भाग-1

नामांकन संख्या M 1 5 5 4 1 3 8 6

अनुक्रमांक (अंकों में)

अनुक्रमांक (शब्दों में)

परीक्षार्थी का पूरा नाम Vaishali Sharma

कक्ष निरीक्षक का नाम

हस्ताक्षर

परीक्षार्थी द्वारा सम्पूर्ण विवरण भर लिए गये हैं।

R

2018- भाग-2

M.Sc. Internal

चौधरी चरण सिंह विश्वविद्यालय, मेरठ
Ch. Charan Singh University, Meerut

4/8/19

निम्नलिखित विवरण परीक्षार्थी द्वारा स्वयं भरा जाए (To be filled by the Examinee)

परीक्षा का नाम (Name of Exam) M.Sc. Ist year वर्ष 20 (Year 20.....) 2019 भाग/सेमेस्टर (Part / Semester) IInd

विषय (Subject) Zoology – Mammalian Phy. प्रश्न-पत्र/पाठ्यक्रम (Paper /Course) पेपर कोड नं. (Paper Code No.) H-2064

परीक्षा का दिन (Day of Examination) Saturday दिनांक (Date) 4/5/19

प्राप्तांक एवं पूर्णांक परीक्षकों द्वारा भरे जायें

पूर्णांक (Max. Marks)

प्रश्नों की क्रम संख्या	a/I	b/II	c/III	d/IV	e/V	f/VI	g/VII	h/VIII	i/IX	j/X	योग
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Vaishali

23

प्राप्तांक

(शब्दों में)	अंकों में

जाँचकर्ता के हस्ताक्षर एवं तिथि

परीक्षक के हस्ताक्षर एवं तिथि

2018- भाग-3

R

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

आवश्यक निर्देशों हेतु पृष्ठ भाग देखें

Date Stamp to be affixed here

(परीक्षार्थी द्वारा भरा जाए)

परीक्षा का नाम M.Sc. Ist year भाग/सेमेस्टर IInd

विषय Zoology – Mammalian Physiology

प्रश्न पत्र ..... दिनांक 4/5/19

परीक्षार्थी का अनुक्रमांक (Roll Number)

उत्तर-पुस्तिका क्रमांक KM-I-01-

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(परीक्षार्थी की श्रेणी)

- संस्थागत ●
- व्यक्तिगत ○
- बैक पेपर ○
- अंक सुधार ○
- भूतपूर्व ○
- एकल विषय ○

नामांकन संख्या (Enrollment Number) M 1 5 5 4 1 3 8 6

पेपर कोड H 2 0 6 4

परीक्षार्थी का पूरा नाम Vaishali Sharma

कक्ष निरीक्षक का नाम

Section 'C'

Q.10 Summery of Blood.

→ Introduction

→ plasma → Water
Protein
Organic Subtunts
Inorganic Subtunts
Enzyme
Hormone
Gases.

→ Blod cell

① Erythrocyte (Red blood ~~cell~~ Corpuscels)

- 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.

Ans → Blood is a fluid Connective tissue. It matrix is liquid and and colourful in see.

→ Blood formation accures in Long Bone Marrow.

→ Blood Composition is various types —

Plasma

→ Plasma is Colourless. thickning substances. it is liquid substances.

→ In plasma 60 % of water present.

Protein →

1. Albumin
2. globulin
3. fibrinogen
4. Prothrombin.

Organic Substant :-

1) Non nitrogenous Substances like - fats

② Non Protein Substances - Present in the plasma.

Inorganic Substances → Inorganic Substances are present in the plasma. Such as Calcium Magnisium, 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 dia Oxide Gas present in plasma of oxygenated & Deoxygenated Blood.

Blod Cell

3 types – Erythrocytes
Leucocytes
Blood Platelets.

Erythrocytes

this is also called Red Blood Corpuscles. if called Corpuscles not cell b/c there is no nucleous & mitochondria present.

