



# Section 'c'

## Q.10 Summary of Blood.

→ Introduction

→ Plasma → Water  
Protein  
Organic Substrates  
Inorganic Substrates  
Enzyme  
Hormone  
Gases.

→ Blood cell

① Erythrocyte (Red blood ~~cell~~ <sup>corpuscle</sup>)

- Number
- Shape & Size.
- Physical str.

② Leucocyte (White Blood cells)

2 types — ① Granulocyte

- Acidophyl
- Basophyl
- Neutrophyl

② Agranulocyte

- Lymphocyte
- Monocyte.

③ Blood Platelets.

⇒ function of Blood.

Q10 Blood is a fluid connective tissue. It is a matrix and is liquid and colourful in see.

⇒ Blood formation occurs in Long Bone Marrow.

⇒ Blood Composition is various types →

# Plasma

thickening  
liquid

→ In plasma present.

Plasma is colorless substances. it is substances.

60% of water

## Protein

→

①

Albumin

②

globulin

③

fibrinogen

④

Prothrombin.

Organic Substances :-

① Non nitrogenous  
like - fats

② Non Protein Substances - Present  
in the Plasma.

Inorganic Substances

Substances are present in the plasma. Such as Calcium, Magnesium, Sodium, Potassium are present in the plasma.

Enzyme

Lipase  
Protease.

Hormones → Progesterone

Gases

→ 8% oxygen present in Deoxygenated Blood.

→ 14% oxygen present in Oxygenated Blood.

→ Carbon dioxide present in plasma of Deoxygenated Blood & oxygenated &

# Blood Cell

3 types -

Erythrocytes  
Leucocytes  
Blood Platelets.

## Erythrocytes →

Red Blood Corpuscles; this is also called  
called Corpuscles not cell  
bc there is no nucleus &  
mitochondria present.

→ In Red Blood Cells are enucleated  
corpuscles. In this nucleus,  
golgi body, mitochondria not present.



Numbers → In Men RBCs  
 5 to 5.5 per cubic million  
 Present

→ But in Women 4.5 to 5 per cubic million RBCs  
 Present -

Shape & Size → Erythrocytes  
 are they yellow in colour. In this they are disc like & they are flexible.

→ But in a group they look  
Red Colour ✓ b/c ✓ present  
the Hemoglobin ✓ Oxygenated ✓ pigment ✓  
is found.

## Physical Structure

the flexible, Biconcave disc  
like structure. RBCs are  
Hem group carry 4 Oxygen  
molecules. One



## Red Blood Corpuscles

## Leucocyte

White  
cells  
are

this is also called  
Blood cells & In this  
nucleus & cytoplasm  
present.

leucocyte are very small structure

WBC are Main 2 types—

① Granulocyte → In the  
granulocyte nucleus granules present.

→ It occurs more in children than the Adult.

→ Granulocytes are divided into 3 categories based on the presence of granules & Nucleus.

