

Topic: SUMMER HOLIDAY HOME WORK (2017-18)

Q1 A brown substance 'X' on heating in air forms a substance 'Y'. When hydrogen gas is passed over heated 'Y', it again changes back into 'X'.

(i) Name the substance 'X' and 'Y'

(ii) Name the chemical processes occurring during both the changes.

(iii) Write the chemical equations involved.

Q2 Give reason, why solution of sulphuric acid conduct electricity whereas, alcohol does not.

Q3 Why is tartaric acid added in to baking soda to get baking powder?

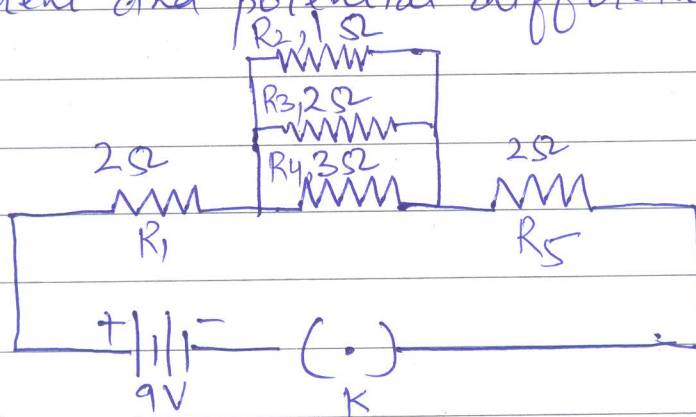
Q4 Why is small intestine in herbivores longer than in carnivores?

Q5 Draw the structure of a nephron and label on it the following parts and write their function.

(a) Glomerulus (b) collecting duct (c) Bowman's capsule.

(d) Collecting duct.

Q5 Find the equivalent resistance of the circuit. Also, find the current and potential differences at each resistor



Q6 Distinguish between the terms electrical resistance and resistivity of conductor.

- Q7 What is the difference between displacement and double displacement reactions? Write equations for these reactions.
- Q8 What is the advantage of having four chambered heart?
- Q9 An electric heater is rated at 2kW. Calculate the cost of using it for 2h daily for the month of September, if each unit costs ₹ 5.30.
- Q10 What are the different ways in which glucose is oxidised to provide energy in various organisms?
- Q11 Why does iron articles corrode but aluminium does not?
- Q12 Give the chemical formula and one use of each of the following: (i) Caustic soda (ii) Gypsum (iii) Baking soda.

Project:- Make a flow chart of atleast 5 salts with their preparation and commercial uses.

- Note! (1) Revise full syllabus done in class
- (2) Holiday homework will be checked on 3<sup>rd</sup> July, 4<sup>th</sup> July, 5<sup>th</sup> July, 2017.

Sonu Aggarwal,