→ In Red Blood Cells are enucleate corpuscles. In this nucleous, golgi body, mitochondria not present.

Numbers

→ In Men RBCs 5 to 5.5 per cubic mellion present.

→ But in Women 4.5 to 5 per cubic mellion RBCs present.

Shape & Size

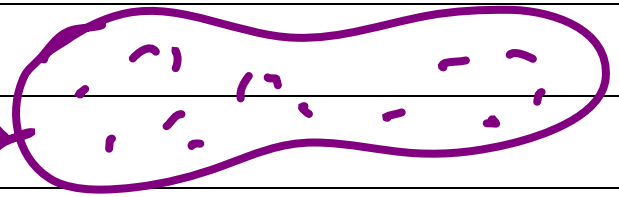
→ Erythrocytes are bisal disc like. In this they are flexible & they are yellow in colour.

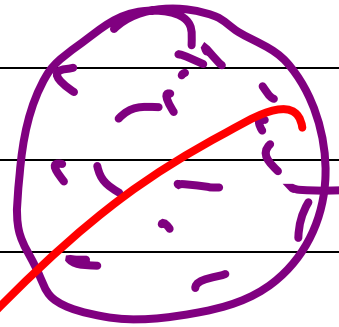
→ But in group they looks Red Colour b/c of present the Oxygenated pigment of Haemoglobin is found.

Physical structure

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

Side View





Surface View

Red Blood Corpsules

Primary

Leucocyte

This is also called White Blood cells. In this cells nucleus & Cytoplasm are present.

Leucocyte are very small structure

WBC are Main 2 types—

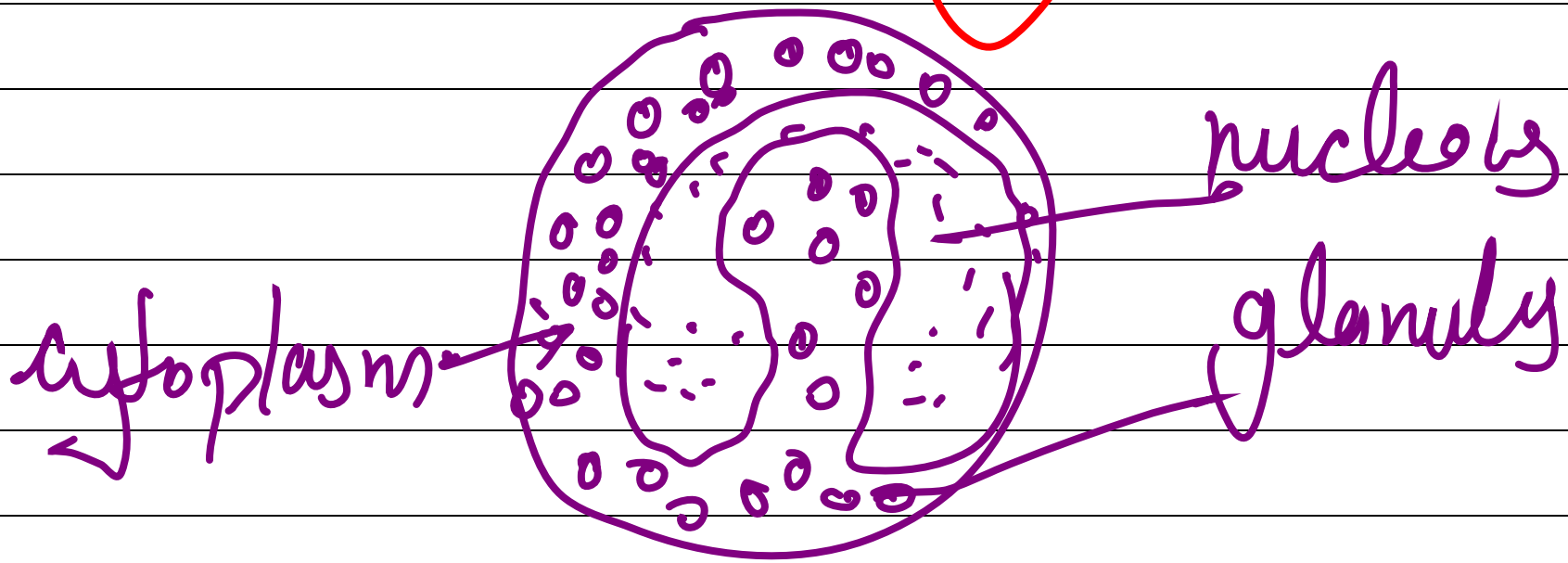
① Granulocyte → In the granulocyte granules & nucleus present.

