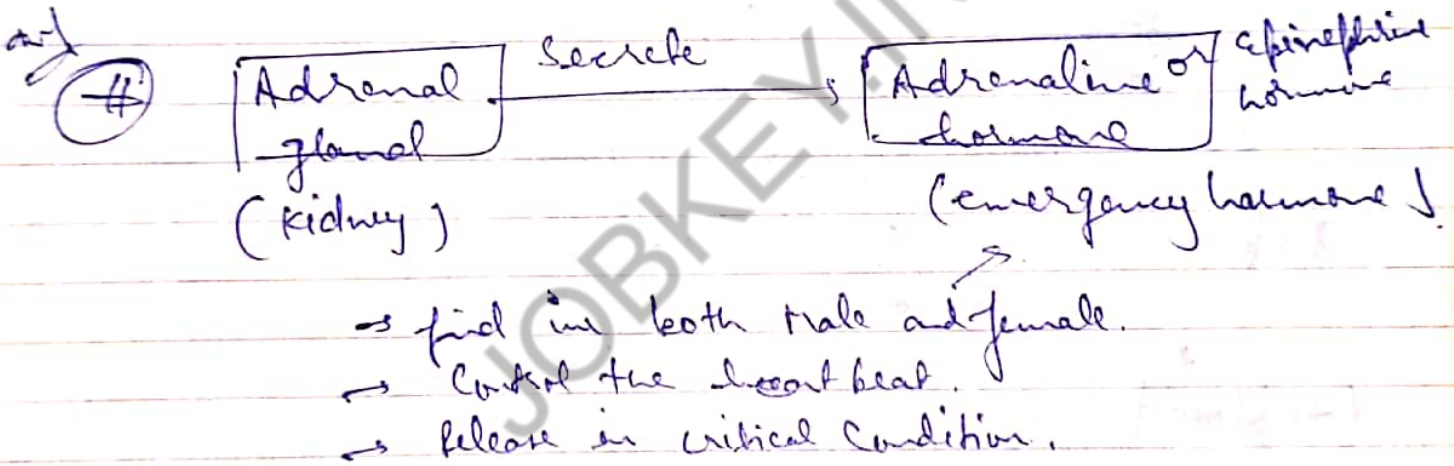
Estrogen → It help in ova formation
→ It bring secondary sexual characteristics in female.

Progesterone →
→ Pregnancy hormone
→ It maintain pregnancy.

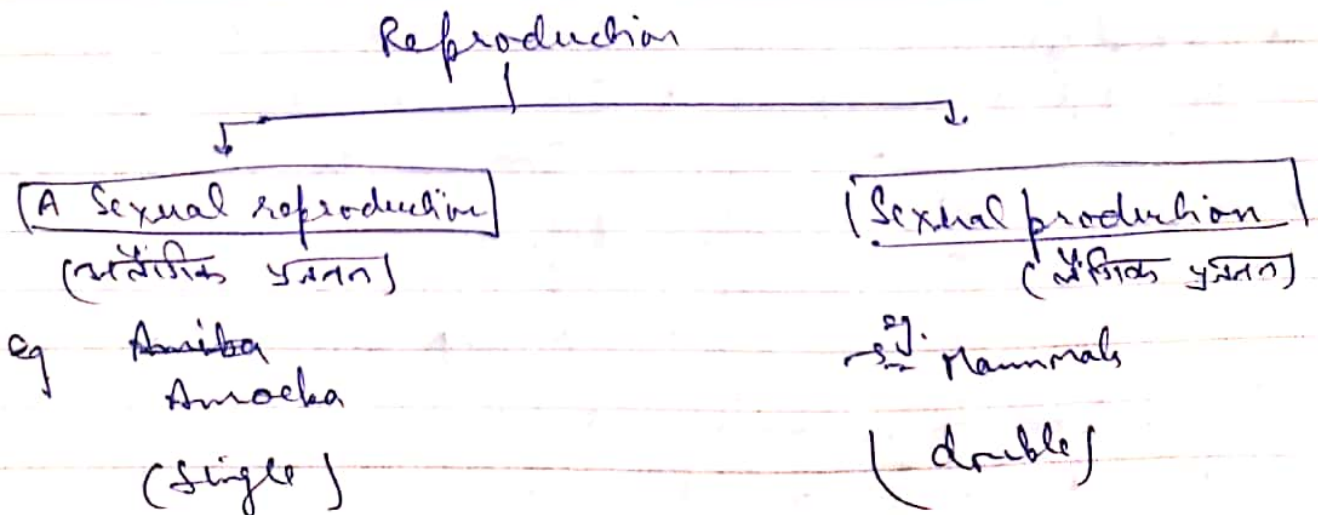
two other female hormone (release by brain)

1. # Oxytocin → It initiate labour pain

2. # Relaxin → It helps in expulsion of baby.



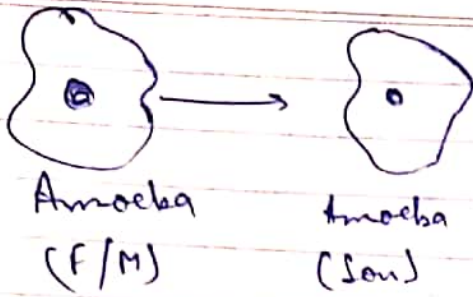
5. # Reproductive System (प्रजनन तंत्र)



