Science Question Bank (Class-10th)

Year2016-2024

Chapter 1 (Chemical Reactions and Equation)

(1MARK QUESTIONS)

2016

1. What is a endothermic reaction?

2. what is an precipitation reaction?

3. What is an exothermic reaction?

2017

1. Balance the following chemical Equation:

$CH_4 + O_2 \xrightarrow{yields} CO_2 + H_2O$

2. Balance the following chemical Equation:

$CO_2 + H_2O \xrightarrow{yields} C_6H_{12}O_6 + O_2$

3. Balance the following chemical Equation:

$NaOH + H_2SO_4 \xrightarrow{yields} Na_2So_4 + H_2O$

2018

1. Balance the following chemical Equation:

$Fe + H_2O \xrightarrow{yields} Fe_3O_4 + H_2$

2. What do you mean by combination reaction? Give examples.

3.Balance the following chemical Equation:

$N_2 + H_2 \xrightarrow{yields} NH_3$

2019

1. Balance the following chemical Equation

$MnO_2 + HCl \xrightarrow{yields} MnCl_2 + H_2O + Cl_2$

2. Balance the following chemical Equation:

$Cu + AgNO_3 \xrightarrow{yields} Cu(NO_3)_2 + Ag$

2020

1. $Fe + CuSO_4$.....+.....

2. $Pb + CuCl_2 \xrightarrow{yields}$.....+.....

3. $Zn + CuSO_4 \xrightarrow{yields}$.....+.....

4. Oil and fat containing food items are flushed with Nitrogen, why?

2021

1.Name the gas filled in chips packets:

(a) Carbon dioxide (b) Nitrogen (c) Oxygen (d) Hydrogen

2. $CaCO_3 \xrightarrow{yields} CaO + CO_2$

This chemical reaction is an example of:

(a) Exothermic (b) Redox (c) Decomposition (d) Neutralization

3. $CuO + H_2 \xrightarrow{yields} Cu + H_2O$

This chemical reaction is an example of:

(a) Exothermic (b) Redox (c) Decomposition (d) Neutralization

4. $HCl + NaOH \xrightarrow{yields} NaCl + H_2O$

This chemical reaction is an example of:

(a) Exothermic (b) Redox (c) Decomposition (d) Neutralization

2022

1. $Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$

This chemical reaction is an example of:

(a) combination reaction

(b) double displacement reaction

(c) decomposition reaction

(d) displacement reaction

2. $Fe + CuSO_4 \xrightarrow{yields} FeSO_4 + Cu$

This chemical reaction is an example of:

(a) combination reaction

(b) double displacement reaction

(c) decomposition reaction

(d) displacement reaction

3. $ZnCO_3 \xrightarrow{yieldz} ZnO + CO_2$

This chemical reaction is an example of:

(a) combination reaction

(b) double displacement reaction

(c) decomposition reaction

(d) displacement reaction

(2 MARKS QUESTIONS)

2016

1. Why should a Magnesium ribbon be cleared before burning in air?

2. why Oil and fats containing Food items are flushed with nitrogen?

3. Why is respiration considered as an exothermic reaction? Explain.

4. What is Corrosion? Name the factors which promote the Corrosion?

2017

1. What do you mean by precipitation reaction? explain by giving examples?

2. what is the meaning of exothermic reaction? Give reaction.

3. Why is respiration considered as an exothermic reaction? Explain?

2018

1. Explain Rancidity with one examples.

2. What does one mean by Redox reactions? Give example.

3.What do you mean by Roasting? Give example

4. Oil and fat containing food items are flushed with nitrogen. Why?

2019

1. Why should a magnesium ribbon be cleaned before burning in air?

2. Oil and fat containing food items are flushed with nitrogen. Why?

2020

1. Why should a magnesium ribbon be cleaned before burning in air?

2. Oil and fat containing food items are flushed with nitrogen. Why?

2021

1. What is neutralization reaction? Give two examples

2. Define: (1) Corrosion (2) Rancidity

2022

1. Oil and fat containing food items are flushed with nitrogen. Why?

2. Why we apply paint on iron articles?

2024

1. Why is respiration considered an exothermic reaction?

2. What is the difference between Oxidation and Reduction?

3. Why is it necessary to balance a Chemical equation?

4. What is neutralization reaction? Give two examples

5. Write the balanced chemical equation for the reaction:

Barium chloride + Potassium sulphate →Barium sulphate + potassium Chloride

2021

(3 MARK QUESTIONS)

1**.** Explain combination and decomposition chemical reactions with examples.

2. What does one mean by exothermic and endothermic reactions? Give examples.

2022

1. What is the difference between the displacement and double displacement reactions? Write equations for these reactions.

2. Explain the following terms with one example each:

(a) Corrosion

(b) Rancidity

3. why should a Magnesium ribbon be cleaned before burning in air?

2024

(5 MARK QUESTIONS)

1. What is chemical reaction? Explain various types of Chemical reactions with examples in brief.

Chapter 2 (Acids Basic and Salt)

(1MARK QUESTIONS)

2016

1. Write the name and formula of the acid present in Vinegar?
2. Write the name and formula of the acid present in Lemon juice?
3. write the name of acid present in Sour milk?
4. Write the chemical formula of Gypsum?
5. Write the chemical formula of washing soda?
6. what is the common name of compound $CaOCl_2$?
7. Write the chemical formula and IUPAC name of Acetic acid?
8. Write uses of Acids?
9. write uses of bases?

2017

1. What is the common name of compound $CaOCl_2$?
2. Write the chemical formula of washing soda?
3. Write the chemical formula of Gypsum?

2018

(1 MARK QUESTIONS)

1. What is the pH value of acid rain?

2. Write an equation to show the reaction between Plaster of Paris and Water.
3. What is the pH value of milk?
4. What is the pH value of coffee?

2019

1. Write the chemical formula of bleaching powder?

2. Write the chemical formula of baking powder?

3. Write the chemical formula of washing soda?

2020

1. Write the common name of $CaOCl_2$.

2. Write the common name of $CaSO_4.\frac{1}{2}H_2O$

3. Write the common name of $CaSO_4.2H_2O$.

2021

1.The formula of marble is :

(a) $CaOCl_2$ (b) $CaCO_3$ (c) $Ca(OH)_2$ (d) $CaSO_4$

2. Which acid is present in Curd:

(a) Oxalic acid (b) Acetic acid (c) Methanoic acid (d) Lactic acid

3 . A solution turns red litmus blue. Its pH is likely to be

(a) 1 (b) 4 (c) 5 (d) 10

4. The formula of bleaching powder is

(a) $CaOCl_2$ (b) $CaCO_3$ (c) $Ca(OH)_2$ (d) $CaSO_4$

5. What is the pH value of blood

(a) 1.2 (b) 7.4 (c) 0 (d) 14

6. A solution reacts with crushed egg shells to give a gas turns lime water milky. The solution contains

(a) NaCl (b) HCl (c) LiCl (d) KCl

7.Which acid is present in Curd:

(a) Oxalic acid (b) Acetic acid (c) Methanoic acid (d) Lactic acid

8. What is the pH value of acid rain is

(a) Less than 5.6 (b) More than 5.6 (c) 0 (d) 7

2022

1.The chemical formula of baking soda is:

(a) Na_2CO_3 (b) $NaHCO_3$ (c) NaCl (d) $CaCO_3$

2.Which acid is present in Tomato:

(a) Oxalic acid (b) Acetic acid (c) Methanoic acid (d) Lactic acid

3. What is the pH value of blood

(a) 6 (b) 7 (c) 3 (d) 14

4. A solution reacts with crushed egg shells to give a gas turns lime water milky. The solution contains

(a) NaCl (b) HCl (c) LiCl (d) KCl

5.The formula of quick lime is :