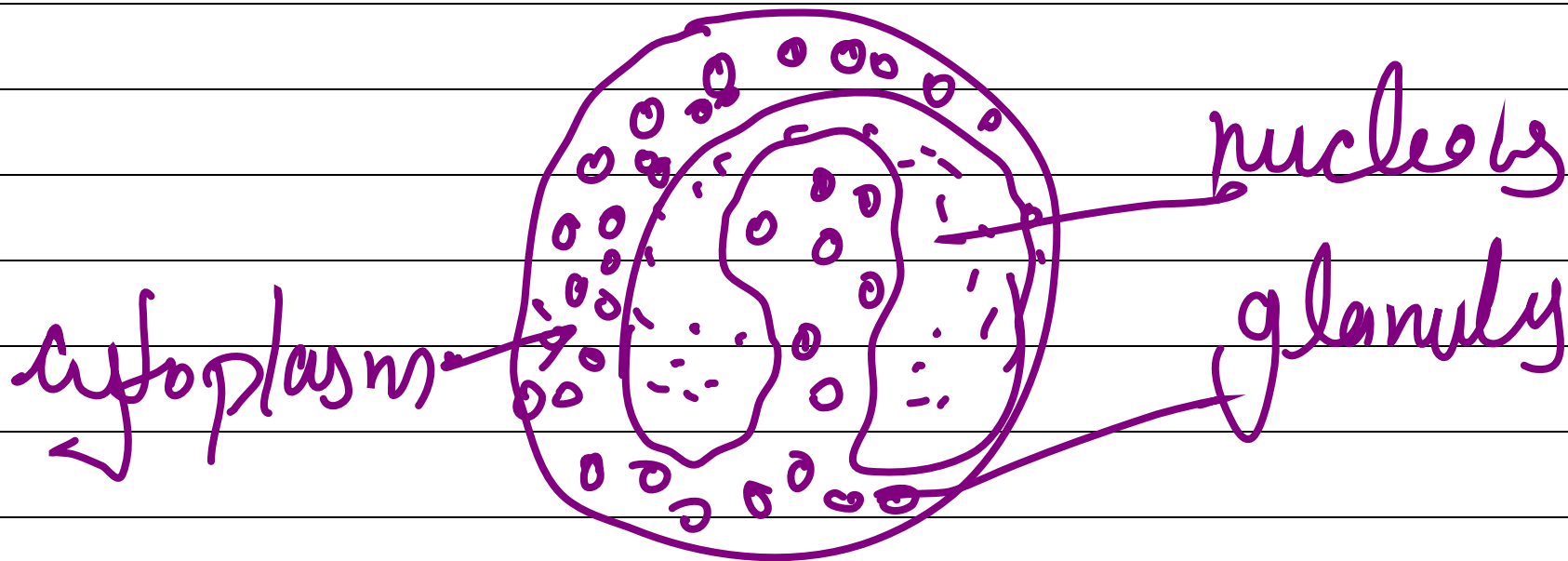
Acidophyl →

nucleus  
present

Acidophyl

In this & large  
present in more granules  
in more number.

help to maintain antibody.

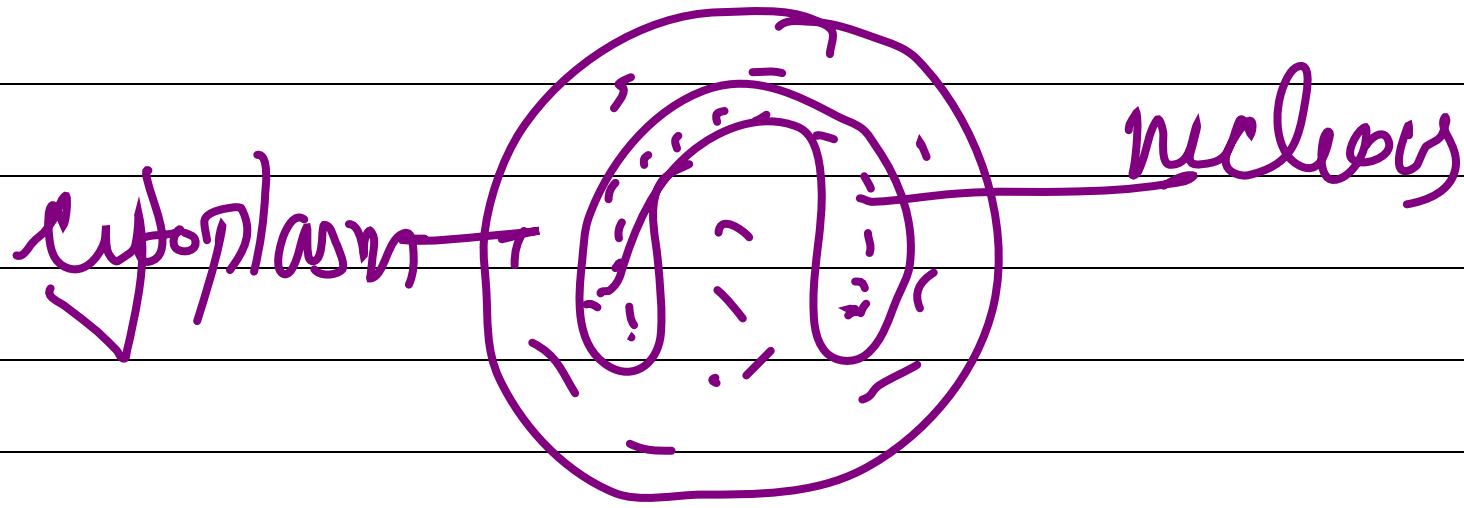


# Basophil

→ Its nucleus is  
S-shaped. ← Some granules  
present in the Basophil.

