

Class X

Biology

Assignment-1

- Q.1 a) Name a fluid connective tissue which transports nutrients to all cells of the body.
- b) Name two major components of human blood.
- c) Name the nutrients transported by blood
- d) Give one function of each : RBC, WBC and Blood Platelets.

Q.2

- a) How many chambers are there in the human heart?
What is it made up of?
- b) Construct a table to show the function of these four chambers.
- c) Why is there no back flow of blood from ventricles to auricles during the ventricular systole?
- d) Why is interventricular septum located in the heart of birds and mammals? What is its function?
- e) What is the difference between pulmonary artery and pulmonary vein?

Q.3 What happens during atrial diastole and atrial systole?

Q.4 What is the difference between single circulation and double circulation?

Q.5 What is the difference between pulmonary circulation and systemic circulation?

Q.6 Doctor measured blood pressure of patient A and wrote

120mm of Hg/80 mm of Hg on his medical card. What does it mean?

Q.7 In a tabular form, write the difference between arteries, veins and capillaries.

Q.8 What is the difference between blood and lymph?

Q.9 What is one cardiac cycle?

Q.10 Why do plants have low energy requirements in spite of transporting nutrients to long distances in tall trees ?

Q.11 a) Name the four elements of xylem.

b) Which one out of the four is the main conducting element?

c) What are the 2 main functions of Xylem?

Q.12

a) Name four elements/cells of Phloem.

b) Which is the main conducting element in Phloem?

c) What are the 2 main functions of Phloem?

Q.13 Name the tissues which form continuous systems of water conducting channels starting from roots to stem and finally leaves?

Q.14 Why do root's epiblema and root hair absorb ions by spending energy?

Q.15 a) How does soil water move from root hair to root xylem?

Show the movement of water through a flow chart.

b) Define osmotic pressure.

c) What are the 2 major forces which help in transporting water and minerals upwards through the xylem tissue?

d) What is root pressure?

e) Name the tissue in plants through which food and hormones are transported in dilute aqueous solutions in plants.

f) Why is translocation of food necessary?

g) How is food translocated from leaves to growing regions of the plant?

Q.16 Define excretion.

Q.17 Name the part through which human beings remove the following waste products-

a) Removal of Carbon Dioxide.

b) Removal of undigested material

c) Removal of nitrogenous waste and excess water.

Q.18 Name the parts of human excretory system.

Q.19 How is urine produced? Write In three steps.

Q.20 Name the filtering unit of kidney and write its functions.

Q.21 Name the different parts of nephron.

Q.22 a) Name the substance present in the initial filtrate component of Bowman's capsule.

b) Are useful components such as glucose and amino acids thrown out through urine?

c) Name the substances secreted by the nephron.

Q.23 What is the composition of urine?

Q.24 Which part of the nephron is connected to the ureter?

X CHEMISRTY HOLIDAY HOME WORK

1. make one project report on any topic of science.
2. make one attractive chart on any current scientific issue related to chemistry .
3. write all the activity with coloured diagram given in unit 1 reaction and chemical equations.
3. make one simple working model on any scientific issue in the group of two students.
4. solve the in text and ncert questions from the unit 1 from the covered syllabus .

HOLIDAY HOME WORK

PHYSICS (X)

1. Do numerical & conceptual of current electricity from NCERT, LAKHMIR SINGH & MANJIT KAUR (at least 100)
2. Search and write steps (with photographs if possible) which can be taken to reduce electricity bill & to avoid accidents due to electricity.
3. Match and check the electricity bill of your home of six months according to the usage of appliances at your home (Provide proper data in written format).

ALL QUESTIONS SHOULD BE DONE IN SEPARATE NOTE BOOK WITH NEAT HAND WRITING OTHER WISE IT WILL BE NOT ACCEPTABLE