(a) $CaOCl_2$ (b) $CaCO_3$ (c) $Ca(OH)_2$ (d) CaO

6. Which acid is present in Curd:

(a) Oxalic acid (b) Acetic acid (c) Methanoic acid (d) Lactic acid

7. Which gas is produced in soda acid fire extinguisher?

(a) O_2 (b) N_2 (c) CO_2 (d) H_2

8. The formula of Gypsum is :

(a) $CaSO_4.\frac{1}{2}H_2O$ (b) $CaSO_4.2H_2O$ (c) $CaCO_3$ (d) $CaOCl_2$

9. Which acid is present in Lemon juice?

(a) Oxalic acid (b) Acetic acid (c) Methanoic acid (d) Lactic acid

10. A solution turns red litmus blue, its pH is likely to be :

(a) 1 (b)4 (c) 5 (d) 10

11. Which acid is present in our stomach?

(a) H_2SO_4 (b) HNO_3 (c)HCL (d) CH_3 COOH

2024

1. Sodium hydrogen carbonate is the Chemical name of which of the following:

(a) Bleaching powder (b) Baking Soda (c) Gypsum (d) None of these

2. A solution turns red litmus blue, its pH is likely to be.

(a) 1 (b) 4 (c) 5 (d) 10

3. What is the formula of Bleaching powder?

(a) $Ca(OH)_2$ (b) CaO (c) $CaOCl_2$ (d) $CaSO_4.2H_2O$

4. Chemical formula of Washing soda:

(a) $Na_2CO_3.10H_2O$ (b) $NaHCO_3$ (c) Na_2CO_3 (d) None of these

5. The p in the pH scale stands for:

(a) Potenz (b) Place (c) Pure (d) Plants

6. Which acid is produced in human stomach?

(2 MARK QUESTIONS)

2016

1. Why does an aqueous solution of an acid conduct Electricity?

2. Write the properties of Base?

3. Write the uses of common salt?

2017

1. Why should curd and sour substance not be kept in brass and copper vessels?

2. Why does distilled water not conduct electricity, whereas rain water does?

3. Why Plaster of Paris is kept in air tight container?

4. Why is aqueous solution of an acid conduct Electricity?

5. Why a milkman adds a very small amount of Baking soda to fresh Milk?

6. Why copper sulphate solution change when iron nails are dipped in it?

7. Why does distilled water not conduct electricity, whereas rain water does?

2018

1**.** What does one mean by Redox reactions? Give examples.

2. Give two main uses of Bleaching Powder.

3. What is meant by calcination ? Give examples

2019

1. Why does an aqueous solution of an acid conduct electricity?

2. Why should curd and sour substances not kept in brass and copper vessels?

3. Why plaster of paris should be stored in a moisture proof container?

2020

1. Why does colour of copper sulphate solution change when an iron nail dipped in it?

2021

1.Plaster of Paris should be stored in moisture proof container .Explain why?

2. Why should curd and sour substances not be kept in brass and copper vessels?

3. What is the role of acid in our stomach?

4. Fresh milk has a pH of 6. How do you think the pH will change as it turns into curd? Explain your answer.

5. Give two important uses of washing soda and baking soda each.

6. Why does distilled water not conduct electricity, whereas rain water does?

2022

1. Why do acids not show acidic behavior in the absence of water.

2. Why does an aqueous solution of an acid conduct electricity.

3. Why does colour of copper sulphate solution change when an iron nail dipped in it?

2023

1**.** Why does dry HCl gas not change the colour of the dry litmus paper?

2024

1. Why does dry HCl gas not change the colour of the dry litmus paper?

2. Why is the use of Iodised salt advisable?

3. Why does an aqueous solution of an acid conduct electricity?

4. Why does colour of Copper sulphate solution change when an iron nail is dipped in it?

2020

(3MARK QUESTIONS)

1.What is chemical formula and chemical name of baking soda? Write the uses of baking soda.

(5MARK QUESTIONS)

2016

1. Discuss the importance of pH in daily life?

2022

1. Discuss the importance of pH in daily life?

Chapter 3(Metals and Non metals)

(1 MARK QUESTIONS)

2016

1.Which metal is a liquid at the room temperature?

2. Which metal can be cut easily cut with a knife?

2017

1. Aluminium is a highly reactive metal, yet it is used to make utensils for cooking?

2. What are amphoteric oxides? give two examples of amphoteric oxides?

3. Explain the meaning of malleable and ductile.

2018

1. Which metal does not corrode easily?

2. What do you mean by Roasting? Give examples.

3. Give an example of a metal which is a poor conductor heat?

2020

1. Which of the following is an alloy

(a) Iron (b) Aluminium (c)Gold (d) Brass

2021

1. Which of the following methods is suitable for preventing an iron frying pan from rusting

(a) applying grease

(b) applying paint

(c) applying a coating of zinc

(d) all of the above

2. Which is the least reactive element in reactivity series

(a) Cu (b)Au (c) Na (d) K

3. Which gas is released by the action of acids with metals

(a) Hydrogen (b)Oxygen (c)Argon (d) Chlorine

4. Which is the most reactive element in reactivity series

(a) Cu (b)Au (c) Na (d) K

2022

1. Which of the following methods is suitable for preventing an iron frying pan from rusting?

(a) applying grease

(b) applying paint

(c) applying a coating of zinc

(d) all of the above

2. Give an examples of a metal which can be easily cut with a knife

(a) Na (b) K (c) Ag (d) Zn

3. Food cans are coated with tin and not with zinc because:

(a) zinc is costlier than tin

(b) zinc has higher melting point than tin

(c) zinc is less reactive than tin

(d) zinc is more reactive than tin

4. Name one metal which is found in nature in the free state

(a) Au (b) Na (c) Cu (d) Zn

5. Which among these is a non-metal?

(a) H (b) Li (c) B (d) Na

6. Which type of covalent bond is present in O_2 molecule?

(a) Single-bond (b) Double-bond (c) Triple-bond (d) None of these

7. An element reacts with oxygen to give a compound with a high melting point. The compound is also soluble in water. The element is likely to be:

(a) Calcium (b) Carbon (c) Silicon (d) Iron

8. Which of the following is an Ore?

(a) Cinnabar (b) Calamine (c) Haematite (d) Rock salt

9. Which among these is a metal?

(a) He (b) Be (c) C (d) N

10. Which among of these is metalloid?

(a) H (b) Li c) B (D) Na

2023

1. Si (Silicon) is a.....

(a) Metal (b) Metalloid (c) Non-Metal (d) All the above

2 MARK QUESTIONS

2016

1. Why Gold and Silver are used to make jewelry?

2.Why do we apply paint on Iron articles?

2017

1. Explain the meaning of malleable and ductile?

2. Aluminium is a highly reactive metal, yet it is used to make utensils for coking?

3. Why are the heating elements of electric irons made up of an alloy rather than that of a pure metals?

2018

1. What does amalgam mean? Give examples.

2019

1. Why do we apply paint on iron articles

2020

1. Why do we apply paint on iron articles?

2021

1. What is an alloys?

2. Which metals do not corrode easily? Give reason.

3. State two ways Rusting of iron?

4. Define Galvanisation?

5. What are amphoteric oxides? Give two examples

2022

1. Why is sodium kept immersed in kerosene oil?

2023

1.Why do we apply paint on Iron articles?

2024

1.Why do we apply paint on Iron articles?

(3 MARK QUESTIONS)

2017

1. Differentiate between metals and non metals on the basis of chemical properties?

2. What are alloys? Why we make them?

1. Define the following terms:

(a) Minerals (b) Ore (c) Gangue

2020

1. What is Aqua regia? Write an use of it.

2. What are amphoteric oxides? Give two examples of amphoteric oxides.

2021

1. Differentiate between metals and non metals on the basis of their chemical properties?

(5 MARK QUESTIONS)

2017

1. Explain the steps involved in the extraction of metals from ores?

2019

1. What is the physical and chemical properties of metals non-metals?

2. Differentiate between metals and non metals on the basis of their chemical properties.

2020

1.What is meant by Rusting? What are essential conditions required for rusting? State the major ways to prevent rusting of iron.

2. Write ten differences between metals and non-metals based upon five physical and five chemical properties.

2022

1.What is meant by Rusting? What are essential conditions required for rusting? State the major ways to prevent rusting of iron.

