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Q No (3)

Ans:

Six level of organization:

- 1 Atom molecules.
- 2 cells
- 3 Tissue.
- 4 organs
- 5 organ system.
- 6 whole organism.

(1) Atom molecules:

All matter is made of atoms. Atoms are combined to form molecules. Molecules are combined to form cells.

(2) Cell:

cell is the basic unit of

2

Structure & functional of a living things.

cell are specialized by size & shape for the job they do

③ Tissue :->

Tissue are made of same type of the cell grouped together to do a specific job.

Example :->

Different type of animal tissue are epithelial, muscles, nervous

~~Tissue~~ this pink sponge has only cell but they are not organized to tissue.

③  
④) organs →

organs is made up of different tissue that work together to do a job.

Example →

= A heart is an organ made of all four tissue. This coral polyp is an organ by a leaf is a plant organ.

⑤) organ system →

An organ system is a group of organs that are working together.

(4)

Example: →

Human organ system  
include Circulatory reproductive  
digestive Nervous respiratory.

Plant organ system - roots  
stem leaves transport  
system.

(b) Whole organism: →

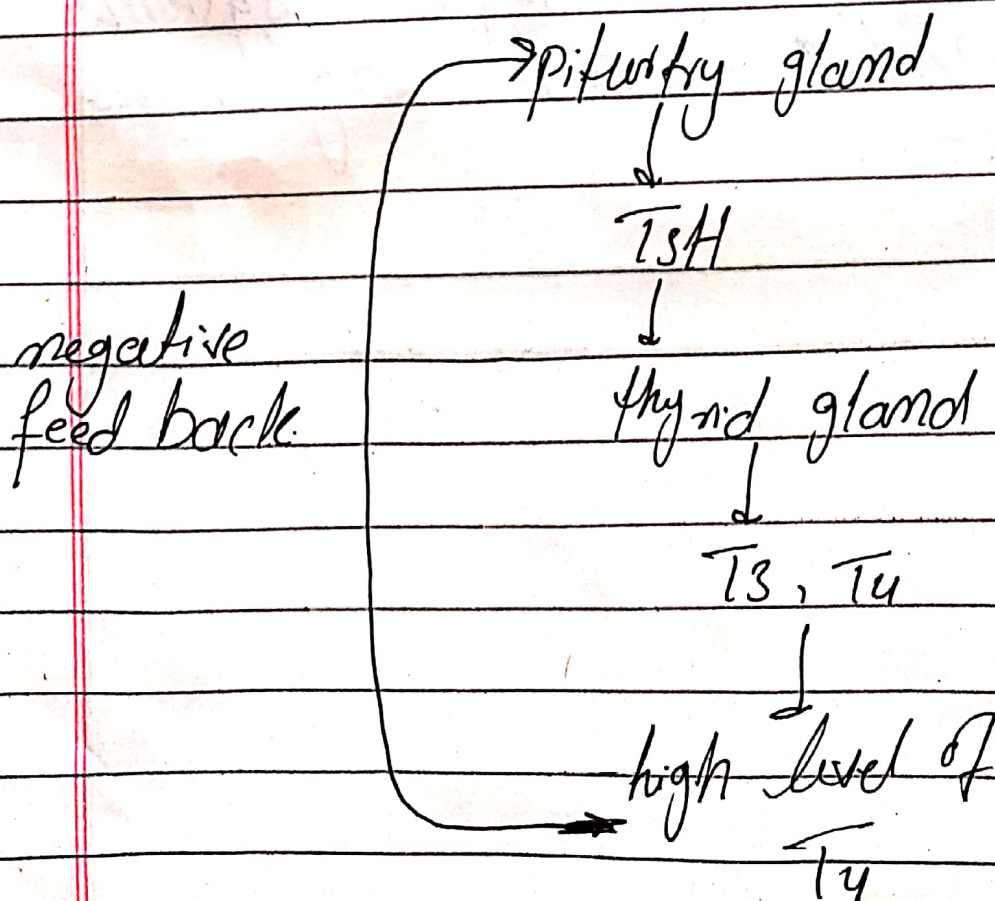
Sum of all cells, tissues,  
organs, & organ systems  
makes an organism.

Q No (17) (18)