→ It occures more in childrens than the Adult.

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

Acidophyl →

In this nucleus present & large granules present in more number. Acidophyl help to maintain antibody.

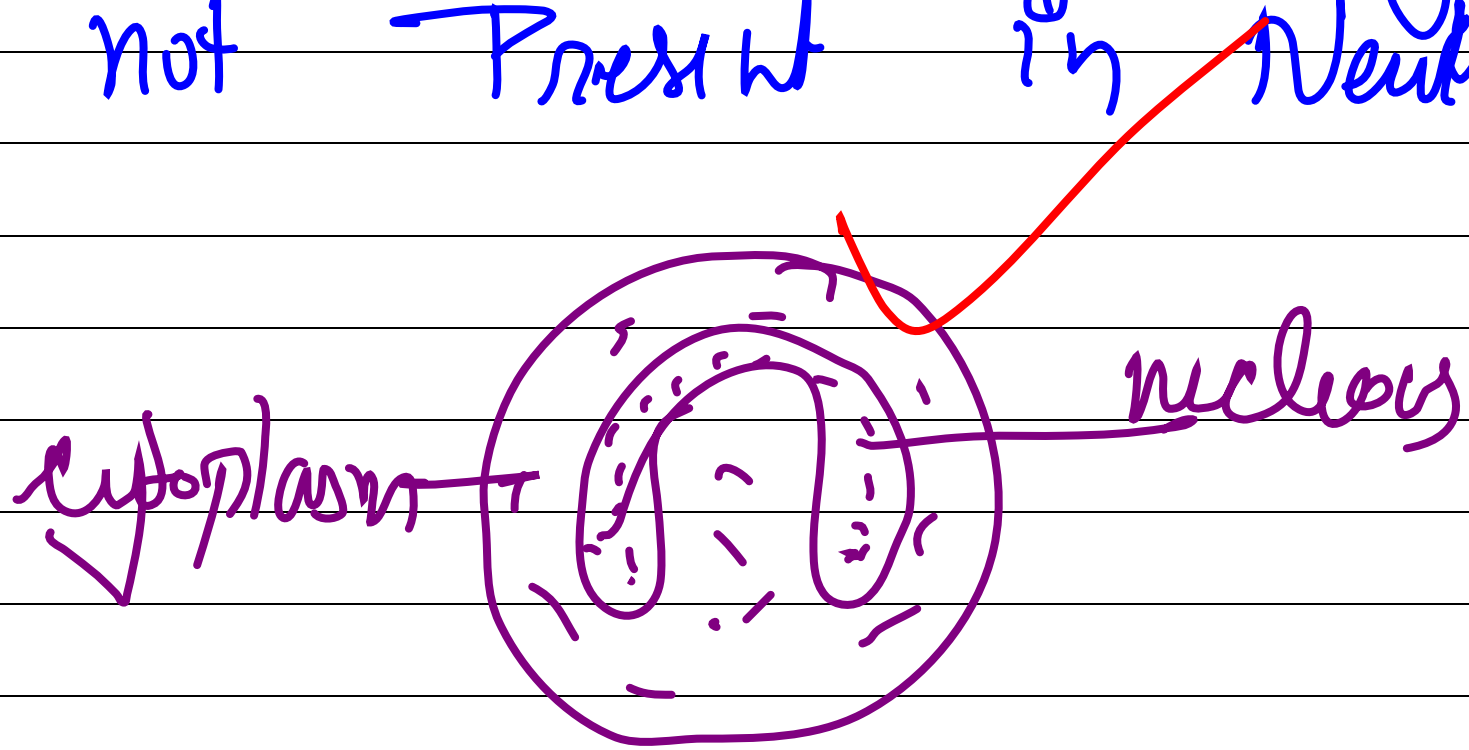


Basophyl

→ Its nucleus is S – shaped. Some granules present in the Basophyl.

