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नामांकन
संख्या
अनुक्रमांक
(शब्दों में)

Sanjana Singh

परीक्षार्थी का पूरा नाम

परीक्षार्थी का नाम परीक्षण का सम्पूर्ण विवरण भर दिए गये हैं।



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2018-

M.Sc. Internal

भाग-2

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

Ch. Charan Singh University, Meerut

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

परीक्षा का नाम
(Name of Exam)

M.Sc. वर्ष 20 19

भाग/सेमेस्टर
(Part / Semester)

II

11/18/19

विषय
(Subject)

Zoology

प्रश्न-पत्र/पाठ्यक्रम
(Paper/Course) Mammalian Physiology

पेपर कोड नं.
(Paper Code No.) H-2064

परीक्षा का दिन
(Day of Examination)

Saturday

दिनांक
(Date)

4/15/19

प्राप्तांक एवं पूर्णांक परीक्षाको द्वारा भरे जायें

पूर्णांक
(Max. Marks)

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प्राप्तांक

(शब्दों में)

अंकों में



2018-

भाग-3

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

आधिकारिक नियमों द्वारा पूर्ण भाग रेखे

Date Stamp to be affixed here

मार्च 2019

(परीक्षार्थी द्वारा भरा जाए)

M.Sc.

भाग/सेमेस्टर

II

Zoology

इनाम

II

Mammalian Physiology

4/15/19

II

परीक्षार्थी का अनुक्रमांक (Roll Number)

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कालेज कोड

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(परीक्षार्थी की श्रेणी)

संस्थागत

व्यावसायिक

दैवि धर्म

अंक सुधार

भूतपूर्व

एकल विषय

नामांकन संख्या (Enrollment Number)

M 1 5 5 3 9 6 1 4

पेपर कोड

H 2 0 6 4

परीक्षार्थी का पूरा नाम

Sanjana Singh

कक्ष निरीक्षक का नाम

Section - A

Ans 1 → Pineal Gland =

- Pineal Gland is present in the posterior part of Brain. (1)
- It is very small & present near the pituitary gland.
- It produces the melatonin hormone to sleep & better walk.

Ans 2→ Protein hormone -

- The proteinaceous hormone are -

→ ACTH (Adrenocorticotrophic hormone)

→ TSH (Thyroid Stimulating hormone)

Function of ACTH -

in the adrenal

• ACTH are present
gland.

- It has two types - adrenal cortex and adrenal medulla .

- Adrenal gland is present near the kidney.

function of TSH -

- Hormone is present in the thyroid gland.

- Thyroid Stimulating Hormone is present in the thyroid gland.
- It produces thyroxine hormone.
- It is present in the neck region.

Ans 3+ Menstrual Cycle

- It is present in the human beings.
- It is the cycle of 21 days.
- In this the offspring is produced in the foetus of mammals.

Estrogen Cycle

- It is present in the animals.
- It is present once in a year/month.
- In this the offspring is produced in the form of egg.

Ans 4 - function of Oxytocin -

- It is a Birth Hormone.
- It is used in parturition.
- It helps in contraction of the uterine muscles through the mammary glands.
- It is present in the Neurohypophysis.
- It contracts the muscles of mammary glands for ejection of milk.

Ans 5:- Structure & function of liver -

- Liver is present above the stomach & beneath the sternum.
- Liver is the only ~~npt~~ recover itself. ~~part~~ which can
- Liver helps in digestion, excretion, ~~respiration~~ etc.
- Liver absorbs the nutrients & minerals.