2. Differentiate between metals and non metals on the basis of their chemical properties.

2024

1. Differentiate between metals and non metals on the basis of their chemical properties

2. What are amphoteric oxides? Give two examples of amphoteric oxides.

3. Why platinum, Gold and silver are used to make jewellery. Give reasons.4.(a) Why do Ionic compounds have high melting points?

(b) What are alloys? Give examples of an alloy?

Chapter 4(Carbon and Its Compound)

1 MARKS QUESTIONS

2016

1. Draw the electron dot structure for Ethanoic acid?

2. What would be the electron dot structure of carbon dioxide which has the formula CO_2?

3. Ionic compounds have high Melting points. Why?

2017

1. write the chemical formula and functional group of Propanoic Acid?

2. How many structural isomers of can you draw for pentane?

3. Why are carbon and its compound used as fuels for most applications?

2018

1. What is the melting point of Methane?

2. Draw the structural formula of Butane?

3. What is the melting point of cholroform?

4. Draw the electron dot structure for Ethanoic acid?

5. Draw the electron dot structure for Propanone?

2019

1. Write the chemical and structural formula of Butane?

2. Give the chemical and structural formula of Pentane?

3. Write the chemical and structural formula of Propane?

2020

1. Ethane with the molecular formula C_2H_6 has

(a) 6 covalent bonds

(b) 7 covalent bonds

(c) 8 covalent bonds

(d) 9 covalent bonds

2022

1. The formula of ethyne is :

(a) C_2H_4 (b) C_2H_2 (c) C_2H_6 (d) C_2H_8

2. C_3H_8 is the formula of

(a) Propane (b) Propene (c) Propyne (D) Propanone

3. C_4H_{10} is t5he formula of ?

(a) Butene (b) Butyne (c) Butane (d) Butanone

4. which type of covalent bond is present in N_2 molecule?

(a) Single bond (b) Double bond (c) Triple bond (d) None of these

5. Chemical formula of ethane is:

(a) C_2H_4 (b) C_2H_2 (c) C_2H_6 (d) C_2H_8

6. Which of the Following is a alcohol group?

(a) — C—COOH (b) —C—OH (c) —OH (d) None of these

7. C_5H_{12} is the formula of

(a) Pentene (b) Pentane (c) Pentyne (d) Pentanone

8. Which type of covalent bond is present in H_2 molecule?

(a) Single bond (b) Double bond (c) Triple bond (d) None of these

2023

1. Ethanol is a two-carbon compound with functional group-

(a) Carboxylic acid (b) Alcohol

(c) Ketone (d) Aldehyde

2. What is the Chemical formula of Butane?

(a) C_4H_{10} (b) C_4H_{12}

(c) C_2H_8 (d) C_4H_{22}

3. Which type of Covalent bond is present in N_2 molecule?

(a) Single bond (b) Double bond (c) Triple bond (d) None of these

4. Butanoic acid is a four-carbon compound with the functional group

(a) Alcohol (b) Ketone (c) Carboxylic acid (d) Aldehyde

5. What is the boiling point of Methane?

(a) 391 K (b) 334 K (c) 351 K (d) 111K

6. Propanol is the 3-carbon compound with a function group

(a) Aldehyde (b) Ketone (c) Alcohol (d) Carboxylic acid

7. What is the melting Point of Methane?

(a) 100K (b) 30K (c) 90K (d) 120K

8. Which is not a Halogen?

(a) Cl (b) Br (c) Ar (d) I

9. What is the general formula of Alkenes?

(a) C_nH_{2n+2} (b)) C_nH_{2n-2} (c)) C_nH_{2n} (d)) C_nH_{2n+1}

2 MARK QUESTIONS

2016

1. what is Hydrogenation? What is its industrial application?

2. Draw the electron dot structure for Propanone?

3. Draw the electron dot structure for Ethanoic acid ?

2017

1.What is Hydrogenation? what is its industrial application?

2.How many structural isomers can you draw for pentane?

3. Why are carbon and its compounds used as fuel for most applications?

4. What would be the electron dot structure of carbon dioxide which has the formula CO_2?

5. How many structural isomers can you draw for Butane?

6. What will be the formula and electron dot structure of cyclopentane?

2018

1. Draw the structural Isomers for Butane?

2.Draw the structural Isomers for Pentane?

3.What is an homologous series? Explain with examples

4. Draw the electron dot structure for Propanone?

5. Draw the electron dot structure for Ethanoic acid ?

2019

1. Would you be able to check if water is hard or not by using a detergent?

2. Draw the structural Isomers for Butane.

3. What would be the electron dot structure of carbon dioxide which has the formula CO_2?

2021

1. What change will you observe if you test soap with red and blue litmus paper?

2022

1. Write the chemical formula of Butanone and draw its structure also.

2023

1. Name the following Compound:

(a) $CH_3 — CH_2 — CH_2 — Cl$

(b) $CH_2 = O$

2. Would you able to check whether water is hard or not by using detergent?

3. Draw the electron dot structures for:

(a) H_2S (b) Propanone

2017

1. Explain the mechanism of the cleaning action of soaps?

3 MARK QUESTIONS

2018

1. How can Ethanol and Ethanoic acid be differentiated on the basis of their physical and chemical properties?

2019

1. Differentiate between soaps and synthetic detergents.

2. What is the homologous series? Explain with an examples.

2023

1.What is thermit reaction? Write an use of it.

2. Why does Micelle formation take place when soap is added to water ? Will a Micelle be formed in other solvent such as Ethanol also?

2024

1. Why are carbon and its compounds used as fuels for most applications?

2. How can Ethanol and Ethanoic acid be differentiated on the basis of their physical and chemical properties?

3. Write the difference between Soap and Detergent.

2023

1. Explain the mechanism of the cleaning action of soaps.

(5 MARK QUESTIONS)

2017

1. Explain the mechanism of the cleaning action of soaps.

2. Explain the properties of ionic compounds?

2024

1. Draw the structures for the following Compounds:

(a) Ethanoic acid

(b) Bromopentane

Chapter 5Life Proces

(1 MARK QUESTIONS)

2017

1. The xylem in plants are responsible for.....

2. In human , protein digestion starts from which organ?

3. Which part of the brain controls the heart?

4. What is a retrovirus?

5. Write name of element which is found in haemoglobin?

6. Write name of element which is found in hemoglobin?

2018

1. Write the full form of A.T.P.

2. Write the full form of A.D.P.

2019

1. Name the pigment responsible for photosynthesis in plants.

2020

1. Asexual reproduction takes place through budding in

(a) Amoeba (b) Yeast (c) Plasmodium (d) Leishmania

2. Name the part of the male reproductive system in which sperms are formed

2021

1. The kidney in human beings are a part of the system for

(a) nutrition(b) respiration (c) excretion (d) transportation

2. Normal systolic pressure of blood in human body is

(a) 120mm of Hg

(b) 100mm of Hg

(c) 80mm of Hg

(d) 90mm of Hg

3. Another name of Bio catalyst is

(a) enzymes (b) hormones (c) reactants (d) catalysts

4. The process of purification of blood by using artificial kidney is called

(a) filtration (b) purification (c) excretion (d) Dialysis

5. The Xylem in plants is responsible for

(a) transport of water

(b) transport of food

(c) transport of amino acids

(d) transport of oxygen

6. Which of the following is a part of excretory system

(a) Tests (b) Small Intestine (c) Liver (d) Kidney

7. The Oxygenated blood enters in which chamber of heart first

8. Name the plant tissue responsible for transportation of water and minerals.

9.The Anther contains:

(a) Sepals (b) Ovules (c) Carpel (d) Pollen grains

10.The complete digestion of food occurs in

(a) stomach

(b) large intestine

(c) oesophagus

9. The autotrophic mode of nutrition requires

(a) carbon dioxide and water

(b) chlorophyll

(c) sunlight

(d) all of the above

10. Which component of blood help in transportation of oxygen

(a) plasma (b) red blood cell (c) white blood cell (D) platelets

11. Which enzyme is present in saliva:

(a) Amylase (b) Pepsin (c) Bile juice (d) All of the above

12.Food enters in which part of digestive system after stomach

(a) Small Intestine

(b) Large intestine

(c) Oesophagus

(d) Liver

13. Which blood vessel carries blood from heart to lungs

(a) Aorta (b) Vena Cava (c) Pulmonary artery (d) Pulmonary Vein

14. The process of removing wastes from the body called

(a) respiration (b) digestion (c) circulation (d) excretion

2022

1. The Xylem in plants is responsible for

(a) transport of water

(b) transport of food

(c) transport of amino acids

(d) transport of oxygen

2. Digestion of Protein starts in

(a) Small Intestine

(b) Large intestine

(c) Oesophagus

(d) Liver

3.The breakdown of pyruvate to give carbon dioxide ,water and energy takes place in

(a) Cytoplasm (b) Mitochondria (c) Chloroplast (d) Nucleus

4. Which enzyme is present in saliva:

(a) Amylase (b) Pepsin (c) Bile Juice (d) All of the above

5. Respiratory pigment in human blood is

(a) Chlorophyll (b) Water (c) Blood (d) haemoglobin

6.Proteins after digestion are converted into

(a) Carbohydrates (b) Glycerol (c) Amino acids (d) Starch

7. Normal diastolic pressure of blood in human body is:

(a) 40mm (b) 60mm (c) 120mm (d) 80mm

8.The kidney in human beings are a part of the system for

(a) nutrition (b) respiration (c) excretion (d) transportation

9. What causes Gonorrhea in humans?

(a) Virus (b) Fungi (c) Protozoa (d) Bacteria

2023

1.The presence of which of the following bacteria in water indicates water contamination?

(a) Streptococcus (b) Coliform (c) Salmonella (d) None of these

(2 MARK QUESTIONS)

2016

1. what are the function of Digestive enzymes?

2. What is the difference between Aerobic and anaerobic respiration?

2017

1. How is the amount of urine produced regulated?

2. What would be the consequences of deficiency of haemoglobin in our body?

3. How are water and minerals transported in plants?

4. What are the differences between the transport of materials in xylem and phloem?

5. Why are some patients of diabetes treated by giving injections of insulin?

2018

1. What are the components of the transport system in highly organised plants?

2. What is Photosynthesis? Write its importance.

3. How is food transported in plants ?

4. Draw a labelled diagram of the longitudinal section of a flower.

5.Draw the diagram of a Nephron?

2019

1.What is the role of saliva in the digestion of food?

2. How is the process of pollination different from fertilisation?

3.How does binary fission is differ from multiple fission.

4.What is the role of saliva in the digestion of food?

2021

1. What is the role of saliva in the digestion of food?

2. What is the function of digestive enzymes?

2022

1. What is the role of acid in our stomach?

2.What are the differences between the transport materials in xylem and phloem?

3. What are the differences between autotrophic and heterotrophic nutrition?

2024

1. What are the differences between the transport of materials in xylem and phloem?

3 MARKS QUESTIONS

2019

1. How are the modes of reproduction different in unicellular and multicellular organisms?

2.Draw a well labelled diagram of human heart

3.Draw a well labelled diagram of human digestive system.

4.Draw a well labelled diagram of human respiratory System?

2021

1. Draw a well labelled diagram of human digestive system.

2. Describe the double circulation in human beings. Why is it necessary?

3. Draw the structure and function of nephrons?

5MARKS QUESTIONS

2016

1. Describe the diagram the Digestive system in Human beings?

2. Describe with diagram Excretory system in human beings?

3. What are the difference between autotrophic nutrition and heterotrophic nutrition?

4. Describe with diagram the Respiratory system in human beings?

2017

1. Describe the structure and functioning of heart of Human beings?

2019

1. Describe the structure and function of Nephron?

2. Explain the construction and working of Human Heart with the help of labelled diagram?

2021

1. Explain in details the functioning of human excretory system with diagram?

2. Explain in details the functioning of human heart with a diagram.

2022

1.Describe the digestive system in human beings with diagram.

2. What are the differences between aerobic and anaerobic respiration?

2024

1.What is Pollination? explain self pollination and cross pollination?

2. What are Plant hormones? write the names and functions of various plant hormones.

3.What are animal hormones? write the names and functions of various animal hormones

Chapter 6 Control and Coordination

1 MARKS QUESTIONS

2016

1. What is the gap between two neurons?

2017

1. Which hormone is secreted by pituitary gland?

2. Give an example of a plant hormone that promotes growth?

2018

1.The brain is responsible for :

(a) Thinking

(b) Regulating the Heart beat

(c) Balancing the body

(d) All of the above

2021

1. Thinking is done by which part of brain:

(a) Fore brain

(b) Midbrain

(c) Hind brain

(d) All of the above

2. Main center of control and coordination in human body is

(a) heart (b) brain (c) stomach (d) lungs

3.The gap between two neurons is called

(a) Dendrite (b) Synapse (c) Axon (d) Impulse

1.What would be the consequences of a deficiency of haemoglobin in our bodies?

4.Activities like walking in straight line, riding a bicycle etc. are controlled by which part of brain

(a) Fore brain

(b) Midbrain

(c) Hind brain

(d) Spinal cord

2022

1. In evolutionary terms we have more in common with

(a) a chinese school boy

(b) a chimpanzee

(c) a spider

(d) a bacterium

2.Autotrophs forms which tropic levels of the food chain?

(a) Producer (b) Primary consumer (c) Secondary consumer (d) tertiary consumer

3.The presence of which bacteria in large amount indicated the contamination of Ganga river water

(a) Lactobacillus (b) Coliform (c) Streptococcus (d) Escherichia

2023

1.The brain is responsible for

(a) Thinking (b) Balancing the body (c) Regulating the heart beat (d) All of these

2. Iodine is necessary for the synthesis of which hormone

(a) Adernaline (b) Auxin (c) Thyroxin (d) Insulin

3.Which gland secretes the insulin hormone

(a) Adrenal gland (b) Parathyroid (c) Thyroid (d) Pancreas

2024

1.The main co-ordination centre of the body is:

(a) Kidneys (b) Heart (c) Brain (d) Digestive system

2 MARKS QUESTIONS

2016

1. How does chemical coordination occurs in plants?

2. How does Phototropism occur in plants?

2017

1. what is the difference between reflex action and walking?

2018

1. Draw the diagram of Neuron?

2019

1. How does our body response when adernaline is secreted into the blood?

2020

1. What is the role of the brain in reflex action

2. What is the difference between a reflex action and walking?

3. What is the need for a system of control and coordination in an organism?

4. Draw the structure of a neuron and explain its functions.

2022

1. What would be the consequences of a deficiency of hemoglobin in our bodies?

2023

How are auxins promote the growth of tendrils around a support

2024

1.Which signal will get disrupted in case of spinal cord injury?

5 Mark Question

2017

1. Explain different parts of human brain with the help of a diagram?

2019

1. Describe the structure and function of Human Brain with the help of well labelled diagram?

Chapter 7 How do Organism Reproduce

(1 MARK QUESTIONS)

2016

1.Name the organism which is reproduced by Multiple fission?

2. Expand I.U.C.D.

2017

1. Give an example of chemical method of contraception?

2. Who is the father Genetics?

3. Write name of male reproductive organ of humans?

4.Write name of female reproductive organ of humans?

5. What could be the reasons for adopting contraceptive devices?

2018

1. The Anther contains:

(a) Sepals (b) Ovules (c) Carpel (d) Pollen grains

2. Name the respiratory pigment in human beings.

3. Give an examples of a plant hormone that promotes growth

4. Which hormone is secreted by thyroid gland?

5. Which gland secretes insulin hormone?

6. Which gland secrete insulin hormone?

2020

1. Which of the following is not a part of the female reproductive system in human beings?

(a) Ovary (b) Uterus (c) Vas deferens (d) Fallopian tube

2. Name the part of female reproductive system in which eggs are produced

3. How many months are required for the development of child inside the mother's body?

2022

1..... is not a part of male reproductive system

(a) Prostate gland (b) Vas deferens (c) Testis (d) Uterus

2. Binary fission occurs in which organism?

(a) Spirogyra (b) Rhizopus (c) Yeast (d) Amoeba

3. What causes syphilis diseases in humans

(a) Virus (b) Fungi (c) Protozoa (d) Bacteria

4. What causes AIDS in humans?

5. Which of the following is a part of male reproductive system in human beings?

Fragmentation occurs in which organism?