Neutrophyl

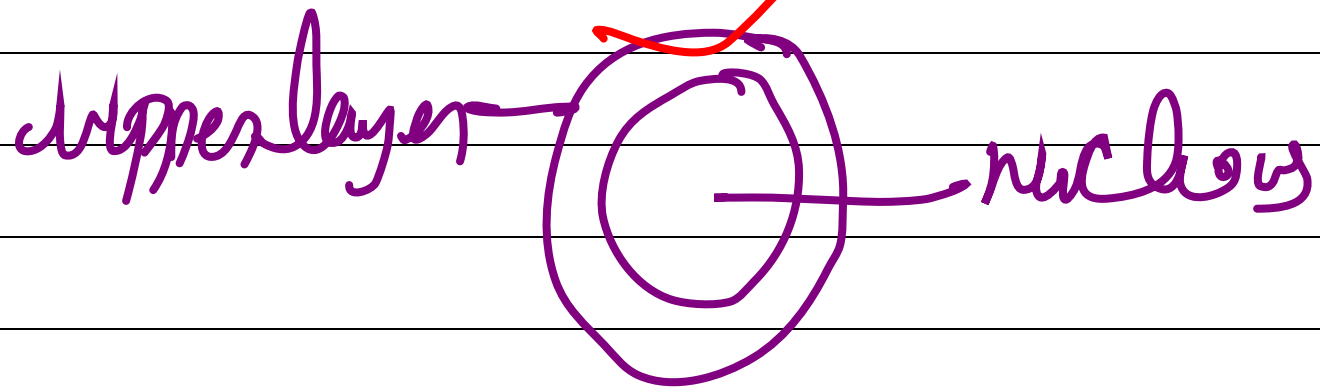
In this nucleus granules present. But not present in Neutrophyl.



Agranulocyte → are Divided in 2 types.

1) Lymphocytes →

this are the smaller size and the nucleus is small. the upper layer is thick of Lymphocyte.



Monocytes

it size is large than the Lymphocyte. it Nucleous is large. & found the upper thickning layer.

Blood Platelets

Blood Platelets found in Blood. they are very smaller in size. they are red in colour. its shape is oval.

function of Blood

1- Transport of minerals

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

3 Disposal of CO_2

the CO_2 from our it restricted body by the Blood.

- Distribution of protein are reached of all parts By the plasma. → Protein
- Removal the excretory substance
- Carry O_2 gas.
- Distribution of other imp. substances to many organs.
- Protects from Disease.

Q-11

- Introduction
- Types → 1) Poikilothermes
  Ectothermas.

2) Homeothermous
   (i) Ectoderm Homeothermas
   (ii) Endoderm Homeothermas.

3) Homothermous.

8.10 Thermoregulation

→ it defined by the temperature of our body.

→ Temperature of Body are Know as the thermoregulation our body temperature maintain.

→ Various Mammales & animales maintain their Body temp. various types.

→ Thermoregulation are occured by Different types.

→ 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.

Poikilothermous & Ectothermous

Poikilothermous are those animal whose Body tempre. varies with ambient region.

→ Some invertebrates, mammals & Birds are Poikilothermous.

→ this are also called warm Blooded animals.

→ Ectothermous 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.

Homeothermous are Divide into two Categories.

1) Ectothermal Homeothermas

Snakes & Lizard are the Ectothermal Homothermas.

