

CBSE Class 10 Sample Paper

Exams are on the head and students are looking for the best study material to score good marks in their exam. With a lot of books and study materials it becomes very difficult to decide what to read and what not to read. So, today we are sharing with you CBSE Class Sample Paper for Class 10.

CBSE Sample Paper: Class 10

Q.1. How is the concentration of hydronium ions affected when a solution of an acid is diluted?

The concentration of hydronium ion will decrease when an acid solution is diluted with water.

Q.2. In the following food chain, 100 J of energy is available to the lion. How much energy was available to the producer?

Plants >>deer >>lion

Q.3. State two advantages of conserving forest and wildlife.

Answer 3.

Conserving forests help us to retain the subsoil water. It also helps to maintain biodiversity of living things.

Floods can be prevented from this.

Also Check: [NCERT Book Solutions Class 7 Chapter 6: Physical & Chemical Changes](#)

Q.4. State two ways for preventing rusting of iron articles.

We can use the galvanization process in which we apply a layer of zinc coating over the iron object so that they do not come in contact with the oxygen and moisture. We can apply paint on the iron object so as to reduce their contact with moisture and oxygen.

Question 5 list the properties of magnetic lines of force

- The magnetic field lines of a magnet will always form a continuous closed path loop.
- The magnetic lines of a magnet start from the north pole and end at the South Pole.

- You will never see these magnetic lines intersecting with each other

Question 6 Differentiate between Metals and nonmetals on the basis of their chemical properties

When we react a metal with dilute acid they will displace the hydrogen present in the acid

Displacement can be easily noticed in the case of metals

Basic oxides are formed on the metals react with oxygen present in the air

Nonmetals

Non-metals form the acidic oxides when they react with oxygen is present in the air

The displacement which we see in the case of metals cannot be observed in the case of non-metals and as they reacted with dilute acids

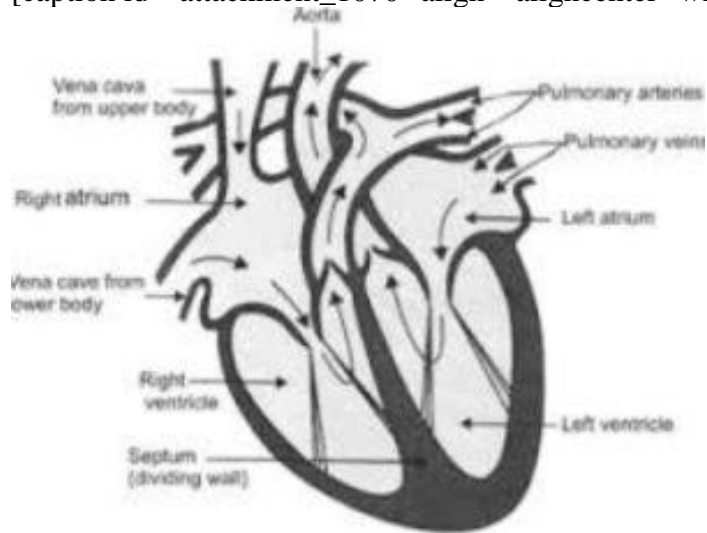
Non-metals do not show the displacement reaction like in the case of metals

Question 7: Explain the process of nutrition in amoeba

Amoeba is a unicellular organism and it uses its finger-like projection which is called as pseudopodia. It forms a food vacuole inside its body where the complex food gets broken into simpler substances for digestion. Enzymes help them to break into simpler substances which then get diffused into the cell cytoplasm. The food which remains undigested is thrown out of the amoeba by the process of endocytosis.

Q.8. Draw labelled diagram of the human heart

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Labelled Diagram of Human

Heart[/caption]

Question 8: What is reflex arc draw labelled diagram to show reflex arc on touching a very hot object

Reflex action is a spontaneous action which can be noticed in our body when we face an instant stimuli. The complete path in which the reflex action takes place is known as the reflex arc

Question 9. Show how you would connect three resistors each of 6 ohm so that the combination has a resistance of

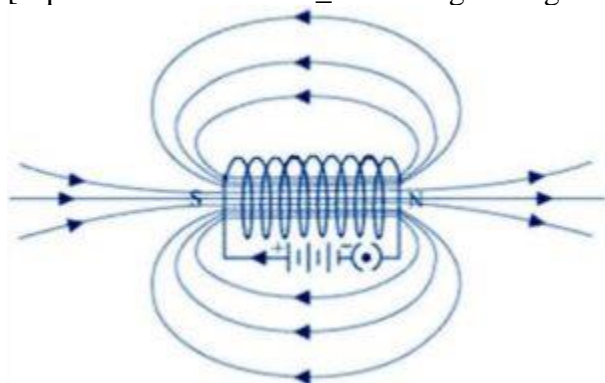
- (a) 9 ohms
- (b) 4 ohms

Question 10

Draw sketch of the pattern of field lines due to a:

- (a) Current flowing into a circular coil**
- (b) solenoid carrying current**

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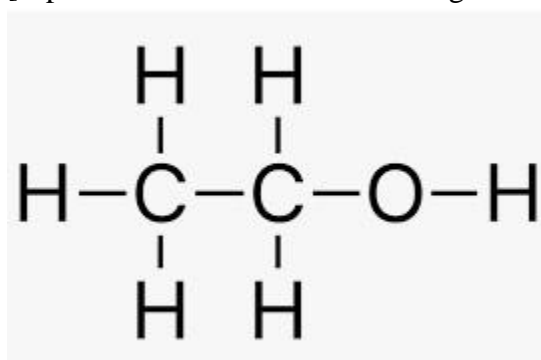


CBSE[/caption]

Current Carrying Solenoid: Class 10

Question 11 Write the structural formula of Ethanol. What happens if it is heated with an excess of concentrated sulphuric acid and 443 K?

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C₂H₅OH[/caption]

Question 12: Write the chemical equation for the reaction stating the role of concentrated H₂SO₄ acid in this reaction

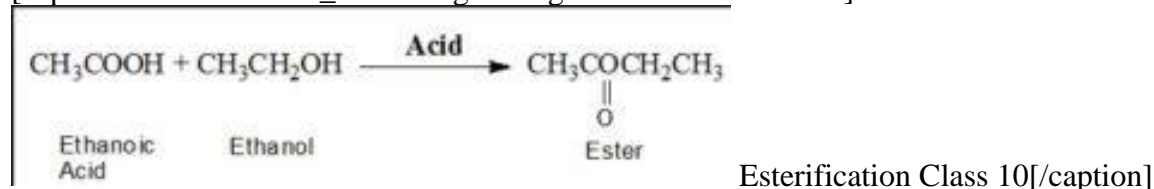
Also Check: [Sources of Energy Extra Questions: Short, Very Short & Long Questions](#)

Question 13. Distinguish between esterification and saponification reaction with the help of chemical equation for each. State one use of each esters and saponification process.

Esterification: The reaction in which a carboxylic acid combines with an alcohol and forms an ester are known as esterification

In esterification, esters are formed

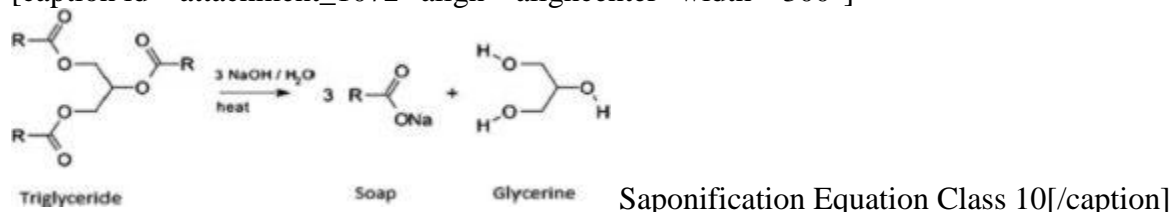
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Saponification: Esters react under the presence of acid or base to give back alcohol and carboxylic acid.

Alcohol is formed

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Question 14: List the four advantages of properly managed watershed management

Below we have listed the four advantages of a properly managed watershed management system

1. A proper watershed management system will help in soil and water conservation which will indirectly help to increase the Biomass production.
by doing this the production and the overall earning of the watershed community can also be increased
2. It reduces the chances of droughts and floods
3. Watershed management will act as a primary resource for land and water which will indirectly serve as a secondary resource for animals and plants present in that area

Question 15. Calcium is an element with atomic number 20 state and answer each of the following questions is calcium a metal or nonmetal. Will its atomic radius be larger or smaller than that of potassium with atomic number 19?

Write the formula of its oxide.

Atomic number of calcium is 20 and its electronic configuration is 2, 8, 8, 2.

Calcium is a metal because it has two electron valence electrons and forms a cation and that is why it is written as Ca^{+2}

The formula for the oxide of calcium is calcium oxide CaO