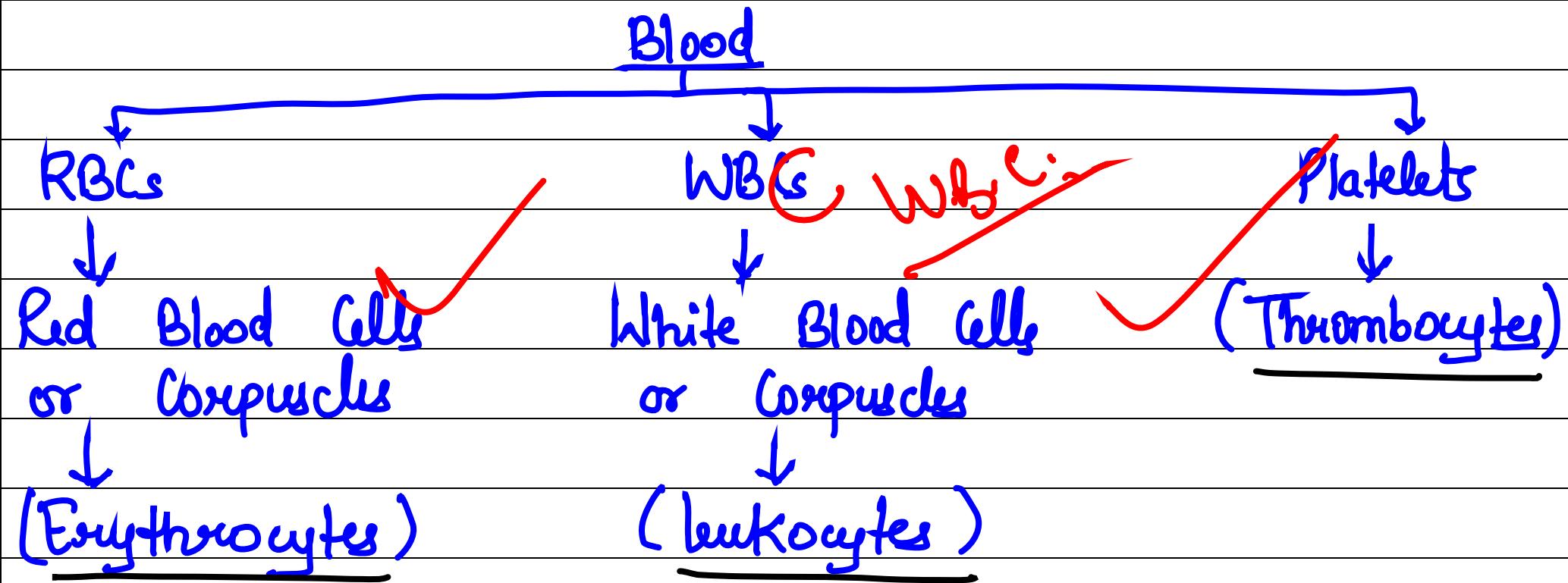
- Liver contain the enzymes which help them for proper digestion.