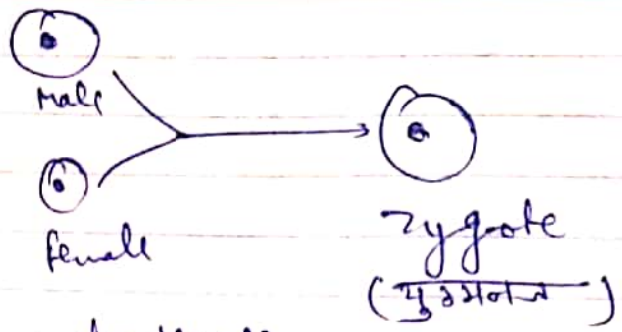
4

Asexual

Sexual

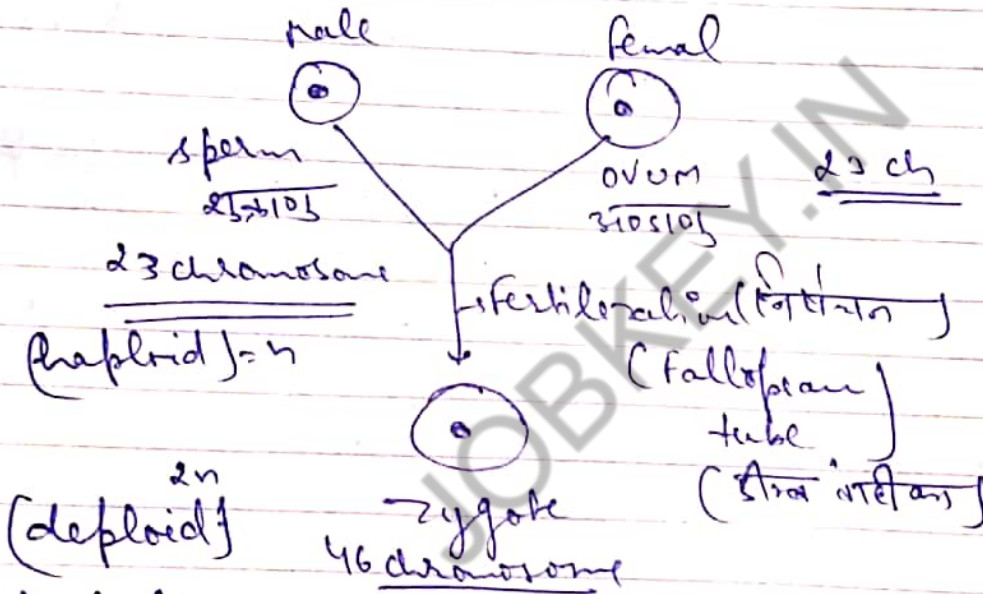


- Single cell.
- less survival



- double cell
- More survival

Human Reproduction



Male Sperm

ovum (female)

- Start with 13-15 yrs
- no end yr.
- life duration 36 yrs
- Mobile (more)



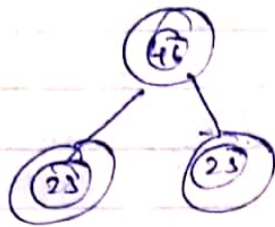
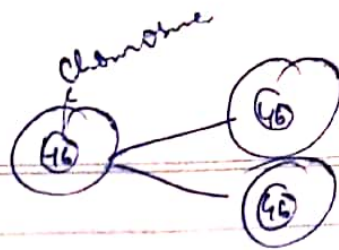
- Menstruation cycle (मासिक चक्र)
- Start with 12-14 yrs
- end yr is 45-50 yrs
- life duration 48 yrs
- Non-Mobile



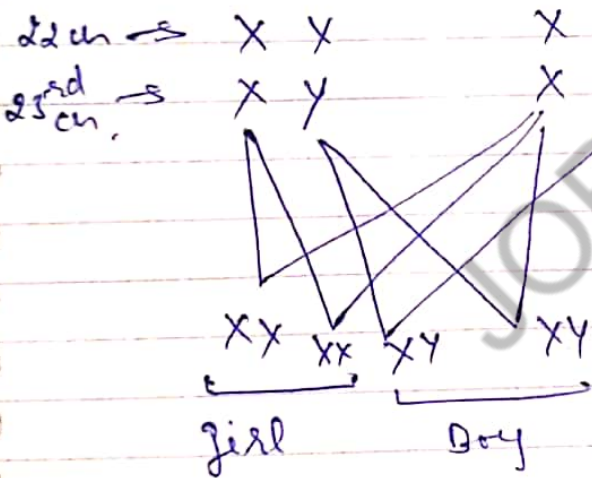
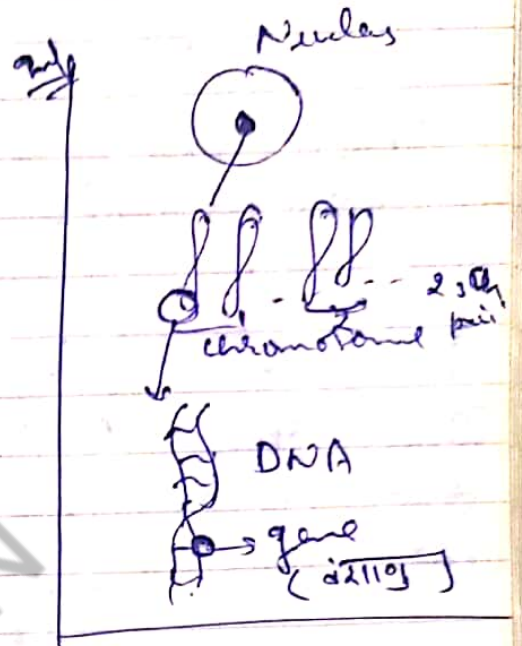
Tip
 ⇒ Human body is 46 chromosomes (2n) but in sperm only 23 chromosomes

5

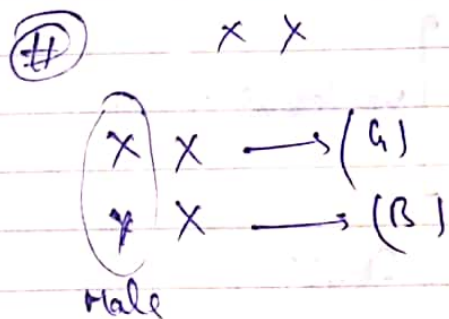
- # Mitosis → समसूत्री विभाजन
- # Meiosis → असमसूत्री विभाजन



Sex-determination
(लिंग-निर्धारण)

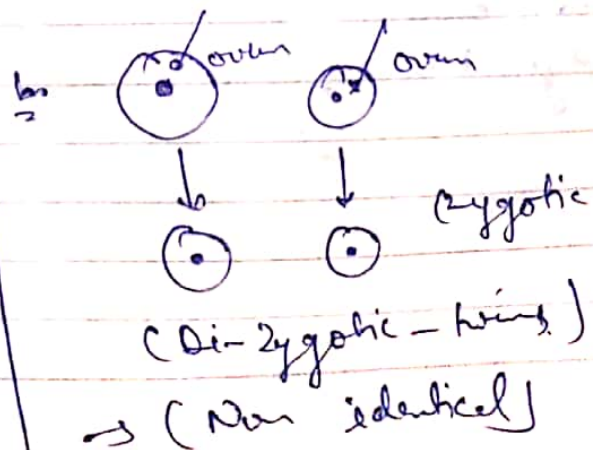
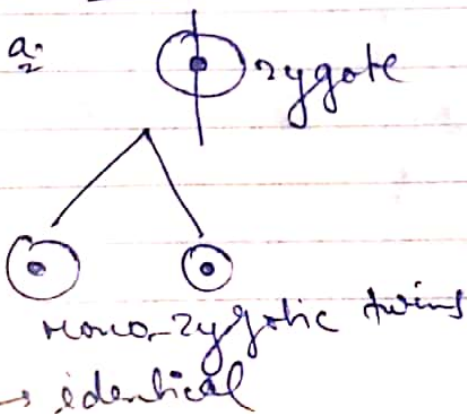