2) Endothermal Homeothermas

Mammals are the endothermal

Homothermas

Homotherms are the animal whose body tempre. Same in all condition. in changing the environment Blood temp. Does not change.

Mainly Homothermas are two types.

→

Section A

① Pineal gland

→ it is situated in the posterior part of the Brain.

→ it secreete Malatonin Hormone in the nervous system.

→ it is also called sleeping Hormone

→ it is small in size.

Q-2 Two Protein Hormone are –

ACTH → Adino - Cortico trophic Hormone.

→ It found in Adrenal gland.

TSH → Thyroid stimulating Hormone.

→ It Control the Conc. of Iodine by Thyroid gland.

Q-3

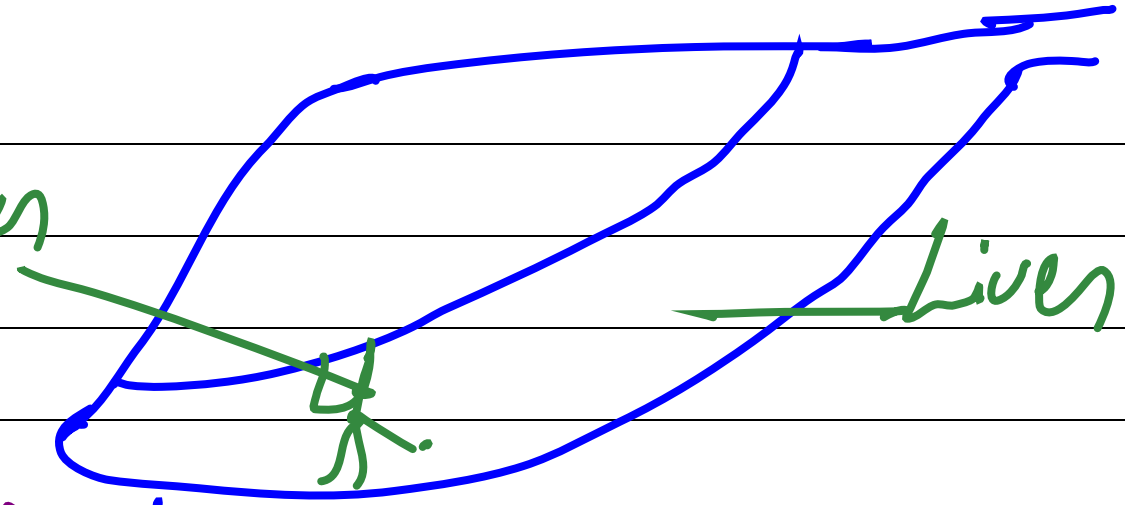
Menstrual cycle	estrous cycle
→ its cycle found in Mammals	→ its cycle found in Birds.
→ offspring present in the fetus.	offspring present in the Egg.
→ if growth in fetus	if growth in Egg.

4. Function of Oxytocin

Hormone found in Oxytocin Mammary gland.

→ It active the mammary gland.

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



Q's Liver → Liver is the Digestive part of the Human.

⇒ its help in the Digestion.

⇒ In Liver gall bladder is present that Secreation & help in Digestion. removal of waste substance.

⇒ its size is more above 1.5 Kg.

→ 7. Lives are attached by the Esophagous. when food come out by the Esophagous. it help in Digestion of food particles.

Section 'B'

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

→ it converts large particles of food into small particles

→ Digestive System Contain various parts of —

1) Mouth → Teeth.
→ Salivary gland

2) Esophagous

3) Stomach.

4) Small intestine.