Section - C

Ans 10 →

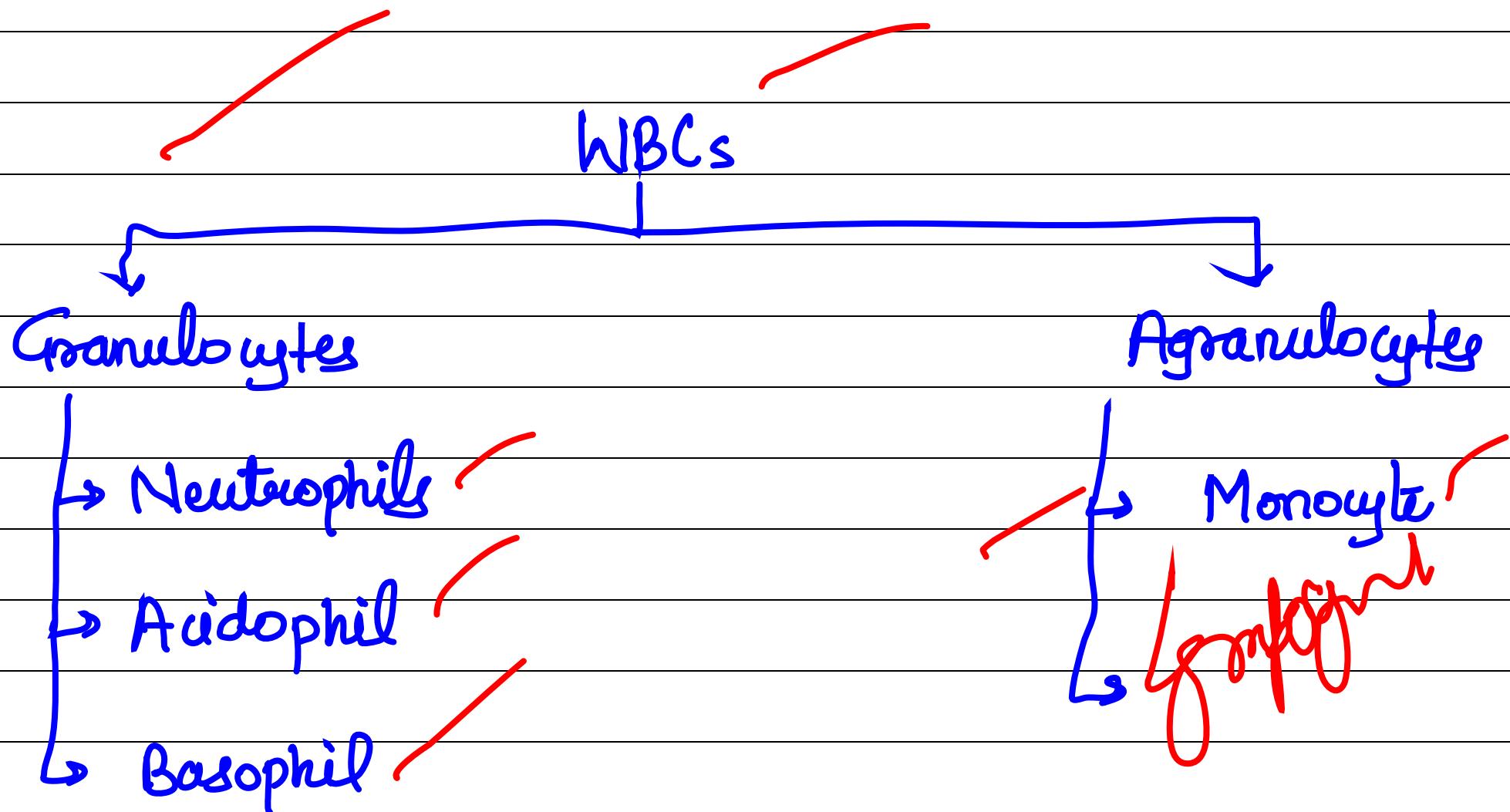
Blood

- Blood is the fluid connective tissue.



55%

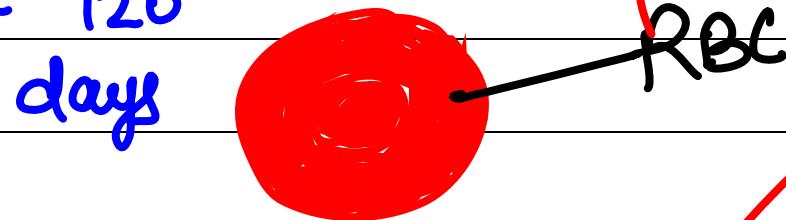
45%



- Blood is a fluid connective tissue.
- In this plasma is present.
- The ratio of RBC & WBC is 600 : 1
- Blood is red in colour because in blood haemoglobin (Hb) is present.
- Due to the less Hb there is a deficiency of jaundice
- The pH of blood is 7.5 i.e., basic.

RBCs - • Red Blood Cells or Corpuscles

- It is also known as erythrocytes.
- life span- 120 days
- In this nuclei are present.
- It helps them to exchange of O_2 & CO_2 .
- And it also helps to purify the deoxygenated blood & oxygenated blood.



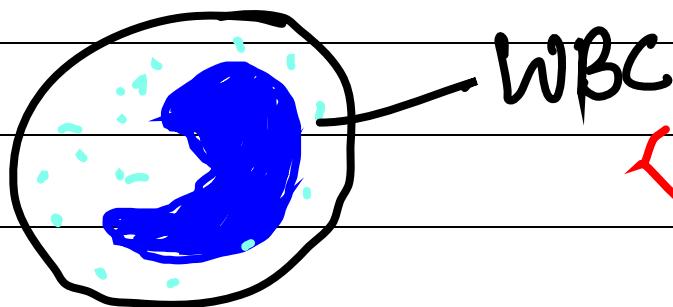
- It purifies the blood.

WBCs -

- White Blood Cells or Corpuscles.

- It is also known as leukocytes.

- Life - span -
2 to 3 days



- WBC cells prevent our body to the antigens & pathogens & other cells which kill tissues.

- In this granules are present.
- It protects our body.

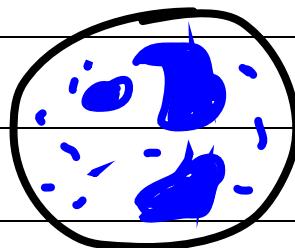
Granulocytes :-

- In this granules are present.
- It is of three types—

Neutrophil -

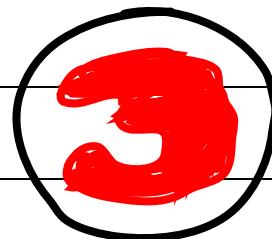
- It is present in the WBC!
- It is neutral cell.

- It helps them to kill the microbes & antigens.



Acidophil -

- In this killed which is acid pH or those present pathogenes at the pH 1 to 7.
- It is also the part of WBCs .