⇒ $G : B = 50 : 50$



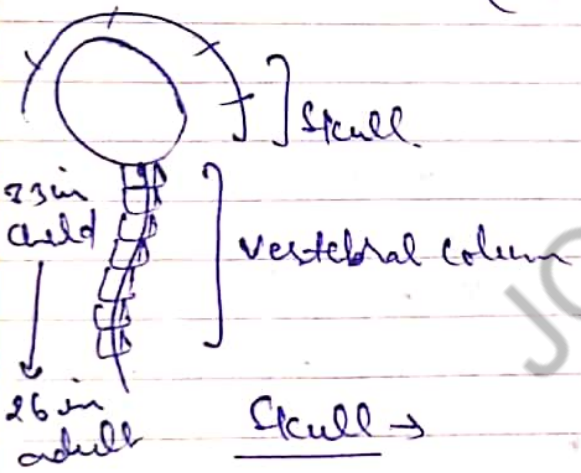
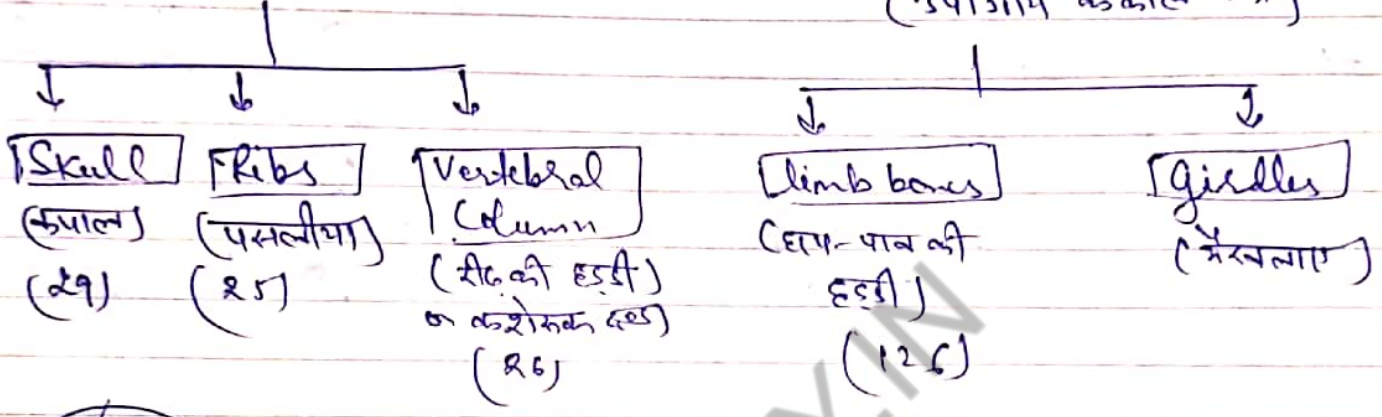
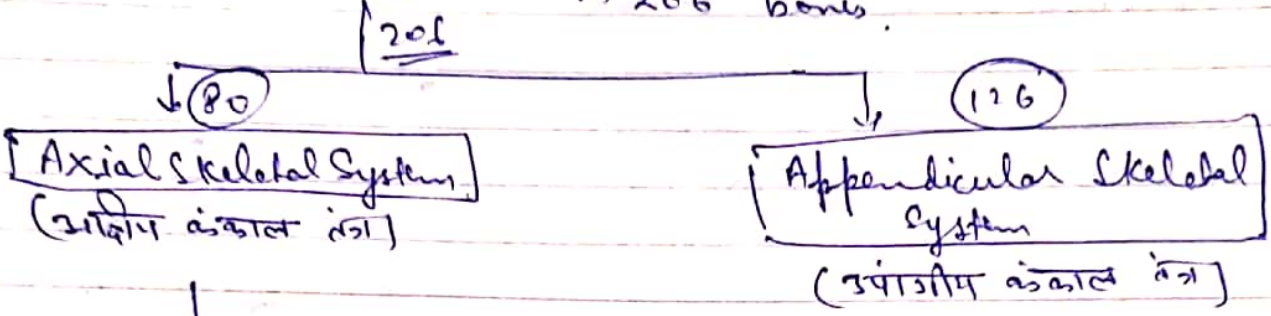
⇒ male is responsible of sex determination

Twins असौ



6

Skeletal System (अंकल तंत्र) → 206 bones.



Hand - 64
leg - 62
126

Ribs

 12 x 1 + 12 = 25

Flat bones - 8
 Facial bones - 14
 Ear bone - 6
 Hyoid bone - 1
29

~~206~~ 306 bones in foetus
 ↓
270 - 280 (Child)
 ↓
206 (Adult)

7

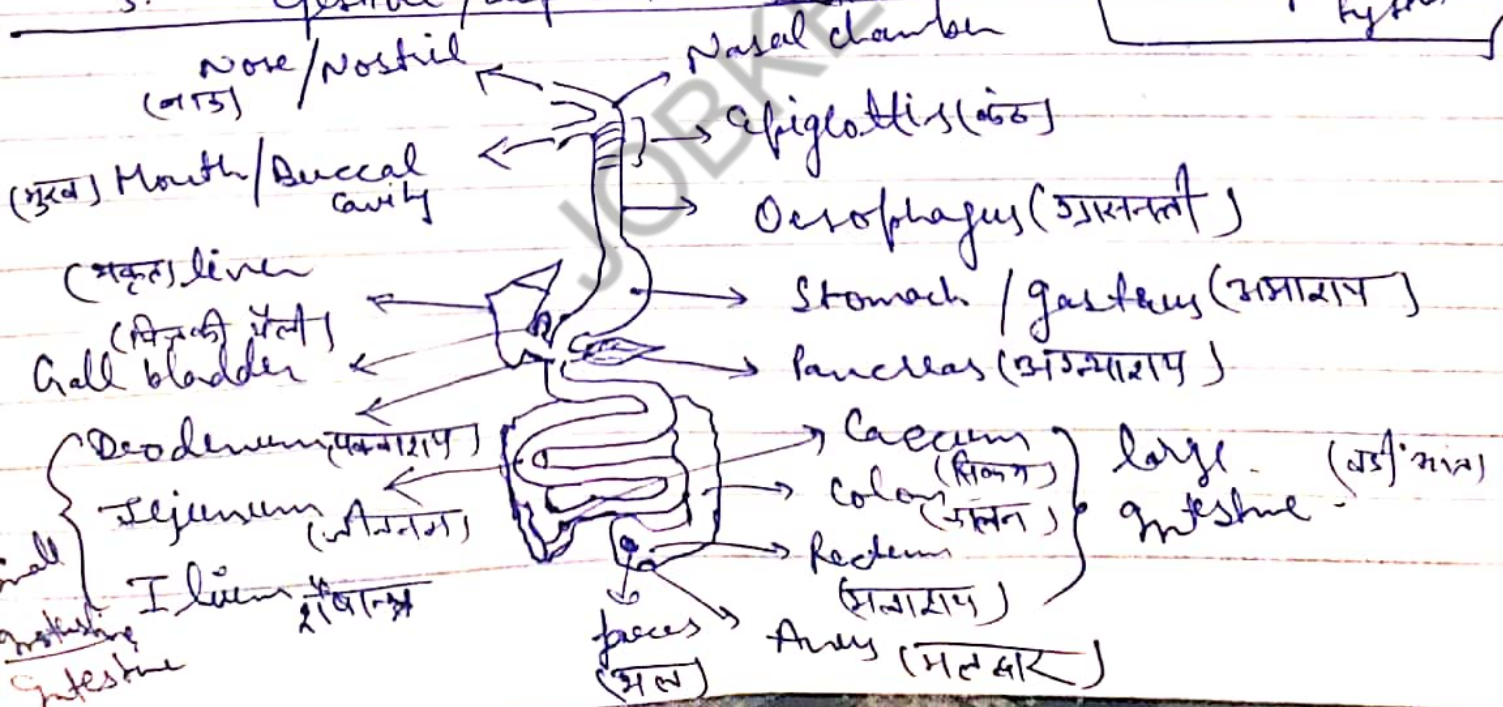
Biology

Digestive System (पानन तंत्र)

