DAV PUBLIC SCHOOL, ECL, JHANJRA AREA

QUESTION BANK FOR CLASS- VII

CHAPTER-4

A. Answer the following questions:

1. What do you mean by mineral acids and organic acids? Give examples.
2. Which acid is known as 'King of Chemicals' and why?
3. Write down the sources of oxalic acid, Citric acid, Tartaric acid, Lactic acid, Acetic acid and Formic acid.
4. What do you mean by strong acids and weak acids? Give examples.
5. How can we make dilute acid from concentrated acid?
6. Why should we add acid to water slowly, not by adding water to acid directly to make dilute acid?
7. What do you mean by acid rain? Write down it's main cause.
8. Write down the cause of yellowing of Taj Mahal or buildings and monuments, made up of marble.
9. Define bases and alkalies with example.
10. "All alkalies are bases, but all bases are not alkalies"—Explain why?

B. Answer the following questions:

1. Define indicators. Name two natural and two chemical indicators.
2. Write down the colour of following indicators in acidic and in basic medium.
    a) Litmus paper b) Phenolphthalein c) Turmeric and d) Juice of China rose.
3. Define neutralisation reaction. Give one example with it's chemical equation.
4. Name the acids from which we can get following salts----
    a) Sulphate b) sulphite c) carbonate and d) acetate.
5. Name the salts that we can get from following acids----
    a) Hydrochloric acid b) Nitric acid c) Formic acid d) Phosphoric acid e) Oxalic acid f) Citric acid g) Tartaric acid h) Lactic acid.
6. What is salt? How can we prepare common salt or table salt by chemical reaction in our laboratory? Write down the chemical equation of this reaction.
7. Write down three important properties of salts.
8. Classify salts on the basis of chemical nature. Write down the definition of each type of salt with example.
9. Write down the differences between neutral, acidic and basic salts with examples.
10. Describe an activity to show that salt water is a good conductor of electricity.

C. Answer the following questions:

1. Write down one remedial action when someone one is stung by a bee, red ants, wasps or stinging nettle to relief his/her pain. Also explain "why should he/she taken this type of remedy?".
2. If we want to make a dilute solution of sulphuric acid from concentrated sulphuric acid, how we should make and why?

3. If your teacher gives you two types of solutions, one is acidic and another is basic. How will you detect them, 'which one is acidic and which is basic?'
4. Two boys were going to restaurant for taking lunch. Suddenly their white clothes become stained due pouring of chicken curry. After coming to home, one was trying to remove the stain by using soap and another one was trying to remove the stain by using lemon juice. What observations, they could see in both cases? Explain the reason.
5. There are two conical flasks in a table, one containing dilute HCl and another NaOH solution. How will you detect them? If two solutions are mixed with each other, what will form? Write down the chemical reaction.
6. Saheli is suffering from uneasiness, nausea and pain in her stomach. Write down the actual cause of these physiological problems. Which medicine should be prescribed to her and why?
7. Write down the name of acid and base from which following salts are formed.
    a) Potassium sulphate b) Magnesium nitrate C) Calcium sulphate d) Sodium sulphite e) Sodium carbonate f) Sodium acetate g) Aluminium chloride h) Ammonium nitrate i) Zinc sulphate j) Copper chloride k) Sodium sulphate l) Sodium formate.
8. Write the chemical formula of the following salts and classify them as acidic, basic or neutral. How will you confirm their nature by laboratory methods? Briefly explain with chemical reaction in each case.
    a) Sodium chloride b) Aluminium chloride c) Sodium acetate.

CHAPTER- 7

A. Answer the following questions:

1. Define the term respiration.
2. Write down the differences between respiration and breathing.
3. What do you mean by cellular respiration?
4. What do you mean by aerobic and anaerobic respiration? Write down there differences.
5. Write down the pathway of break down of glucose in different organisms in presence of oxygen and in absence of oxygen.
6. Write down the overall chemical reactions occurred in aerobic and anaerobic respiration in plant and animal.
7. What do you mean by alcoholic and lactic acid fermentation? Where we can found this type of anaerobic respiration. Write down their chemical equations.
8. Define the term fermentation. Why do we use yeast powder in brewing and baking industries?
9. Why do we get muscle cramps after heavy physical exercise?
10. What are stomata? Write down it's overall functions.

B. Answer the following questions:

1. Define the term transpiration. When transpiration normally occurs?
2. What are lenticels? Where these are present? Write the functions of lenticels.
3. If we over watered a potted plant, what will happen after 2 to 3 days?
4. Write down the respiratory organ of following organisms:
    a) Amoeba and Hydra b) Earthworms and Leeches c) Fishes, prawns and crabs d) Insects e) Spiders f) Human
5. How do fishes perform respiration in water?
6. What do you mean by external respiration and internal respiration? Write down there occurrences in human body.
7. What do you mean by inhalation and exhalation? Name the organs that help in these two processes?
8. Define breathing rate. Write down the breathing rate of adult human in normal condition and during vigorous exercise, in a new born baby, in rat and in horse.
9. Write down the mechanism of breathing in human, mentioning the role of diaphragm and ribcage.
10. Why do we yawn?
11. What do you mean by oxygen debt? Why does this occur in our muscle? Write down it's effect.