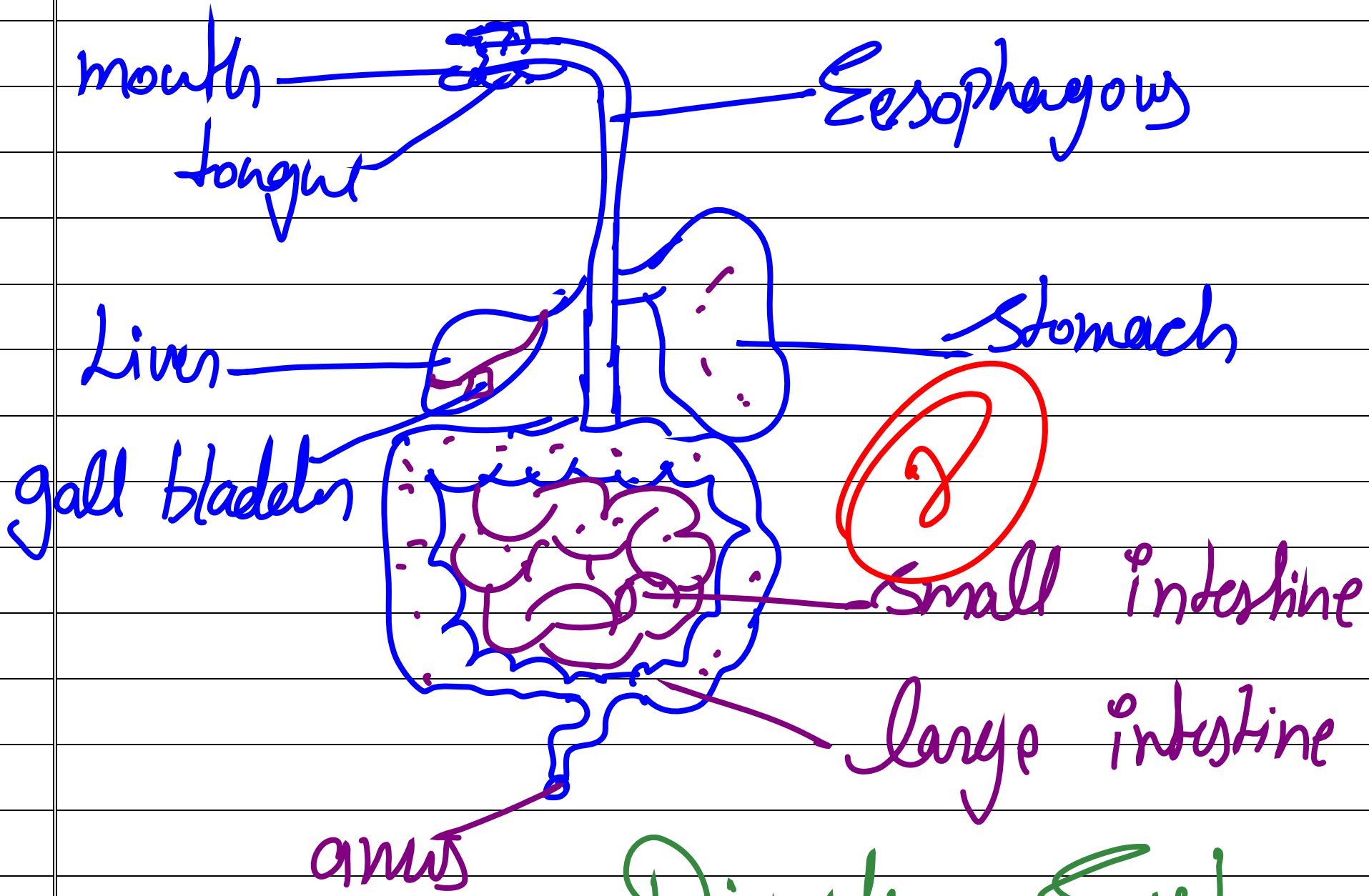
1) Duodenum
2) Jejunum
3) ileum

(5) large intestine.

(6) gal bladder.