→ Process of Digestion

1. Ingestion (अहार: ग्रहण)
2. Digestion (पानन)
3. absorption (अवशोषण)
4. Assimilation (द्वितीयाहारा)
5. Egestion/defecation (मलमूर्त्ति)

Fig. Human digestive system



8

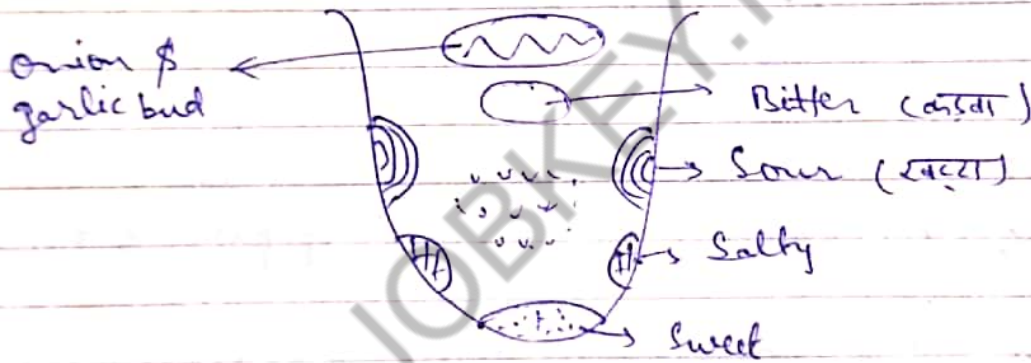
⇒ Mouth. (मुख)

1. Teeth

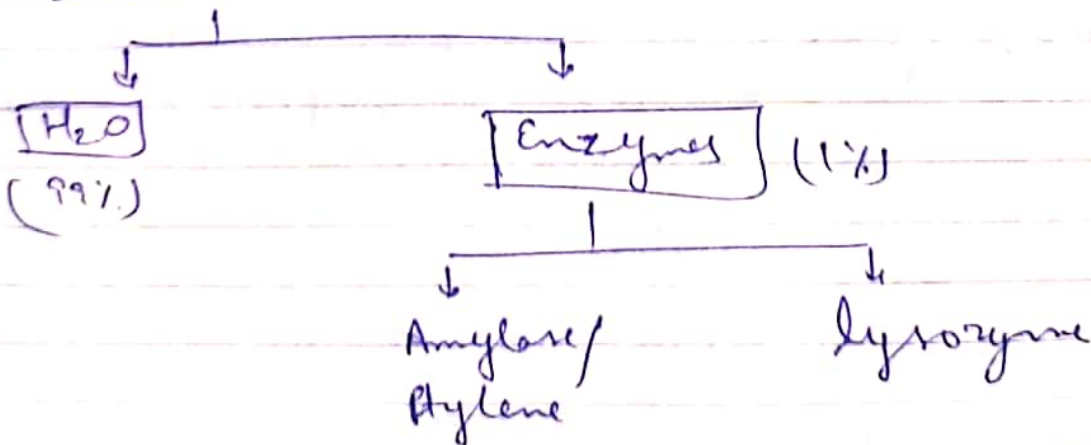
[Adult] → 2 1 2 3
(Dental formula) $\frac{P+P}{P+P} = \text{teeth } \frac{16}{16} = 32$

[child] → 2 1 2 0 $\frac{5+5}{5+5} = \frac{10}{10} = 20$

2. Tongue. (जिह्वा)



3. Saliva (मूत्र)

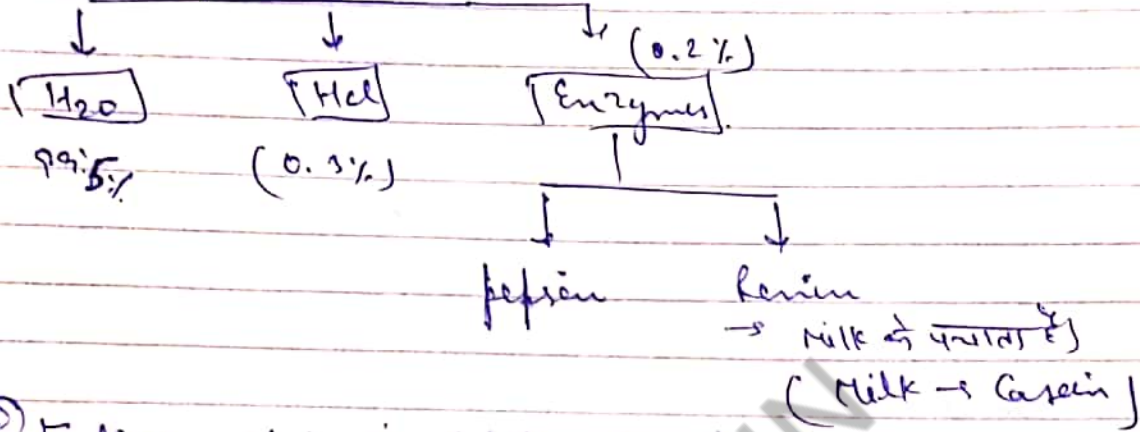


9

Mucus Membrane (रक्तमय झिल्ली)

Peristalsis Movement (प्राणिक गति) (5TH Enzymes of food, stomach को चलाते हैं)

Gastric Juice (पेट का रस)



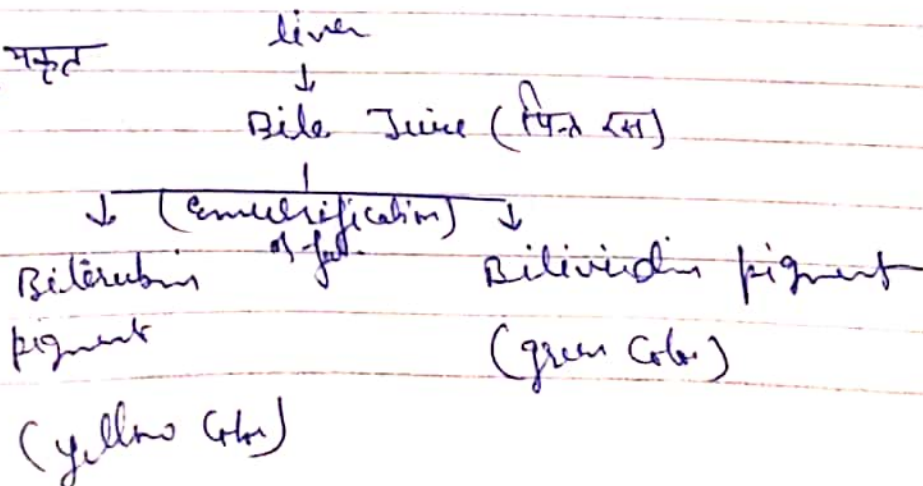
liver cirrhosis (fatty liver) → It is a disease of liver.