(a) Spirogyra (b) Rhizopus (c) Yeast (d) Amoeba

2024

1.Where does fertilization takes place in women?

2MARKS QUESTIONS

2016

1. What are the function of Testis in human beings?

2. Why does Menstruation occur?

3. How does binary fission differ from Multiple fission?

4. What is the role of the Seminal vesicles and the Prostate gland?

2017

1. How is process of pollination different from fertilization?

2. What are advantages of sexual reproduction over asexual reproduction?

2018

1.What is the role of the seminal vesicles and the prostate gland?

2019

1.What would be the consequences of deficiency of Hemoglobin in our body?

2. Why are some patients of diabetes treated by giving injection of insulin?

2020

1. How does self pollination differ from Cross pollination?

2. Describe double circulation in human beings why is not necessary

3. How does internal fertilization differ from external fertilization?

2022

1. Name any two bisexual flowers

2. Why does menstruation occur.

3.Name any one unisexual and bisexual flower each

4. What is role of seminal vesicles and prostate gland?

2023

1. How does binary fission differ from multiple fission?

2.Describe asexual reproduction in Amoeba?

3.How is the process of pollination different Fertilisation?

4.How does the embryo get nourishment inside the mother body?

5.What is the function performed by testis in Human beings?

6.What are the different methods of contraception?

7. Why is Vegetative propagation practised for growing some type of plants?

3MARKS QUESTIONS

1.Draw a labelled diagram of the longitudinal section of flower?

2022

1.How does binary fission differ from multiple fission? Give one example of each.

5MARKS QUESTIONS

2017

1. Compare and contrast the nervous and hormonal mechanism for control and coordination in animals?

2018

1. What are the difference between Aerobic respiration and Anaerobic respiration?

2020

1.Explain the human female reproductive system in details with the help of a well labelled diagram

2.Explain the process of sex determination in human in details with the help of a diagram

3. Explain the human male reproductive system in details with the help of a well labelled diagram

Chapter 8 Heredity and Evolution

(1 MARK QUESTIONS)

2017

1. Define the term Heredity?

2018

1.In evolutionary terms, we have more in common with:

(a) a-Chinese school-boy

(b)a-Chimpanzee

(c) a spider

(d) a Bacterium

2. Write the full form of D.N.A

2019

1. Who was the father of Heredity?

2. Give the full form of HIV

3. Give full form of DNA

4. Give full form of AIDS

5. Who formulated the hypothesis that" evolution took place due to natural selection".

6. Who formulated the "theory of evolution"?

2020

1.Name the scientist who proposed the theory of evolution if species by natural selection.

2. Name the plant on which Mendel conducted the experiments of the inheritance of traits?

2022

1. An example of homologous organ is

(a) Our arm and a dog's fore-leg

(b) Our teeth and an elephant's tusks

(c) Potato and runners of grass

(d) All of the above

2. Who is the father of genetics?

(a) Charles Darwin (b) Robert Hooke (c) John Mendel (d) Robert Brown

3. Who formulated the hypothesis that evolution took place due to natural selection?

(a) Lamarck (b) Weismann (c) Charles Darwin (d) Mendel

4. The human species was originated in :

(a) America (b) Africa (c) India (d) Australia

5. Mendel choose which plant to formulate the rule of inheritance:

(a) Radish (b) Pea (c) Potato (d) Brinjal

6.The functional unit of DNA is called

(a) Ribosomes (b) RNA (c) Gene (d) Chromosome

2023

1. Which of the following is a part of male reproductive system in human beings?

(a) Ovary (b) Uterus (c) Vas deferens (d) Fallopian tube

2.Anther contains

(a) Sepal (b) Ovule (c) Pollen Grain (d) Petals

3.Menstruation cycle is completed in

(a) 7 days (b) 14 days (c) 28 days (d) 40 days

2 MARK QUESTIONS

2016

1. What factors could leads to h rise of a new species?

2. How does the creation of variations in a species promote survival?

3. How is the sex of the child determined in Human beings?

2017

1. Why are traits acquired during life time of an individual normally not inherited to the next generation?

2. Why are traits acquired during life time of an individual normally not inherited to the next generation?

3. Why is DNA copying essential part of the process of reproduction?

4. Explain the term homologous organ with example?

5. Explain the term analogous organs?

2019

1. Why reduction in number of surviving tigers is a cause of worry from the point of view of genetics?

2. What factors could lead to the rise of a new species?

2020

1. Can the wings of butterfly and wings of bat be considered as a homologous organs? Why or why not.

2 .Explain the terms analogous and homologous organs with examples?

2022

1.Can a wing of butterfly and a wing of bat be considered as homologous organ ? why or why not?

2. How does binary fission differ from multiple fission?

3.How does the creation of variations in a species promote survival?

2023

1.What are the importance of DNA copying in reproduction?

2020

3 MARKS QUESTIONS

1. Explain the term analogous and homologous organs with examples?

2. How is the sex determined of in human beings?

2022

1.How do Mendel's experiments show that traits may be dominant or recessive?

2.How is the sex of child determines in humans?

3.How is the process of pollination different from fertilization?

4.What are the advantages of sexual reproduction over asexual reproduction

2024

1. How do Mendel experiments how that traits maybe dominant or recessive?

2022

(5 MARKS QUESTIONS)

1.Draw a well labelled diagram of a longitudinal section of a flower and explain the process of sexual reproduction in plants

2.What could be the reason for adopting contraceptive methods?

3.How does an embryo get nourishment inside the mother's body?

4. Explain the human female reproductive system in details with the help of a well labelled diagram

Chapter 10 (Light and Reflection)

(1 MARK QUESTIONS)

2016

1. Define the principal focus of a concave mirror?

2. Define focal length of spherical mirror?

3. Write the uses of convex mirror?

4. **.** Define the principal focus of a convex mirror?

5. Define Focal lengths of a spherical mirror?

2017

1. What is the Refractive index glass?

2. Name the mirror that can give a straight and enlarged image of an object?

3. What is the Refractive index of water?

4. What is the speed of light in vacuum?

5. what is the refractive index of air?

6. write lens formula?

2018

(1 MARK QUESTIONS)

1. What is the Refractive index of water?

2. What is the Mirror formula?

3. Define Power of lens. What is its unit?

4. Name the mirror that can give an erect an enlarged image of an object.

5. What is the Refractive index of Benzene?

2019

1. No matter how far you stand from a mirror , your image always appears erect. The mirror is likely to be -

(a) Only Plane (b) Only Concave (c) Only Convex (d) Either Plane or Convex

2. Where should an object be placed in front of convex lens to get a real image of the size of the object?

(a) At the principal focus of the lens

(b) At twice the focal length

(c) At infinity

(d) Between the optical centre of the lens and its principal focus.

3. The image is formed by a concave mirror is observed to be virtual, erect and larger than the object. Where should be the position of the object?

(a) Between the principal focus and the centre of curvature

(b) at the centre of curvature

(c) Beyond the centre of curvature

(d) Between the pole of the mirror and its principal focus

2020

1. What is lens formula.

2. Refractive index of Diamond is.....

3. Write the mirror formula.

4. Refractive index of Ice is.....

5. Refractive index of air is .....

2022

1. If the angle of incidence is 45^0**,** then the angle of reflection will be

(a) 90^0 (b) 30^0 (c) 45^0 (d) 80^0

2. The splitting of white light into 7 seven colours is known as

(a) scattering (b) Refraction (c) Reflection (d) Dispersion

3. Which one of the following materials cannot be used to make a lens?

(a) Cornea (b) Iris (c) Pupil (d) Retina

2023

1. Focal length of Concave mirror is:

(a) Positive (b) Negative

(c) can be +ve or _ve (d) None of these

2. Refractive index of air is

(a) 1.0003 (b) 1.02 (c) 1.1 (d) 1.04

3. Formula to find the power of Lens is

(a)P=2 ×2f (b) P=2f (c) $P=\frac{1}{2f}$ (d) $P=\frac{1}{f}$

4. The unit of Power of lens is ?

(a) Watt (b) Kilowatt (c) Dioptre (d) None of these

5.Refractive index of Ice is.....