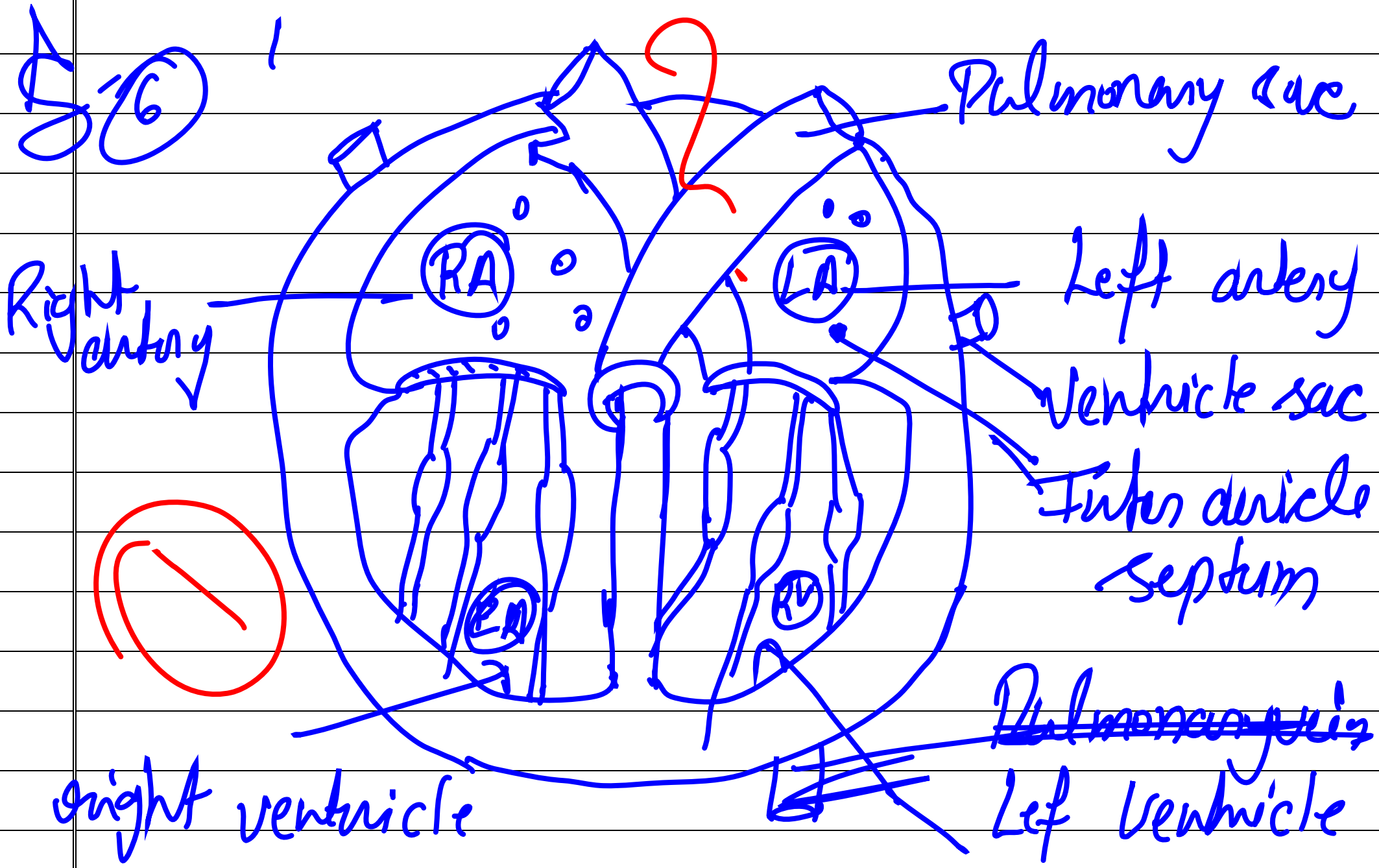
(7) Liver

(8) Intestine.



Digestive System

Q-6


Pulmonary sac
Right atrium
RA
LA
Left atrium
Ventricle sac
Inter atrial septum
RV
Pulmonary vein
right ventricle
Left ventricle

⇒ The heart of Bird is the four chambered.

⇒ it's struct. Pulmonary & other artery & vein present.