HCl 1. It provide acidity to stomach
2. It activate the enzymes pepsin & Renin

pepsin → It partially digest protein
→ It completely digest Milk.

Note → Casein is the chief protein of Milk.
→ due to excess consumption of Alcohol - liver cirrhosis

liver मकृत



10

→ Bilirubin ↑↑

is disease → Jaundice / Hepatitis
(पित्त)

→ Due to Urochrome pigment, Urine color is yellow.

③ Pancreas (अम्लीय रस)

↓

Pancreatic Juice (अम्लीय रस)

Enzymes

↓

↓

↓

Trypsin

Amylase

Lipase

↓

↓

↓

protein

Carbohydrate

lipid (fat)

④

Intestine (अंत्र)

↓

Intestinal Juice (अम्लीय रस)

enzymes

→	Trypsin	→	Complex protein
→	Maltase	→	Maltose
→	Lipase	→	lipid (fat)
→	Sucrase	→	Sucrose
→	Lactase	→	Lactose (Milk Sugar)

④

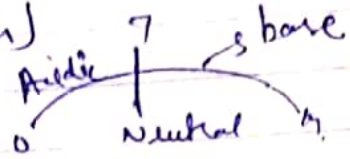
Length

1. Alimentary Canal (अंत्रिकाणु) → 9 to 10 m
2. Food pipe → 25 cm
3. Small intestine → 6 to 8 m

(11)

4. large intestine \rightarrow 1 to 1.5 mtr.

(#) Ph value. (power of hydrogen)

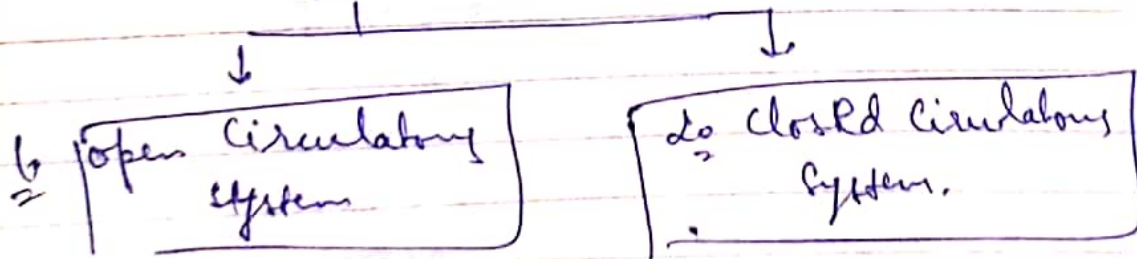


1. Saliva \rightarrow 6.8
2. Stomach \rightarrow 1.5 to 2.5
3. Liver \rightarrow 8
4. Gall bladder \rightarrow 8.3
5. Pancreas \rightarrow 7.7
6. Urine \rightarrow 6
7. Sweat (पसीना) \rightarrow 7.3
8. Blood \rightarrow 7.4
9. Water \rightarrow 7 (Neutral)
10. Tears \rightarrow 6.3 to 6.8

(#) Circulatory System (परिसंचरण तंत्र)

\rightarrow William Harvey (1628)

\rightarrow Type



eg. Insect

eg. Mammals

Note. Insect \rightarrow 13 chamber heart
Fishes \rightarrow 2 chamber heart
Reptiles \rightarrow 3 chamber heart
Mammal \rightarrow 4 chamber heart

12

A.V. node
(Atricle Ventricular node)

S.A. node
(Sino auricular node)
(प्राथमिक स्त्रोत्रकेंद्रक)

(दायां गण्डिका)
Right Auricle

left Auricle
(बायां गण्डिका)

Tricuspid valve
(द्विचलनियम अयत)

Bicuspid valve
(द्विचलनियम अयत)

Right Ventricle
(दायां निलय)

left Ventricle
(बायां निलय)

Bundle of his
(हिस्त का गुच्छक)

Purkinje fibre
(पूरकिन्जे कासक)

Pericardium (एडुमायट)

Fig. Human heart

#

CO₂ blood
(deoxygenated)
(अऑक्सीजनित)

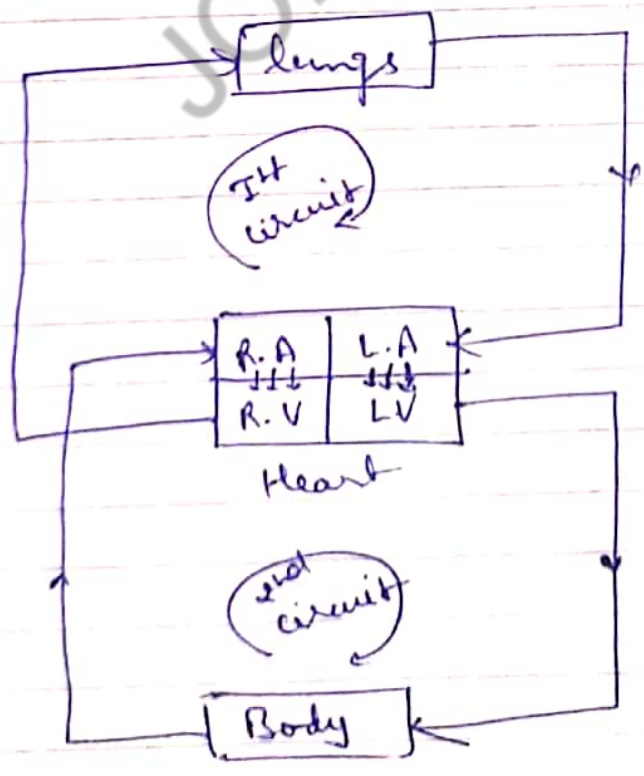


Fig: double circulation of blood
(रक्त का दोहरा परिसंचन)

O₂ blood
(oxygenated)
(ऑक्सीजनित)

13

Heart beat

1st heart beat → Dubb

2nd _____ → Lubb

difference b/w two heart beat 0.8 sec

#

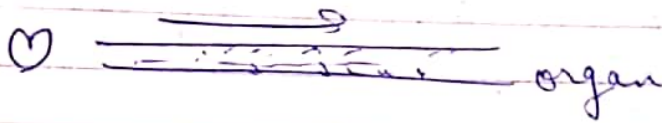


Fig Arteries (carry)



Fig (veins) ~~carry~~

Note In case of lungs this process is reversed.