Basophil :-

- In this only those enzymes or antigens are kill which are present in the blood & which is basic in nature i.e., pH 7 to 14.
- It is also the part of WBCs.
- And present in granulocyte.
- In this granules are absent.

Agranulocyte :-

- In this granules are absent.
- It is of two types -

→ Monocyte

Platelets :-

- It is also called thrombocytes.
- It is present in the blood.

- It is very important for our body.
- When platelets is down or minimum then there is deficiency in the body.
e.g. Dengue

Ans 11→

Thermoregulation

- Thermoregulation is the adaptive features of the living beings or human beings.
- Thermoregulation is a process in which

we maintain the stability of the temperature according to our body.

- Why dogs bask? why lizards take sunbath?
It is due to warm temperature.
- When the temperature is hot then the animals & human beings change their metabolic rate according to the temperature.
- Bears, polar bears, iguanas live in the cold climate & they set their temperature.

Endotherms :-

Endotherms like mammals & birds change their metabolic rate according to their body temperature.

Ectotherms :-

Ectotherms like snake & lizard cannot change their metabolic rate but they adapt the environment in which they live.

Behavioural Strategies :-

The ectotherms & endotherms change their behaviour

according to temperature.

- When there is cold environment then they adapt the cold environment.
- They shivering in the cold environment, rubbing their hands but they adjust themselves in the environment.
- In summer elephant spray the water on our body & other animals seek the shade to hide themselves.

Thermogenesis - Gain or loss of heat

- When there is hot temperature then we gain the cold temperature as quickly as possible to hide ourselves from the sun.
- We adapt the environment.
- We drink cold water in summer & lots of cold drink & ice-cream to maintain our body temperature.
- In winter on our body hairs are

present to protect us.

- In animals & birds, fur and feathers are present to protect them for the summer & winter.

Countercurrent of heat exchange -

In this when the blood flows in the body the speed of the warm to other body.

Vasoconstriction :-

blood supply

In vasoconstriction the body makes warmer.

- They constrict the body.
- They construct the blood vessels & then they allow flow in the body.

Insulation :-

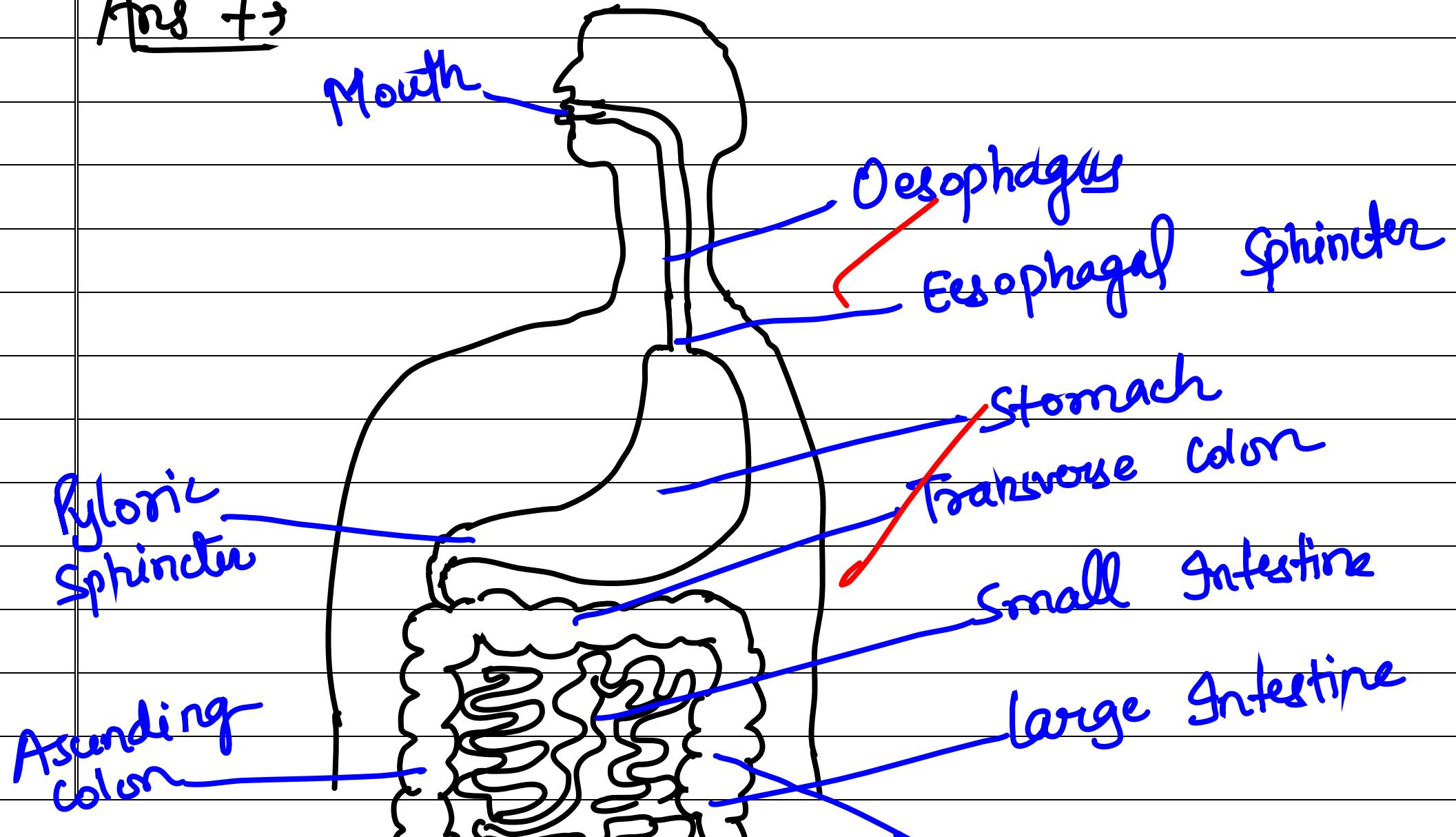
- In this we provide very much other things to protect ourself.
- The mammals have fur and