(a) 1.31 (b) 1.37 (c) 1.36 (d) 1.33

6. The field of view is maximum for.....

(a) Plane mirror (b) Concave mirror

(c) Convex mirror (d) None of these

7.Refractive index of Water is

(a) 1.31 (b) 1.33 (c) 1.23 (d) 1.2

8. Speed of light in vacuum is

(a) 3×10^8 m/sec (b) 3×10^{18} m/sec

(c) 3×10^8 km/sec (d) 3×10^{28} m/sec

(2 MARK QUESTIONS)

2016

1. write the uses of Convex mirror?

2. write the laws of Reflection?

3. Write the uses of concave mirror?

2017

1.Show by diagram the image formed in convex lens when the object lies beyond 2F?

2. Find the focal length of convex mirror whose radius of curvature is 32cm?

3.Light enters from air to glass having refractive index 1.50. what is speed of light in glass?

The speed of light in vacuum is 3×10^8m/s.

4. The radius of curvature of a spherical mirror is 20 cm. what is its focal length?

5. Find the power of a concave lens of focal length 2m?

2018

1. Define Power of lens. What is its unit?

2. Find the focal length of a lens of power -2.0D . What type of lens is this?

3. What is the difference between Reflection and Refraction?

2019

1. Find the radius curvature of spherical mirror having focal length 10cm.

2. The magnification produced by a plane mirror is -1 . What does this mean?

3. The magnification produced by a plane mirror is +1 . What does this mean?

2020

1. Find the power of a concave lens of focal length 2m.

2022

1. What is reflection? Explain the laws of reflection.

2. What do you mean by diffraction of light?

2023

1. Find the focal length of a Convex mirror whose radius of curvature in 32 m.

2. Name the type of mirror used in Headlight of a car. Support your answer with reason.

3.Find the power of a concave lens of focal length 2m.

4. Name the type of mirror used in rear view mirror of vehicles. Support your answer with reason.

5. What are the uses of Convex mirror?

6. The radius of curvature of a spherical mirror is 20cm. What is its Focal length?

7. What are the uses of Concave mirror?

8. Find the Focal length of a Convex mirror whose radius of Curvature in 32m.

9. Differentiate between Reflection and Refraction?

2024

1. Find the focal length of a convex mirror whose radius of curvature is 32 cm?

2. Why do we prefer a convex mirror as a rear view mirror in vehicles?

3. what kind of Mirror concave, convex or plane would be best suited for use in a solar cooker? explain.

4. The refractive index of diamond is 2.42. what is the meaning of this statement?

(4 MARK QUESTIONS)

2016

1. A concave mirror used for rear-view on an automobile has a radius of curvature of 3.00 m. If a bus is located at 5.00 m from this mirror find the position, nature and size of the image.

2. An object 4.0 cm size, placed at 25.0cm in front of a concave mirror of focal length 15.0 cm. At what distance from the mirror should a screen be placed in order to obtain a sharp image? Find the nature and size of the image.

3. A 2.0 cm tall object is placed perpendicular to the principal axis of a convex lens of focal length 10.0 cm. The distance of the object from the lens is 15.0cm. find the nature, position and size of the image?

2017

1. An object 5.0 cm in length is placed at a distance of 20 cm in front of convex mirror of radius of curvature 30cm. find the position of the image ,its nature an size

2018

1.A convex mirror used for rear-view on an automobile has a radius of curvature of 3.00 m. If a bus is located at 5.00 m from this mirror find the position, nature and size of the image.

2. A concave lens has focal length of 15cm. at what distance should the object from the lens be placed so that it form the an image at 10cm form the lens? Also find the magnification produced by the lens.

3.An object 4.0 cm size, placed at 25.0cm in front of a concave mirror of focal length 15.0 cm. At what distance from the mirror should a screen be placed in order to obtain a sharp image? Find the nature and size of the image.

Chapter 11(Human Eye and ColourfullWorld)

(1 MARK QUESTIONS)

2016

1. what is meant by power of accommodation of the eye?

2. What is Myopia?

3. what is Hypermetropia?

2017

1. How will you correct Hypermetropia?

2. What happens to the image distance in the eye, when we increase the distance of an object from the eye?

3. On which part of human eye forms the image of an object?

2019

1. The least distance of distinct vision for a young adult with a normal vision is about.....

2. The3 human eye form the image of an object at its.....

2020

1. The human eye focus objects at different distances by adjusting the focal length of the eye lens. This is due to

(a) Presbyopia (b) Accommodation (c) Near-sightedness (d) Far-sightedness

2. The human eye forms the image of an object at its

(a) Cornea (b) Cilliary muscles (c) Iris (d) Retina

3. Which kind of lens present in human eye?

4. The least distance of distinct vision for a young adult with normal vision is about

(a)25m (b) 2.5cm (c) 25cm (d) 2.5m

2022

1. The change of focal length of an eye lens is caused by the action of the

(a) Pupil (b) Retina (c) Ciliary Muscles (d) Iris

2. Which lens is appropriate to correct Near-sightedness?

(a) Concave (b) Convex (c) Plane (d) Bifocal lens

3. The least distance of distinct vision for a young adult with normal vision is about

(a)25m (b) 2.5cm (c) 25cm (d) 2.5m

4. Which lens is appropriate to correct Presbyopia?

(a) Convex lens (b) Concave lens (c) Bi-focal lens (d) None of these

5. Which lens is appropriate to correct far- sightedness?

(a) Convex lens (b) Concave lens (c) Bi-focal lens (d) None of these

6. Which part of eye controls the amount of light entering the eye?

(a) Iris (b) Cornea (c) Ciliary muscles (d) Pupil

2023

1. Which part of Human eye image is formed?

(a) Retina (b) Iris (c) Cornea (d) Vitreous Humor

2. Which type of lens is used to correct Hypermetropia?

(a) Concave (b) Convex (c) Plane (d) Bifocal lens

3. The defect of vision in which person can see distant object clearly but nearby object look blurred is-

(a) Myopia (b) Astigmatism (v) Hypermetropia (d) Presbyopia

4. In Human eye one of the sight defect is

(a) Born blindness (b) Colour blindness (c) Sleeping (d) Myopia

5. Twinkling of stars is caused due to..... of Light.

(a) Reflection (b) Refraction (c) Scattering (d) None of the above.

6. Which lens is present in the Human eye?

(a) Convex (b) Concave (c) Biconvex (d) Biconcave

7. The image formed on the Retina is

(a) Virtual and Inverted

(b) Real and Inverted

(c)Real and Erect

(d) Virtual and Erect

8. What is the far point of a Normal Human Eye?

(a)24m (b) 2.5m (c) 25cm (d) Infinity

9. Which part of eye can donated after death?

(a) Cornea (b) Retina (c) Iris (d) Pupil

10. What is the Colour of Danger signal?

(a) Red (b) Blue (c) Yellow (d) Green

10. The change of focal length of an eye lens is caused by the action of the

(a) Pupil (b) Retina (c) Ciliary Muscles (d) Iris

11. The Crystalline lens of people at old age becomes milky and cloudy this condition is known as:

(a) Hypermetropia (b) Myopia (c) Cataract (d) Presbyopia

2024

1. On which part of Human eye the image of an object is formed?

(a) Retina (b) Cornea (c) Eye ball (d) Iris

2. The Human eye forms the image of an object at its:

(a) Cornea (b) Iris (c) Pupil (d) Retina

3.The change in focal length of an eye lens is caused by the action of the:

(a) Pupil (b) Retina (c) Ciliary muscles (d) Iris

(2 MARK QUESTIONS)

2016

1. Why does the Sun appears raddish early in the morning?

2. Why does star twinkle?

3. Explain , why the planet do not twinkle?

2017

1. Why does sky appear dark instead of blue to an astronaut?

2. Why does star twinkle?

2018

1. What is Tyndall Effect? Give its three examples.

2. Explain why planets do not twinkle?

2022

1. A doctor has prescribed a corrective lens of power +1.5 D. find the focal length of the lens. Is the prescribed lens diverging or converging?