Blood pressure

→ 80 - 120 mm Hg. (Normal)

← low B.P

→ High B.P

→ Sphygmomanometer

14

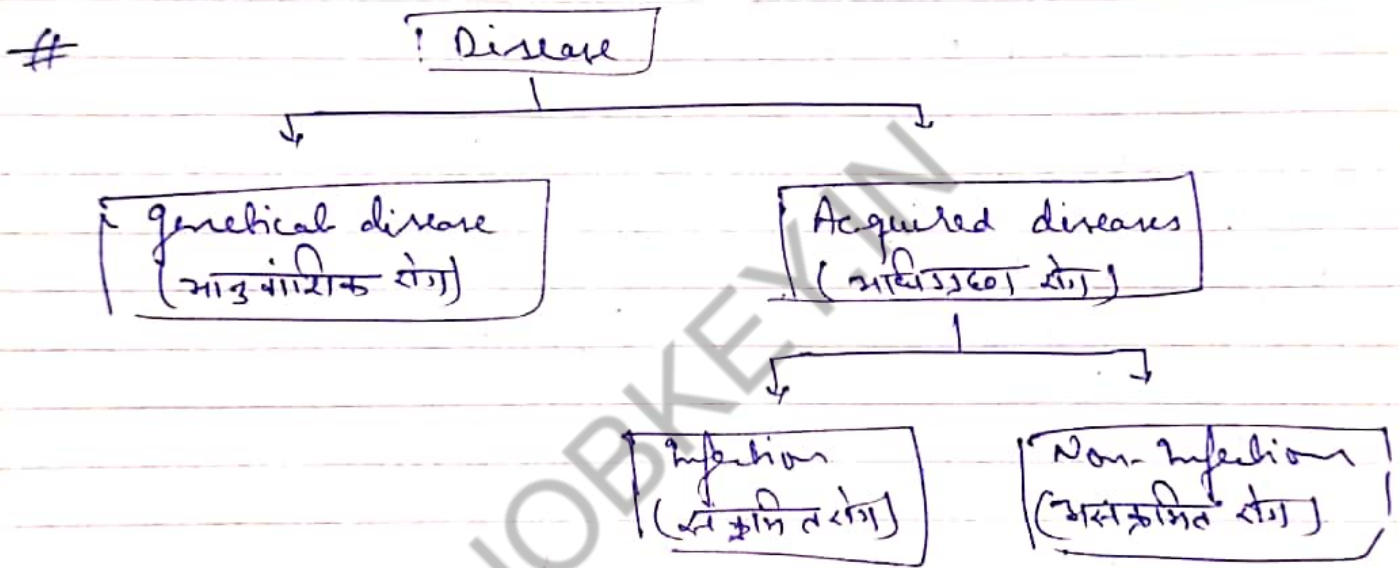
Biology

Heart Transplants

- Dr. Christian Bernard (1967, South Africa)
- Dr. P. Venugopal Rao (1994 - AIIMS)

2/2
⊕ Disease

→ WHO → world health org. "1948, Geneva"
Hx to - Healthy = Physically + Mentally + Socially.

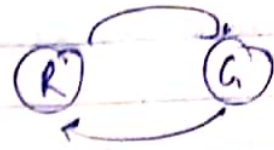


⊕ Genetical Disease

1. Colour blindness (रंग दीनता)
2. Haemophilia (रक्त लसता)
3. Klinefelter Syndrome (क्लीन फिल्टर सिंड्रोम) (Male)
4. Turner Syndrome (टर्नर सिंड्रोम) (Women)
5. Haas Syndrome (पटाक सिंड्रोम)

→ No रोग
→ not found in "Male"

1. Color blindness.



- (i) Rod Cell → light
- (ii) Cone cell → colour
 - Unable to differentiate the colour
 - Red sees green and green sees red colour.

2. Haemophilia

(रक्त का थक्का नहीं बनना)

- Blood clotting
- eg. Queen Victoria (Subika Queen)
- Royal Disease (राजत रोग)

3. Klinefelter Syndrome.

- found in only Male
- found in only 23rd chromosome
- eg. बंजर

	<u>Male</u>			<u>Female</u>	
22 nd ch	X	Y	22 nd ch	X	Y
23 rd ch	⊗ X	Y	23 rd ch	⊗ X	Y
	<u>46 ch</u>			<u>47 ch</u>	

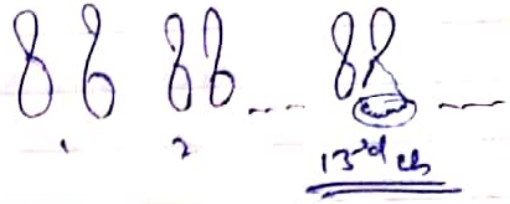
4. Turner Syndrome.

- found in only Woman.
- found in only 23rd ch eg. बाढ़ी मन

	<u>Female</u>			<u>Normal Female</u>	
22 nd ch	X	X	X	X	
23 rd ch	X	X	X	-	X/O
	<u>46</u>		<u>45 ch</u>		

5. Plau Syndrome.

- 1. Discovered by T. Plau.
- 2. found in 13th ch
 eg. दो ना कई रोग
 नाच ना कई रोग.



(A) Infection Disease.

* Viral disease. (बीजाणु जनित रोग)

- 1. A.I.D.S. (Acquired Immuno deficiency Syndrome)
 - No इलाज
 - HIV Virus (Human Immuno deficiency Virus) (एचआइवी)
 - 1981 USA → 1st Case
 - 1986 India Chennai
 - Test - ELISA Medium Thiamidic
A.Z.T. drug (Azido Antibiotic drug)

2. Dengue. (एडी जोड़ बुखार)

Pathogen → Arbo Virus
(रोगजनक)

vector (वाहक) → Aedes aegypti (मच्छर)

Symptoms (लक्षण) → जोड़ में तेज दर्द व तेज बुखार।

3. Rabies (रोटी)

रोग जनक → Rhabdovirus

वाहक → dog, cat, Monkey

लक्षण → fear of water (Hydrophobia), Mental Retardation
(मानसिक रोग)

* Bacterial disease (जीवाणु जनित रोग)

1. T.B (Tuberculosis)

Pathogen (रोग जनक) → Mycobacterium tuberculosis
Symptoms → खांसी के साथ blood साथ

2. Cholera (हंता)

रोग जनक → Vibrio Cholerae
लक्षण → पस्त व उल्टी

3. Typhoid (मियादी बुखार)

रोग जनक → Salmonella Typhi
लक्षण - तेज बुखार व सिर दर्द
⇒ Test → Widal

4. Pneumonia (निमोनिया)

रोग जनक → Streptococcus Pneumonia
लक्षण → सखी लागना व सांस फूलना

* Fungal Disease (कवक जनित रोग)