Ans Part B

Negative feedback mechanism

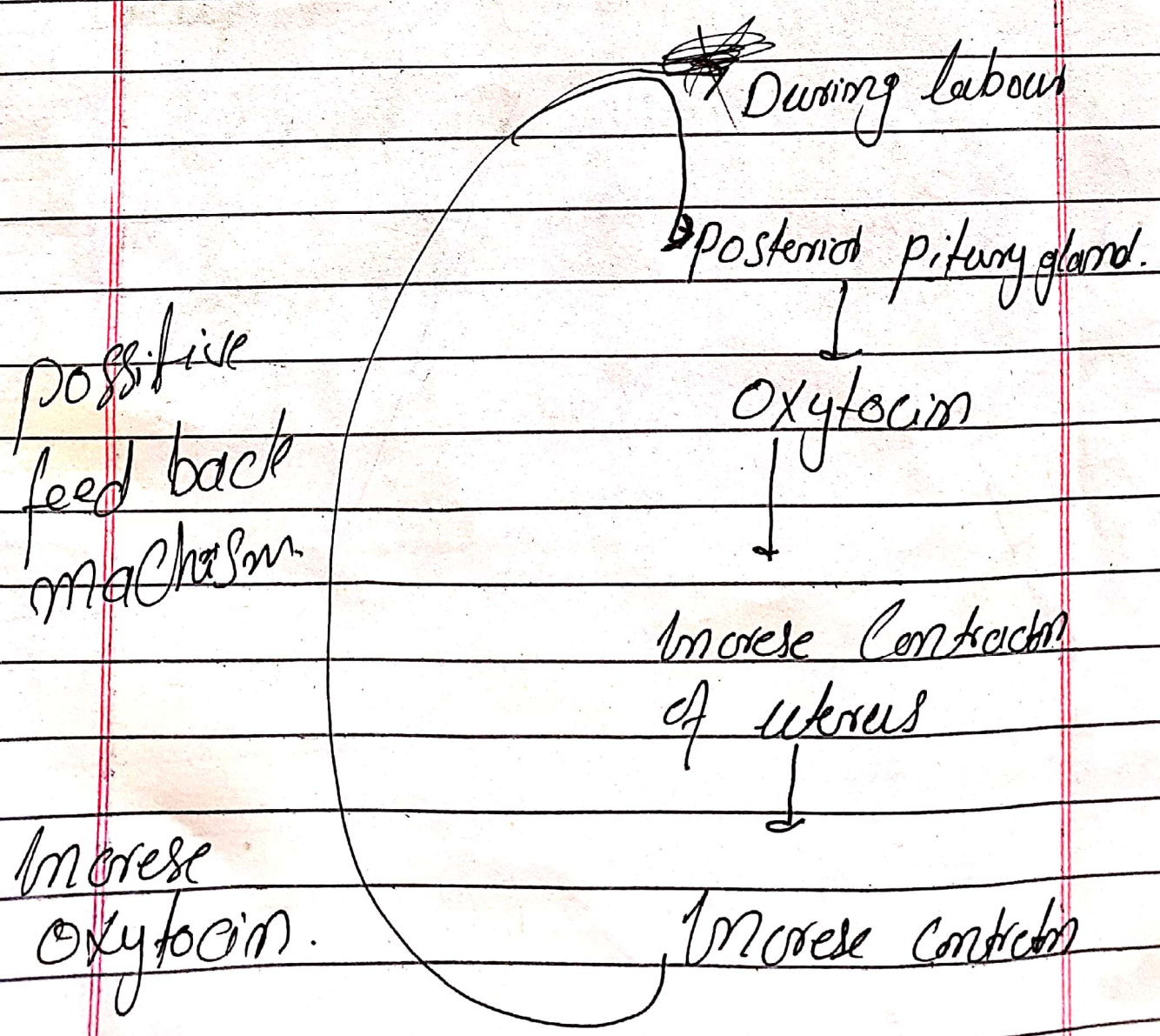
The process in which one hormone inhibit or decrease the secretion of another hormone is called negative feedback.



(6)

Positive feedback mechanism

The feedback mechanism in which the stimulus increase the secretion of hormone is called positive feedback mechanism.



Q No ② ⑦

Ans:

(A) Cell organelles →

The group of small molecules in the cytoplasm are closed by its own cell membrane & have a specialized function is called cell organelles.

(B) four cell organelles

① golgi Apparatus.

② lysosome

③ mitochondria

④ Ribosome.



(8)

## (1) Golgi Apparatus:

→ Consist of stacks of closely folded flattened membranous sacs.

→ proteins move from ER to C.A. where they are packed in to membrane bounded vesicles called secretory granules.

→ the contents then leaves the cell by exocytosis.

## (2) Lysosomes:

→ it is the type of secretory vesicle with membranous walls form by C.A.

→ contain a variety of enzymes by

⑨

Large molecules (DNA) inside the cell to small particles.

→ lysosomes digest foreign material such as microbes.

### ③ Mitochondria

→ it is called a power house of the cell.

→ energy is made available in cell by synthesizing ATP.

→ Most Active cell types have the greater number of mitochondria.  
(e.g) liver, muscles  
eg: liver muscles

(10)

## (4) Ribosomes

→ the granules composed of RNA & protein.

→ present on the outer surface of the nuclear envelope & rough endoplasmic reticulum.

→ make protein: for use with in the cell such as enzymes required for metabolism.

(11)

① No (3)

Ans: →

Physiology of digestion: →

The first part of digestive system is mouth.

(1) Mouth: → The digestion of food starts in the mouth. Chewing makes food easily palatable by absorbed.

(2) Pharynx: →

Pass food from the mouth ~~to~~ to esophagus.

### (12) ③ Esophagus

Food from the ~~from~~ pharynx passed on to the stomach through contraction relaxation called peristalsis. The lower esophageal sphincters prevent back flow of food.

### (4) Stomach :->

The food reach on to the stomach mixed with gastric secretion of stomach & convert on to liqued part called chyme.

### (5) Small Intestine :->

The chyme inter

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In to small intestine  
where it mixed with  
secretion of liver (bile)  
& pancreas (pancreatic juice)  
to digest carbohydrates,  
protein & fats.

The jejunum & ileum  
responsible for digestion  
& absorption of food  
In to the blood  
stream.

Pancreatic Juice →

→ it contain ~~amylase~~<sup>amylase</sup>,  
lipase, protease. help in  
the digestion of carbo-  
hydrates, fats & protein.

(14) Large Intestine →

The undigested food  
passed from small intestine  
In to the large

(14)

Intestine first in liquid form then @ last Convert to the solid by absorption of water & secrete through anus

digestion of food constituents is in different part of GI tract.

Mouth: (carbohydrate)

Stomach (protein)

Small intestine: (

→ Carbohydrate, protein & lipi

→ Protein

→ lipids.

Large intestine.

water & salts.

~~electro~~ electrolytes.

is kind of