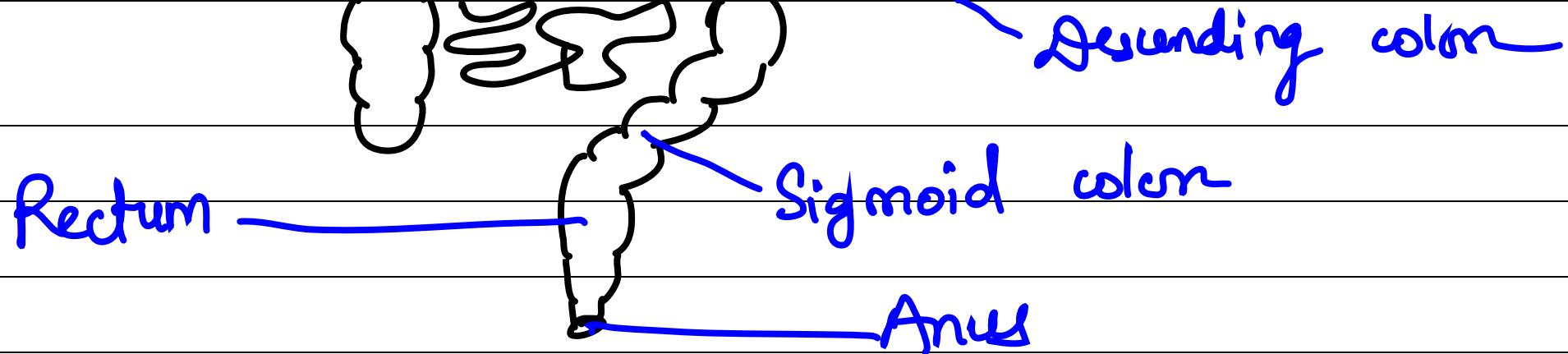
feathers & hairs to protect them from the environment,

- The feathers of the bird helps themselves to insulate their body.
- But in men the hair is not useful & it has goosebumps.
- like sub our body or we wear hands to insulate our coat in winter season to protect our body.

Section - B

Ans 7 →





Digestive System

- Digestive System help them to break down of macromolecules.
- In this following parts are present-
 - Mouth
 - Oesophagus
 - Stomach

- Small Intestine
- Large Intestine

- Mouth -
 - It is the first part of the digestive system.
- Teeth - Chews, tear, cut, grind.
- Salivary amylase - Helps them to secrete saliva.
- Oesophagus -
 - Food goes into oesophagus.

- They lubricate with the help of mucus.
- Stomach :-
 - from oesophagus food goes into stomach.
 - The bolus is mixed with the goes in stomach & gastric juice.
 - And the bolus is become chyme.

- Small Intestine -

- The food comes in small intestine from stomach.
- And in small intestine they are fully absorbed the nutrients & minerals.
- And then goes in large intestine.

- Large Intestine -

- food goes in large intestine & then the waste materials goes in anus.