	(रोग)	(रोग जनक)
दाढ़	R → Ringworm	→ Trichophyton lunberioi
ब्रस	A → Asthma	→ Aspergillus fumigatus
खज	S/J → Scabies	→ Acarus scabies
एथलेट फुट	A → Athlete foot	→ Tenia pedis
खजली	I → Itching	→ chemical, dust
खजली	खजली → खज → दाढ़	

* Protozoal diseases (प्रोटोजोवा जनित रोग)

रोग	(रोगजनक)
D → Dysentery	→ infected water
M → Malaria	→ female anopheles
P → Pyerthone पापणिसा	→ infected food
K → Kala azar	→ sand fly (बालू भक्षत्री)
S → Sleeping sickness	→ Tse-tse fly (तिसकता भक्षत्री)

→ Malaria से Quinine (क्विनिन) drug दिया जाता है
Quine, Cincona plant (bark) से मिलता है

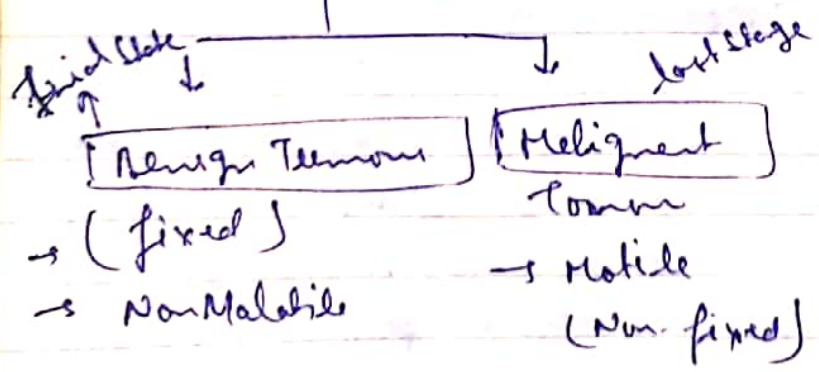
Non-infection disease.

1. Cancer (कर्क रोग)
2. Paralysis (लकवा)
3. Epilepsy (मिर्ची)

Cancer

→ uncontrolled growth of cells. ^{make} → Tumor

→ Tumor



Test → Biopsy test

Treatment → 1. Surgery
2. Laser therapy

3. Chemotherapy

Initial stage

Biology

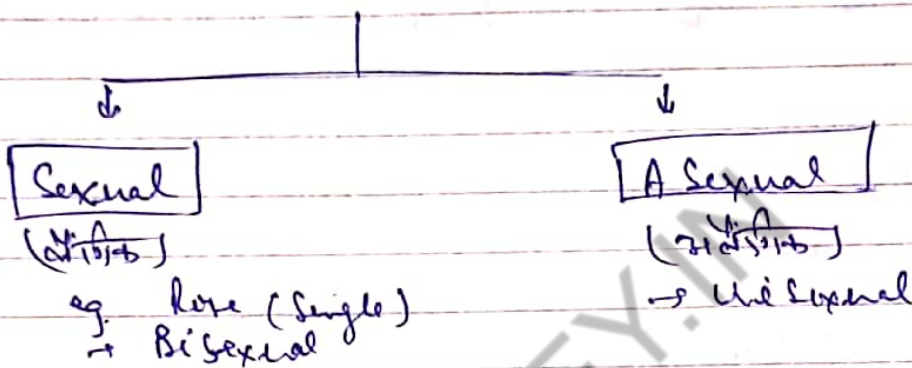
जीवशास्त्र विज्ञान

Botany

Father of Botany - Theophrastus.

⊛ Reproduction of Plants (जनन)

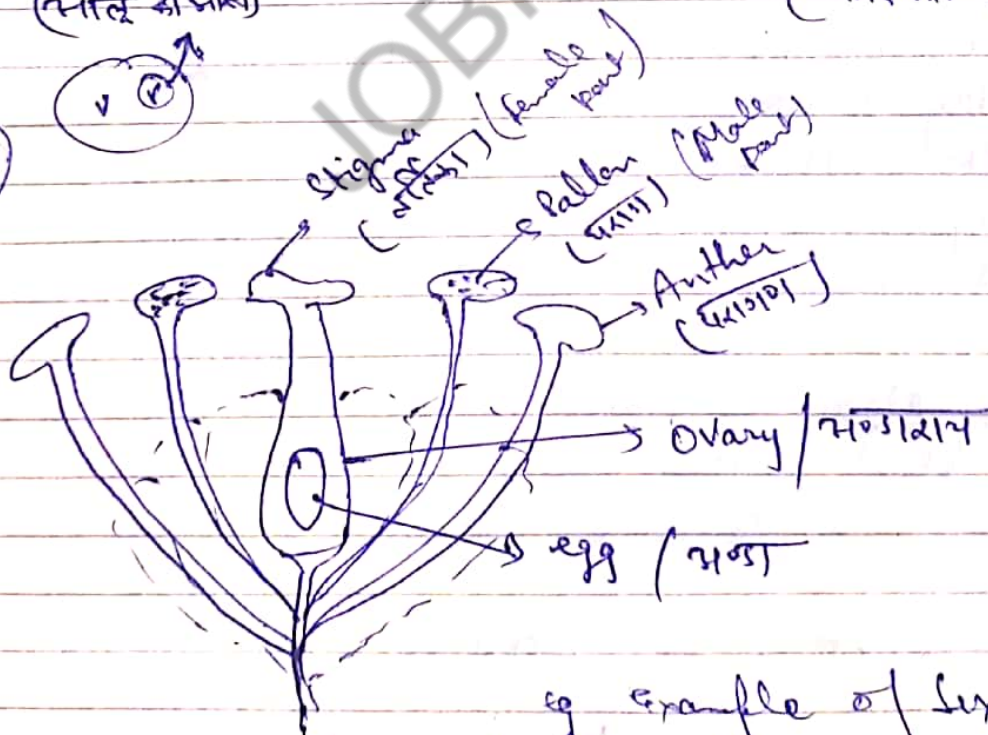
→ जल में रहने वाले पौधों की प्रजनन प्रणाली



→ eye of potato is responsible for → vegetative propagation (जलमय प्रजनन)



⊛



eg example of Sexual (single / bisexual)
(जलमय प्रजनन की प्रणाली है)

पराग

- Pollen always tough & wet
- Transfer of pollen from Anther to stigma of a same flower or another of same species is called pollination process (परागण प्रक्रिया)
- कौन सा पोषक तंत्र पराग में पाया जाता है - Protein
- Hay fever → Inhalation of pollen causes.
शामक दवा में पराग के प्रवेश से बिलगी होती है

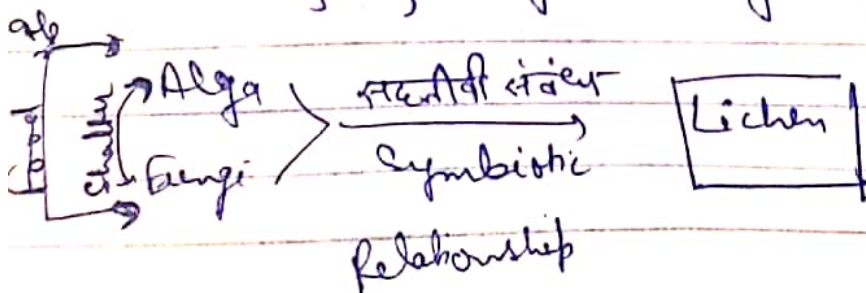
⊕ 5 Kingdom classification
(5 साम्राज्य वर्गीकरण)

→ "R. H. Whittaker"

1. Algae (शैवाल)
 2. Fungi (कवक)
 3. Bryophytes
 4. Pteridophytes
 5. Gymnosperms
 6. Angiosperms
- (Algal bloom - कटाई)
Plant Kingdom

→ Study of Algae → Phycology
→ Algal bloom is most dangerous species
(कटाई) → Terror of Bengal.