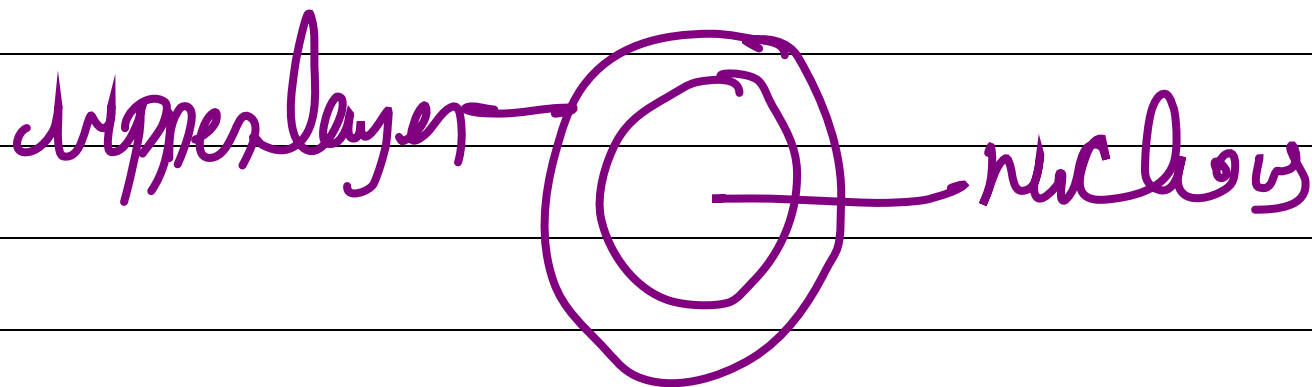


Neutrophyl → In this nucleus  
Present . But granules  
not Present in Neutrophyl.



Agranulocyte are Divided in  
2 types.

1) Lymphocytes  
 this are the  
 smaller size and the nucleus  
 is smaller. the upper  
 layer is thick of Lymphocyte.





# Mono cytes

the size is large than lymphocyte. it is large. & it is found in the upper thickening layer. it is nucleous.

# Blood Platelets

Blood Platelets found in blood. they are very small in size. they are red in colour. they are oval in shape.

# function of Blood →

## ↳ Transport of minerals →

Blood all minerals are By the  
 takes every organs by the  
 Blood.

## ↳ Disposal of CO<sub>2</sub> →

the CO<sub>2</sub> is removed  
 by the Blood. out of  
 the body

→ Distribution of protein  
are reached of all parts  
By the plasma. → reach

→ Removal the excretory substance

→ Carry  $O_2$  gas.

→ Distribution of other imp.  
Substances to many organs.

→ Protects from disease.

Q-11. Introduction

Types → 1) Poikilotherms  
Ectotherms.

2) Homeotherms

(i) Ectoderm Homeotherms

(ii) Endoderm Homeotherms.

3) Homotherms.

↳ to Thermoregulation → it defined by the temperature of our body.

↳ Know as the temperature of the body are thermoregulator maintain.

⇒ Various Mammals & animals maintain their body temp. various types.

⇒ Thermoregulation are occurred in different types.

21  
→ Maintain their Body temperature  
& according to the environment  
& according to the Constant.

→ Some mammals Body temp.  
are Constant.

→ Body temp. are Cold Blooded  
& Warm Blooded.

# Poikilotherms & Ectotherms

Poikilotherms are those animals whose

Body temperature varies with ambient region.

→ Some invertebrates, mammals & Birds are Poikilotherms.

→ This are also called warm blooded animals.

→ Ectotherms are constant Body temperature.

Homeothermas →

Homeothermous temp. are constant. Its body temp. are not changes in environment.

→ Birds & Mammals are the true Homeothermas.

→ Some Deep fishes & Reptiles are the Homeothermas animals.



Homeotherms are Divide into  
two Categories.

1) Scothermal Homeotherms →





# Section A

- ① Pineal gland → it is situated in the posterior part of the Brain.
- it secretes Melatonin Hormone in the nervous system.
  - it is also called sleeping Hormone
  - it is small in size.

Q-2 Two Protein Hormone are -

ACTH → Adreno-Cortico trophic Hormone.

→ It found in Adrenal gland.

TSH → Thyroid Stimulating Hormone.

→ It control the Conc. of Iodine in Thyroid gland.

Q-3

Menstrual cycle

⇒ its cycle found  
in Mammals

estrous cycle

⇒ its cycle found  
in Birds.

## Q. 4. function of Oxytocin →

Hormone gland. found in <sup>Oxytocin</sup> Mammary gland.

→ It active the mammary gland.

→ Oxytocin Hormone give to the Mammels gland to active the production of milk.