2. Find the focal length of a lens of power -2.0D. What type of lens is this?

3. Why does sky appear dark instead of blue to an astronaut?

4.What is meant by Power of accommodation of the Eye?

5. Why do Stars Twinkle?

6. Explain why planets do not twinkle?

7. What is the near and far point of the3 human eye for normal vision?

2023

1.Why does the sky appear dark instead of blue to an Astronaut?

2. What is meant by Power of accommodation of the Eye?

3. Why do Stars Twinkle?

(3 MARK QUESTIONS)

2018

1. With the help of well labelled diagram explain the structure of Human Eye.

2023

1. What is Tyndall effect? Give two examples.

2. A person is unable to read a book properly. From which defect is he suffering? How to correct this defect?

3. Explain why the planets do not twinkle?

2024

1**.** Explain why the planets do not twinkle?

2**.** Why does the sky appear dark instead of blue to an astronaut?

3. Why does the Sun appear reddish at the time of Sunrise and Sunset?

4. What are the various types of defect of Vision? How they can be corrected?

4. What is Tyndall effect? Give two examples

(5 MARK QUESTIONS)

2017

1. With the help of well labelled diagram explain the structure of Human Eye.

2022

1**.** With the help of well labelled diagram explain the structure of Human Eye.

2023

1. With the help of well labelled diagram explain the structure of Human Eye.

Chapter 12(Electricity)

(1 MARK QUESTIONS)

2016

1. what does an electric circuit mean?

2. Name the device which controls electric current?

3. . Name the device which measures electric current?

4. What is an electric motor?

5.What s electric generator?

6. Name the device which measures the potential difference across a conductor?

2017

1.Write the SI unit of resistivity?

2. What is the SI unit of Electric Current?

2018

1**.** What is the symbol of Ammeter used in electric circuit?

2. A current of 0.5 is drawn by a filament of an electric bulb for 10 min, find the amount of electric charge that flows through the circuit.

3. What is the symbol of Resistor used in electric circuit?

4. Name a device that helps to maintain a potential difference across a conductor.

5.What is the symbol of voltmeter used in electric circuit?

2019

1. Write the SI unit of Electric Power?

2. Name a device that helps to maintain a potential difference across a conductor.

3. Name the energy stored in the water of a dam?

4. What is the SI unit of Electric charge?

5. Name the device which detect the presence of current in a circuit.

6. What is the SI unit of Electric Current?

7. Name the device that detect the presence of current in a circuit ?

8. A solar cell converts which energy into electrical energy

2020

1. What is the SI unit of Electric Charge?

2. What is the SI unit of Electric Current?

3. What is the SI unit of Resistance?

2021

1. The SI unit of Potential Difference is :

(a) Volt (b) Coulomb (c) Watt (d) Ampere

2.In an electric circuit ammeter is always connected in-

(a)Series (b) Parallel (c) Both of the above (d) None of the these

3. Which device is used to detect the presence of electric current is

(a)Generator (b) Galvanometer (c) Ammeter (d) Motor

4. The potential difference between two points in a current carrying conductor when 1 Joule of work is done to move a charge of 1C from one point to another will be:

(a) 0V (b) 2V (c) 1V (d) 10V

5.In an electric circuit voltmeter is always connected in-

(a)Series (b) Parallel (c) Both of the above (d) None of the these

6. The SI unit of electric current is.....

7. The device which is used to measure voltage is:

(a) Voltmeter (b) Ammeter (c) Rheostat (d) Galvanometer

2022

1.What is the SI unit of Electric Current is.....

2. The device which is used to measure voltage is:

(a) Voltmeter (b) Ammeter (c) Rheostat (d) Galvanometer

3. The element of electric heating device is made of

(a) Tungsten (b) Argon (c) Iron (d) Nichrome

4. What is the SI unit of Electric Charge?

5. Which device is used to detect the presence of electric current is

(a)Generator (b) Galvanometer (c) Ammeter (d) Motor

6.In an electric circuit ammeter is always connected in-

(a)Series (b) Parallel (c) Both of the above (d) None of the these

7.Which of the following terms does not represent electrical power in a circuit?

(a) $I^2 R$ (b) IR^2 (c) VI (d) V^2 /R

8. The SI unit of Potential difference is:

(a) Volt (b) Coulomb (c) Watt (d) Ampere

9. Melting point of Tungsten is:

(a) 1380^0 C (b) 1380^0 F (c) 3380^0 F (d) 3380^0 C

2024

1**.** S.I. unit of electric charge is:

(a) Watt (b) Kilowatt (c) Coulomb (d) Ampere

3. Name the instrument used to measure Electric current in a circuit:

(a)Ammeter (b) Galvanometer (c) Voltmeter (d) Terminal

3. The rate of flow of electric charges is known as:

(a) Electric circuit (b) Electric current (c) Potential difference (d) Electric Potential

(2 MARKS QUESTIONS)

2016

1. What does an electric circuit mean?

2. Name the device which controls electric current?

3. Name two sources of direct current?

4. Name the device which measures electric current?

5. Name the device which measures the potential difference across a conductor?

6. An electric bulb is connected to a 220V generator. the current is 0.50A. what is the power of the bulb?

7. On what factors does the resistance depends?

8. An electric Iron of resistance 20Ω takes a current of 5.0 A . Calculate the heat developed in 30s.

2017

1.What is the function of an Earth wire? Why is necessary to earth metallic appliances?

2. Why is series arrangement not used for domestic circuits?

3. Why does the cord of an electric heater not glow while heating element does?

2018

1. A current of 0.5A is drawn by a filament of an electric bulb for 10 min, find the amount of electric charge that flows through the circuit?

2. How much work done is done in moving a charge of 2C across two points having a potential difference of 12V?

3. On what factors does the resistance of conductor depend?

2020

1. What are the advantages of connecting electrical devices in parallel instead of connecting them in series ?

2. Why are copper and aluminium wire usually employed for electricity transmission?

3. Why is the tungsten used almost exclusively for making filament of electric lamps?

2021

1. Current of 0.5 A is drawn by a filament of an electric bulb for 10 minutes. Find the amount of electric charge that flows through the circuit.

2**.** How much work is done in moving a charge of 2C across two points having a potential difference of 12V?

3. What is meant by saying that the potential difference between two points is 1v?

2022

1.Why does the cord of an electric heater not glow while heating element does?

2. An electric iron of resistance 20 Ω takes a current of 5A. Calculate the heat developed in 30s.

3. Why is the tungsten used almost exclusively for making filament of electric lamps?

4. An electric bulb is connected to a 220V generator. If current flows through the bulb is 0.50A then what is the power of the bulb?

5. On what factors does the resistance of conductor depend?

6. Compute the heat generated while transferring 96000 Coulomb of charge in one hour through a potential difference of 50V.

2019

(3 MARK QUESTIONS)

1. Why does the cord of an electric heater not glow while the heating element does?

2. What are the advantages of connecting electrical devices in parallel with the batteries instead of connecting then in series?

3.Explain the following

(a) Why are the conductors of electric heating devices, such as bread toaster and electric irons made of an alloy iron than pure metals?

(b) How does the resistance of a wire vary with its area of cross-section?