→ Study of Fungi → Mycology



(22)

⇒ Angiosperms → Covering Seed,
(All plants & fruits)

→ which plant do not have flower but having seeds - ~~Covering~~ plant
pine

genetics (वंशाणुशास्त्र)

→ gregor Johann Mendel

Pea (पिना - पिसा) → Pisum sativum

Mango → Mangifera indica

Humans → Homo sapiens

Frog → Rana b. tigrina

wheat → Triticum aestivum

Scientific
Name

→ From which language scientific name are
originated → Latin / Greek

→ Humans scientific Name → Homo sapiens

(The wise) (Meaning)

→ which font are used → Italic (Font)

(44)

factor / गुण

Gene

→ Discovered by "gregor Johann Mendel"

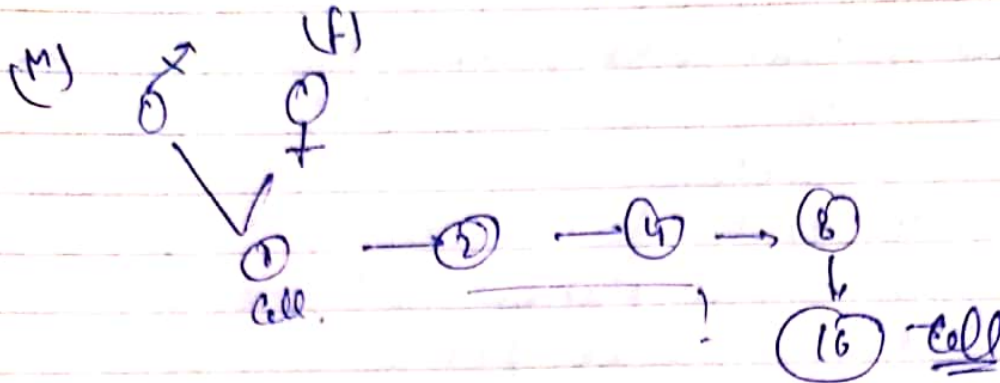
name given

Johannson

(23)

Patrick Steptoe & Robert Edwards

(H) IVF → In vitro fertilisation



- 16 cell stage same female & start stage of - In vitro fertiliser
- 16 cell stage start female & start stage of → Surrogate (start & start)
- 5 state in for the state: C, UK, UP, M.P, HR, Delhi
- 24 Aug 2016 start stage of state!
- 1st Indian IVF baby → Harsha India
- Sheep - dolly of cloning
- Cow - Rosy

(H) Charles Darwin

→ father of Revolution

Theory:-

1. Natural Selection (सहज चयन)
2. Survival of fittest.

2nd "The origin of species" (book)

3. benchmark

4. → Theory of tailless mouse.

24

1973 - Ten Corbet Uttarakhand, Tiger & P.W.

- National park
1. Ten Corbet National Park U.P. (Tiger)
 2. ~~at~~ National Park (M.P.) Tiger
 3. Dudhwa National Park (U.P.) Tiger
 4. Ranthambore (Rajasthan) Tiger
 5. Rajaji National Park (U.P.) Elephant
 6. Gir National Park (Guj.) Lions
 7. Kaziranga National Park (ASAM) Rhino
 8. Keibul Lamjear → (Manipur) (Deer)
(floating park) रिज/सिंह

JOBKEY.IN

95

Biology

④ Genetics (आनुवंशिकता)

- Study of genes
- Father → Gregor Johann Mendel
- Scientific name is written with combination of two words. → Genus + Species

eg
pea → Pisum sativum
 ↓ ↓
 Genus Species

- language use → Latin (Greek)
- font style → Italic

- 1. Frog → Rana tigrina
- 2. Wheat → Triticum aestivum
- 3. Mango → Mangifera indica
- 4. Human → Homo sapiens
 "The wise"

①, Potato X Tomato

↓
Pomato → It is a first transgenic species

② Horse X Donkey

↓
Mule (मूला)

26

- Ist transgenic animal (barbaric) → Mule
- Ist transgenic plant → Tomato
- IVF → in vitro fertilization
(परासंज्ञी द्वारा बना किया गया)

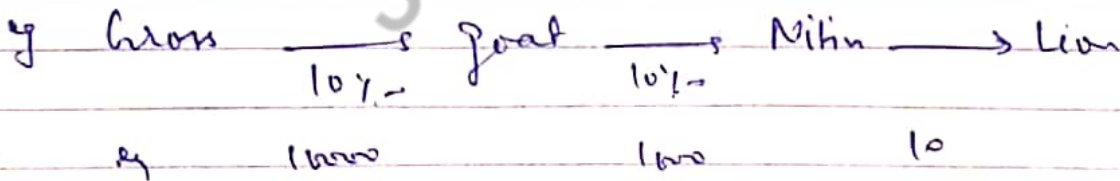
- Ist Born baby by IVF → Louise Brown
- _____ in India → Harsha / Indira

④ Charles Darwin Theory

1. Nature Selection → origin of species
 प्राकृतिक चयन → प्रजाति की उत्पत्ति

d. Umralta → Theory of Tailless Mouse
 (बिना पूंछ के चूहे का प्रोडिग)

④ 10% law → 10% energy transform one stage to other stage.



- Ist National park → Jim Corbett (UK) → lions
- ~~राजस्थान~~ ~~राजस्थान~~ National park (raj) → Tigers
- ~~मध्य प्रदेश~~ National park (MP) → Tigers
- ~~उत्तर प्रदेश~~ National park (UP) → Tigers
- Gir National park (Gujarat) → lions
- Rajaji National park (UK) → elephant
- ~~असम~~ National park (Assam) → Rhinos

→ float National park (Manipur) → Keibul Lamjao
→ Deer / Sanghai

→ 10% energy is transfer from one trophic level to another
in the food chain → 10% law.

→ largest plant → Eucalyptus (Australia)
→ It decreases the water level.

→ Smallest plant → Wolffia
→ largest ↓

→ largest flower → Ipomoea

→ Smallest flower → Wolffia

→ largest tree → Sequoia (USA)

→ Smallest tree → Willow

