

# HOME ASSIGNMENT

classmate

Date \_\_\_\_\_

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## BIOLOGY

Q1) Which of the following tissues consists of dead cells?

Ans) a - Sclerenchyma

Q2) Tendons connect \_\_\_\_\_ to \_\_\_\_\_

Ans) a - muscles to bones

Q3) Fluid connective tissue in humans is

Ans) c - Blood and lymph

Q4) Based on whether they produce fruits or not, plants are classified into

Ans) d - Gymnosperms and pteridophytes

Q5) Oxygen and carbon dioxide are exchanged at the \_\_\_\_\_

Ans) d - Alveoli

⑥ Which of the following has a skin on its body and breathes with the help of gills?

Ans) a - Rohu

⑦ Carbohydrates are stored by the plant in the form of

Ans) d - Starch

⑧ Which of the following refers to the energy currency of the cell?

Ans) a - ATP

⑨ Which of the following tissues stores fats?

Ans) b Adipose tissue

⑩ Which of the following chemicals is added during respiration experiments to prevent bacterial growth on dead seeds?

Ans) b - carbonic acid

(11) Which of the following stores urine?

Ans) c - Urinary bladder

(12) Excretion - in Amoeba takes place with the help of \_\_\_\_\_

Ans) b - contractile vacuole

(13) Identify this method of reproduction

Ans) c - Binary fission

(14) Nephrons release urine into the \_\_\_\_\_ from where the ~~set~~ ureters carry it to the urinary bladder

Ans) c - renal pelvis

(15) Which of the following occurs due to allergic reaction 'hives'?

Ans) It swells, red patches appear on the skin.

② Name the following

① Tissue involved in the transport of food in plants - Phloem

② The middle portion of an insect's body.  
Thorax

③ Organisms in which, the body consists of thread like structures. Fungi (Agaricus)

④ Tiny openings found on the lower side of the leaf for the exchange of gases.  
Stomata

⑤ Amphibians of plant kingdom. Bryophyte

① Fill in the blanks:

- ① Starfish moves with the help of tube feet.
  - ② Each nephron consists of a cup-shaped structure called Bowman's capsule.
  - ③ Sporus are tiny structures capable of producing new plants.
  - ④ Annelids have special organs for excretion called nephridia.
  - ⑤ Stomata are surrounded by a pair of bean-shaped cells called guard cell.
- ③ A. Match the following:

Column A

① Sponge

② Snail

③ Butterfly

④ Toad

⑤ Lizard

Column B

Porifera

Mollusca

Butterfly

Amphibia

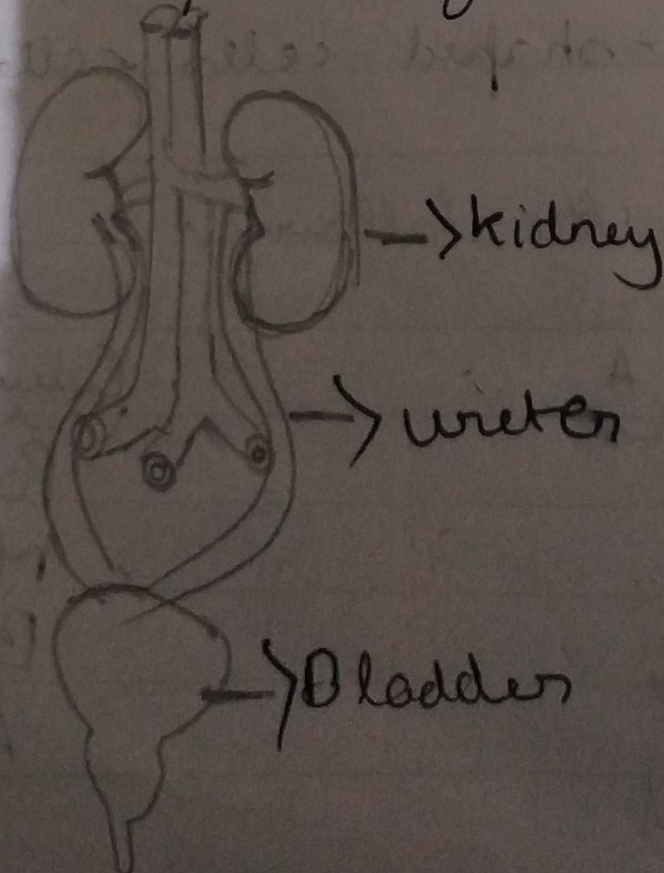
Reptilia

B) Answer the following.