J's Lives → Lives



Section 'B'

Q-7. Digestive System → Digestive  
System help in Digestion  
of food.

→ it converts large particles of food into small particles

→ Digestive System contains various parts of →

1) Mouth → Teeth.  
→ Salivary gland

② Esophagus

③ Stomach.

④ Small intestine.

- 1) Duodenum
- 2) Jejunum
- 3) Ileum

5

large intestine.

6

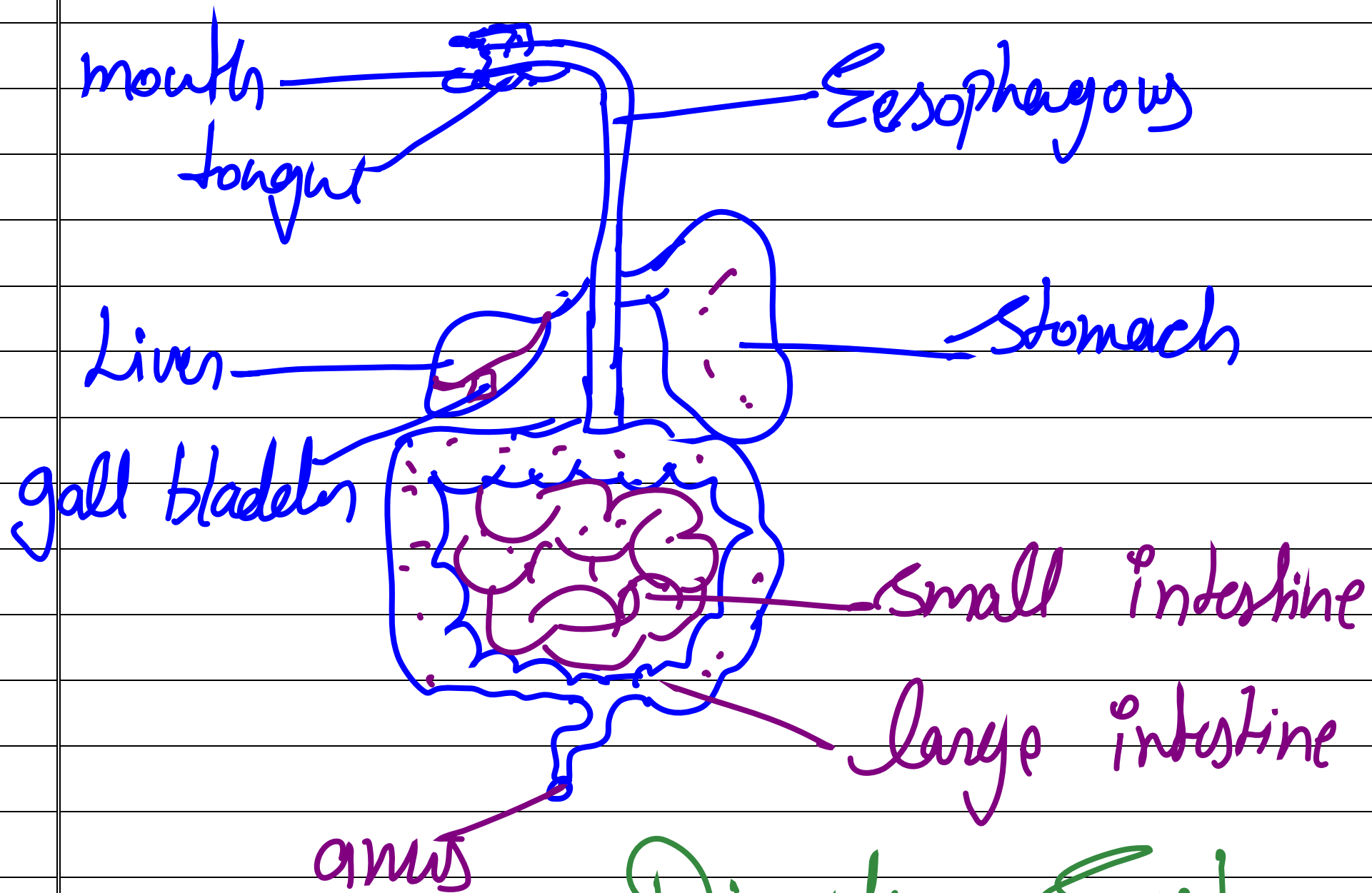
gal bladder.

7

Liver

8

Intestine.



Digestive System