2020

1. Three resistor of resistances 2Ω, 3Ω, 6Ω are connected in series . Find the total resistance of this combination.

2024

1. What is the function of an Earth wire? Why is necessary to earth metallic appliances?

(5 MARKS QUESTIONS)

2016

1. What is ohms law? How it can be verified experimentally?

2. Describe the heating effect of electric current?

2024

1. Why are Copper and Aluminium wires usually used for electricit6y transmission?

2. What determines the rate at which energy is delivered by a current?

3. On what factors does the resistance of conductor depends ?

4. What are the advantages of connecting electrical devices in parallel with the instead of connecting then in series?

5. Which uses more energy : a 250 W T.V. set for one hour or a 120W electric heater for 10 minutes?

6. Why does the cord of an electric heater not glow while the heating element does?

7. Why is the series arrangement not used for Domestic circuits?

8. Explain the practical applications of heating effect of Electric current?

9. an electric heater of resistance 8Ω draws 15A electric current from the service mains for 2 hours. calculate the rate at which heat is produced in the heater?

Chapter 13 (Magnetic Field and its Effects

(1 MARKS QUESTIONS)

2016

1. When does an electric short circuit occur?
2. why is the tungsten used almost exclusively for filament of Electric lamp?

3. What is an Electric motor?

4. Name two safety measures commonly used in Electric circuit and appliances?

5. Name two sources of Direct current?

2017

1. List three sources of magnetic fields?

2018

1. List two methods of producing magnetic field.

2. The power of Alternating current is received at.....V.

3. The frequency of Alternating current is .....Hz.

2020

1. Write the full form of A.C.

2. Write the full form of D.C.

3. Write the full form of L.E.D.

4. What is an Electromagnet? on what factors does the strength of an Electromagnet depend? Write the uses of Electromagnet

2021

1. The frequency of Alternating Current is:

(a) 50Hz (b) 100Hz (c) 200Hz (d) 1000Hz

2. An electric fuse works on:

(a) Magnetic effect of electric current

(b) Chemical effect of electric current

(c) Light effect of electric current

(d) Heating effect of electric current

3. The colour of insulation of earth wire is

(a) Red (b) Black (c) White (d) Green

4. At the time of short circuit the current in the circuit

(a) reduces substantially

(b) does not change

(c) increases heavily

(d) vary continuously

5. Name device which produces electricity

(a) generator

(b) motor

(c) rheostat

(d) voltmeter

6. Voltage of AC supply in our houses is

(a) 100V (b) 440V (c) 220V (d) 50V

2021

1. At the time of short circuit the current in the circuit

(a) reduces substantially

(b) does not change

(c) increases heavily

(d) vary continuously

2022

1**.** The magnetic field inside a long straight solenoid carrying current:

(a) is zero

(b) decreases as we move towards end

(c) increases as we move towards end

(d) is the same all the points

2. A rectangular coil of copper wire is rotated in a magnetic field. the direction of induced current changes once in each:

(a) two revolutions

(b) one revolution

(c) half revolution

(d) one-forth revolution

3.Voltage of AC supply in our houses is:

(a) 100V (b) 440V (c) 220V (d) 50V

4. A positively charged particle projected towards . West is deflected towards North by a Magnetic field. the direction of Magnetic field is:

(a) towards South (b) Towards East (c) Downward (d) Upward

5. the device used for producing electric current is called:

(a) generator (b) Galvanometer (c) ammeter (D) motor

6. The frequency of alternating current is:

(a) 50Hz (b) 100Hz (c) 200Hz (d) 1000Hz

(2 MARKS QUESTIONS)

2016

1. What does an electric short circuit occur?

2**.** why does a Compass needle get deflected when brought near a bar magnet?

2017

1. Why are the heating element of electric irons made up of an alloy rather than that of a pure metal?

2. Why are copper and aluminium wires usually employed for electricity transmission?

3. List the properties of Magnetic lines of force?

4.Why two magnetic lines of force do not intersect each other?

5. What is the function of earth wire? Why is it necessary to earth metallic appliances?

2018

1. State Fleming's Right-hand rule.

2. What is the function of earth wire?

3. State Fleming's left-hand rule.

4. List the properties of Magnetic lines of force.

2019

1. List the properties of Magnetic lines of force?

2. Name four devices in which electric motors are used?

2021

1. Why does a compass needle get deflected when brought near a bar magnet?

2**.** State Fleming's left-hand rule.

2022

1**.** Why two magnetic lines of force do not intersect each other?

2. What does an electric short circuit occur?

2021

(3 MARKS QUESTIONS)

1. Explain precautions should be taken to avoid the overloading of domestic electric circuits?

2022

1.List the properties of Magnetic lines of force?

2. Explain precautions should be taken to avoid the overloading of domestic electric circuits?

3. What is the function of earth wire? Why is it necessary to earth Metallic appliances?

2024

1. Why two magnetic lines of force do not intersect each other?

2024

1. Explain the principle and working of an Electric generator by drawing a labelled diagram

5 MARK QUESTIONS

2016

1. What is an Electromagnet? on what factors dos the strength of an electromagnet depends?

2. An electric motor takes 5.0A from a 220V line. Determine the power off the motor and the energy consumed in 2 hours?

2021

1. Explain short circuit and overloading in an electrical supply. How these can be prevented?

2. Explain precautions should be taken to avoid the overloading of domestic electric circuits?

Chapter 14 (Our Environment)

1 MARK QUESTIONS

2016

1. What is the meaning of consumer?

2. What is the meaning of producer?

2017

1. Name one chemical compound which depletes ozone layer?

2. What will happen if we kill all the organisms in one tropic level?

3. Name any two Natural resources?

4. What is biosphere?

2018

1. Which of the following constitute a food- chains

(a) Grass, Wheat and Human

(b) Grass, Goat and Human

(c) Goat, Cow and Elephant

(d) Grass , Fish and Goat

2. Give one food chain having at least two steps

2019

1. What are decomposers?

2. Define producer?

2020

1. Define Biomagnification?

2. Define Biosphere?

3. Define food chain?

2022

1.While moving from bottom to top in a food chain the amount of energy transferred to next level

(a) increases (b) decreases (c) remains same (d) None of these

2.In a food chain, the largest number of individuals are present at which level?

(a) Producers (b) Primary consumers (c) Secondary consumers (d) Tertiary consumers

3. Which of the following constitute a food chain?

(a) Grass, Wheat and Human

(b) Grass, Goat and Human

(c) Goat, Cow and Elephant

(d) Grass , Fish and Goat

4.In a terrestrial ecosystem approximately what percentage of solar energy is converted into food energy by the leaves of green plants ?

(a) 1% (b) 1.5 % (c) 2.5% (d) 10%

2023

1.When is the Ganga action plan launched

(a) 1985A.D (b) 1975 A.D (c) 1984A.D (d) 1965 A.D

2.How much is distance is covered by Ganga river from Gangotri in himalayas to ganga sagar in bay of bengal ?

(a) 2200km (b) 2300 km (c) 2400km (d) 2500km

3.The tropic level of autotrophs is

(a) First (b) Second (c) Third (d) Fourth

2 MARKS QUESTIONS

2016

1. What is the role of decomposers of Fossil Fuels?

2. Why should we conserve Forests and wildlife?

3.what is Ozone and how does it effect any Ecosystem?

4. Why is damage to the ozone layer a cause for concern?

5. What changes can you make in your habits to become more Environment friendly?

2017

1. What changes would you suggest in your home in order to be environment friendly? write any four changes?

2018

1.Differentiate between Eco-system and Biome.

2. Differentiate between food chain and food web

2019

1.What is ozone and how does it affect any ecosystem?

2.What will happen if we kill all the organism in one tropic level?

3. What are the tropic levels? Give one example of food chain and state the different tropic level in it?

2020

1.What are trophic levels? Give an examples of a food chain and state the different trophic levels in it.

2.What will happen if we kill all the organisms in one trophic level?

3.Can the organisms of any trophic level be removed without causing any damage to the ecosystem?

2022

1.Define ecosystem with the help of an examples

2. What will happen if we kill all the organisms in one trophic level?

2022

3 MARK QUESTIONS

1.Differentiate between food chain and food web with examples

2024

1. Why should we conserve forests and wildlife?

2022

5 MARKS QUESTIONS

1.What are trophic levels? Give an examples of a food chain and state its different trophic levels.