① Observe the picture given below and identify the cell structure. In which type of cells is this structure present? What is its role?

Ans) This structure is present in leaf which is known as chloroplast. Chloroplast contains chlorophyll, it absorbs the sunlight which provides energy for the process of photosynthesis. These cells are on the upper side of the leaf. The entire process of photosynthesis occurs inside the chloroplasts of the leaf.

②



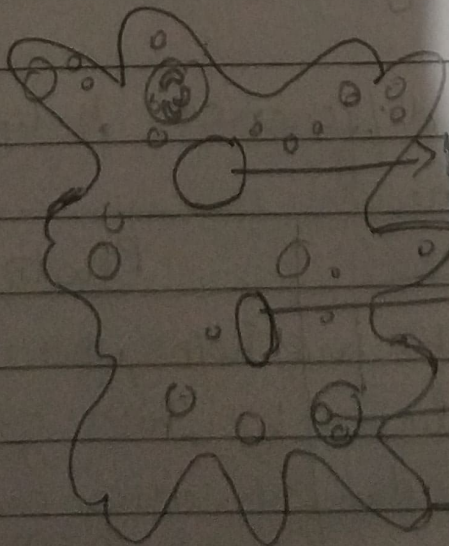
(4) a) What are allergens? Name any two allergens.

Ans) The substances that cause allergies are called allergens. Two allergens are dust, pollen etc.

(b) Which test is mostly preferred to test an allergy, skin prick test or blood test? Why?

Ans) Blood is a better option to test an allergy. Unlike skin-prick testing, a blood test can be performed irrespective of age, skin condition, medication, symptom disease activity and pregnancy.

(B)



A Contractile vacuole

B Nucleus

C Food vacuole

D cell membrane

	Aerobic Respiration	Anerobic Respiration
Oxygen requirements	Yes	No
End products	Carbon dioxide + Water + Energy	Ethanol + Carbon dioxide
Energy released	38 ATP	2 ATP

B) Find the odd one out.

1) Tannin, Urea, Uric acid, Bile

2) Cerebrum, Medulla, Spinal nerves, Cerebellum

3) Bat, blue whale, flying squirrel, water striders

4) Typhoid, Hay fever, Hives, Asthma

5) Xylem, Parenchyma, Meristem, Ligament

A) State the differences between respiration and photosynthesis.

Respiration	Photosynthesis
Respiration is the process in which glucose is broken down to release energy.	Photosynthesis is the process by which green plants capture solar energy and use it to convert carbon dioxide and water into simple sugars.



Homework continued

Respiration

- i) During respiration, glucose is broken down.
- ii) Occurs only during the day.

Photosynthesis

- i) During photosynthesis, glucose is produced.
- ii) Occurs both during the day & night.

(B) Define the following terms.

① Egestion - Egestion is the act of excreting unusable or undigested material from a cell.

② Tissue - A group of cells, which are similar in structure and perform a specific function form a tissue.

③ Symbiosis - The bacteria provide food to the host plant and the host plant in turn provides shelter to the bacteria. This kind of relationship wherein two organisms live in harmony, each benefiting from such a relationship is called symbiosis.

4) Monocotyledon: Plant containing only one cotyledon or one seed leaf in their seeds are known as Monocotyledon.  
Examples:- rice, grass, maize etc.

5) Breathing- The process of respiration, during which air is inhaled into the lungs through the nose and then exhaled.

7) A) Write two characteristics and one example for each of the following:

1) Arthropoda- i) Body is divided into 3 regions: head, thorax and abdomen. In most cases the body is covered by tough covering of chitin.

ii) Body has jointed legs.  
Ex- Prawn, Butterfly

2) Annelida- i) Body composed of rings or segments.

ii) They have a soft, moist body wall through which they breathe.

Example - earthworm, leech

~~(2) Mollusca~~

(3) Mollusca - i) Soft body which is not segmented

ii) Body enclosed in a hard shell.

Example - snail, octopus.

(B) Answer the following

(1) State the commercial importance of yeast.

Ans) Yeast is important in bakeries as it is used in the making of bread. It is also important in the breweries for making of alcohol. It is also important in the breweries for making alcohol.

② Write three points of differences between xylem and ~~the~~ phloem.

Xylem	Phloem
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① Transports water & minerals absorbed by the roots to other plant parts.

① Conducts food manufactured in the leaves to other plant parts.

② Consists mainly of dead cells

② Consists mainly of living cells.

③ Conduction is unidirectional i.e. only upwards from the roots.

③ Bidirectional conduction i.e. both upwards and downwards from the leaves.

