KENDRIYA VIDYALAYA VASANTKUNJ NEWDELHI
MINIMUM LEVEL OF LEARNING FOR CLASS 10

CHEMICAL REACTIONS-

Q.1 Difference between Exothermic and Endothermic reactions.
Q.2 Explain Rancidity and corrosion.
Q.3 Difference between Combination and Decomposition reactions.
Q.4 Define Neutralization reaction.
Q.5 Oxidation and Reduction.

ACID BASES AND SALTS-

Q.1 Difference between Acid and Bases (Physical and chemical properties).
Q.2 Plaster of Paris formula, formation and uses.
Q.3 pH in our daily life.
Q.4 Bleaching powder and Baking soda formula, preparation and uses.

METALS AND NONMETALS-

Q.1 Difference between Metals and Non-metals (Physical and chemical properties).
Q.2 What is an alloy?
Q.3 Define the terms: (a) Mineral (b) Ore (c) Gangue (d) Galvanization.
Q.4 Distinguish between 'roasting' and 'calcination'
Q.5 Name the following:
(a) A metal which is preserved in kerosene
(b) A lustrous colored non- metal
(c) A metal which can melt while kept on palm
(d) A metal, which is a poor conductor of heat.

CARBON AND COMPOUNDS-

Q 1 Difference between Saturated and Unsaturated Hydrocarbons.
Q 2 Difference between Soaps and Detergents.
Q 3 Versatile nature of Carbon-Tetravalent, Catenation, Covolant bond
Q 4 Explain Esterification and saponification.
Q 5 Difference between Ethanol and Ethanoic acid.

PERIODIC CLASSIFICATION OF ELEMENTS-

Q 1 Compare and contrast the arrangement of elements in Mendeleev's Periodic Table and the Modern Periodic Table.

Q 2 Explain Valency, Atomic number, Atomic mass, Groups and periods.

Q 3 Lithium, sodium potassium belongs to same group called alkali metals. Why?

Q 4 State three points of difference between Newland and Dobereiner periodic table.

LIFE PROCESS-

Q 1 Describe double circulation in human beings. Why is it necessary?

Q 2 List the three events that occur during the process of photosynthesis. Explain the role of Stomata in this process.

Q 3 What are the different ways in which glucose is oxidized to provide energy in various organisms?

Q 4 Difference between arteries and veins.

Q 5 How is 'respiration' different from 'breathing'? Explain the process of aerobic and anaerobic respiration.

Q 6 Write the functions of -Saliva, HCL, mucus, pepsin, lipase, bile juice, platelets, W.B.C, R.B.C.

CONTROL AND COORDINATION-

Q 1 Write functions of Hormones-Auxin, Gibberellin, Cytokinin, Progesterone, Estrogen, Thyroxin, Testosterone, Insulin.

Q 2 Which part of the brain maintains posture and equilibrium of the body?

Q 3 Draw the structure of a neuron and explain its function. What happens at the synapse between two neurons?

Q 4 Explain with a diagram Reflex action.

Q 5 Difference between Tropic movement and nastic movement.

REPRODUCTION-

Q 1 Difference between Sexual reproduction and Asexual reproduction.

Q 2 Write the changes occur during puberty in boys and girls.
Q 3 Write the functions of- Testis, Ovary, Prostate gland, Seminal vesicle,
Q 4 Explain -Fertilization, Pollination,
Q 5 What are the different methods of contraception? What are STDs? Full form of AIDS and HIV.
Q 6 Draw Male reproductive system, Female reproductive system and longitudinal section of a flower and label the following parts.

Heredity and Evolution-

Q 1 State the meaning of inherited traits and acquired traits.
Q 2 Difference between Homologous and Analogous organs.
Q 3 How can we determine the sex of the child in Humans?
Q 4 Explain Evolution, Speciation, Migration, Genetic drift, Natural selection.
Q 5 Explain Mendel's law of independent inheritance. Give one example.

LIGHT-

Q 1 Define power of a lens. Write its SI units.
Q 2 Draw ray diagrams showing the image formation by a concave mirror when an object is placed
(a) between pole and focus of the mirror
(b) between focus and centre of curvature of the mirror
(c) at centre of curvature of the mirror
(d) a little beyond centre of curvature of the mirror
(e) at infinity
Q 3 Draw ray diagrams showing the image formation by a convex lens when an object is placed
(a) between optical centre and focus of the lens
(b) between focus and twice the focal length of the lens
(c) at twice the focal length of the lens
(d) at infinity

(e) at the focus of the lens

Q 4 Explain Refraction and its laws, Reflection and its laws.

Human Eye-

Q 1 What is tyndall effect?

Q 2 Define power of accommodation and its SI unit.

Q 3 Difference between Myopia and Hypermetropia.

Q 4 Explain the process

(i) How rainbow is formed?

(ii) Why does the sun appear reddish early in the morning.

Q 5 Draw a simple diagram of the human eye and label clearly the cornea, iris, pupil, ciliary muscles, eye lens, retina and optic nerve.

ELECTRICITY-

Q 1 What is the difference between a conductor and an insulator?

Q 2 What is electric current? Write its formula and SI unit.

Q 3 What is potential difference? Give its unit with definition.

Q 4 State Ohm's law?

Q 5 Factors affecting resistance of a conductor

Magnetic effects of current-

Q1 Define electromagnetic induction.

Q 2 Name two safety measure commonly used in household electric circuit

(a)which color code is used for earthing wire (b)Explain the working of electric fuse

Q 3 Write one application of each of the following:(a) Right-hand thumb rule (b) Fleming's left-hand rule(c) Fleming's right hand rule

Q 4 What is solenoid? Diagram for magnetic field due to current carrying solenoid. Uses of solenoid.

Q 5 On what principal does motor work?

Sources of energy-

Q 1 Difference between conventional and non-conventional source of energy.

Q 2 Biogas is also known as gobar gas. Justify.
Q 3 What is acid rain?
Q 4 List three characteristics of an ideal source of energy.
Q 5 Describe how hydro energy can be converted into electrical energy. Write any
two limitations of hydro energy.

Our environment-

Q 1 What is biological magnification?
Q 2 Difference between Biotic and Abiotic components.
Q 3 What is Ozone layer? The depletion of ozone layer is a cause of concern. Why?
Q 4 What is the role of decomposers in the ecosystem?
Q 5What is 10% rule of energy?
Q 6 Difference between Biodegradable and non-biodegradable substances.

Management of natural resources-

Q 1 Name the stakeholders who have their dependence on forests?
Q 2 What is sustainable management?
Q 3 Management of forest and wild life resources are a very challenging task. Why? Give any two reasons.
Q 4 Explain the traditional water harvesting system with a suitable diagram. Write about the techniques of water harvesting.
Q 5 What is a dam? Write two main advantages and two ill-effects of constructing a big dam.

Prepared by-
DIVYA BHASIN
TGT SCIENCE
K.V,VASANTKUNJ