C. Answer the following questions:

1. Write down the causes of coughing and sneezing.
2. How does smoking affect our lungs? Name two diseases occurred due to smoking.
3. How is oxygen transported from lungs to other parts of the body?
4. Which is known as 'respiratory carrier' of our body and why?
5. Why do we need to breathe out carbon-di-oxide from our body?
6. Among carbon-di-oxide and carbon-monoxide, which gas is more harmful to us and why?
7. Draw and label the diagram of human respiratory system.
8. A potted plant is kept under following conditions. State the rate of photosynthesis and respiration as well as status of gaseous exchange in each case---
    a) In dark b) In bright light c) In dim light.
9. Describe an activity to show that exhaled air contains carbon-di-oxide.
10. Add some little yeast powder into a sugar solution containing conical flask. What will you observe after few hours? Write down the reason.
11. Shortly describe an activity to show that respiration produces heat energy.
12. An athlete experience muscle cramps after a sprint. Write down the actual cause. What measure he/she should taken immediately to relief from this situation? Explain why?

CHAPTER- 8

A. Answer the following questions:

1. Define the term transportation in an organism.
2. Write down the main purposes of transportation.
3. How does transportation occur in unicellular organisms?
4. Why transportation is very complex in multicellular organisms?
5. Which substances mainly transported within the plant body?
6. Write down the sources of Carbon-di-oxide, oxygen, water and minerals that are absorbed by the plant. Name the physiological processes for which these are absorbed.
7. Write down the function of 'root hairs'.
8. Name two conducting tissues in plants. Why are they called conducting tissues?
9. What is xylem? Mention its main function.
10. What is phloem? Mention is main function.

B. Answer the following questions:

1. Define the term vascular bundle.
2. Why are xylem and phloem, known as vascular tissues?
3. Define the term transpiration in plants.
4. Why is transpiration called a necessary evil?
5. Name substances that are mainly transported within the animal body in human.
6. What is the pumping organ of human circulatory system? Write down its location in our body.
7. Shortly describe the blood circulation through the heart, lungs and our different body parts.
8. Name the three types of blood vessels present in our body.
9. Define arteries, veins and capillaries. Mention their function.
10. Write down the differences between arteries and veins.

C. Answer the following questions:

1. What is blood? Write down it's main components.
2. What is blood plasma? Mention its function.
3. Why the colour of our blood is red?
4. Which molecule is known as 'respiratory carrier' and why?
5. Write down the full form of RBC. Mention its specific function.
6. Write down the full form of WBC. Mention its specific function.
7. Write down the main function of platelets.
8. Write down the over all functions of blood.
9. Define the terms cardiac systole and diastole.
10. Write down the definition of heart beat. Mention the total heart beat count per minute in case of human.

A. Answer the following questions:

1. What is pulse and pulse rate? Where in our body, we can properly feel the pulses?
2. Why is the pulse rate increased after some vigorous exercise?
3. Define the term excretion. How is the excretion occurred in unicellular organisms?

4. Name the primary excretory organ in human being.
5. Which is the main excretory product of human beings?
6. Write down how the excretory waste materials are removed from our body?
7. Are faeces excretory material of our body? How are these eliminated from our body?
8. Write down the role of lungs in excretion.
9. Write down the role of our skin in excretion.
10. Draw a well labelled diagram of human excretory system.

CHAPTER-11

A. Answer the following questions:

1. What do you mean by charged or uncharged objects?
2. Among the metallic and non-metallic objects, which normally get charged up on rubbing and why?
3. What do you mean by conductors or insulators? Give examples of each.
4. Why do metallic materials acts as conductors whereas non-metallic materials acts as insulators?
5. "Good conductors of heat are also good conductors of electricity"—is this statement correct? Explain in support of your answer.
6. When repulsion and attraction between two charged objects occur?
7. What is positive and negative charge? How can we decide the nature of an unknown charge?
8. "Charges are produced in pairs"- Justify these sentence with the explanation of an activity.
9. What do you mean by 'Earthing'? Why should we earth the metallic body of all electrical devices?
10. Mention different methods by which a given object can be charged?

B. Answer the following questions:

1. What do you mean by 'electrical induction'?
2. Name a simple device to detect charged on a body. Write down the principle of working of this device.
3. What do you mean by electric discharge, lightning and thunder?
4. Write down the principle of electric charges occurred during lightning in the nature.
5. Write down the damaging effects of lightning.
6. What is lightning conductor? Who discovered it?
7. Briefly describe how does the lightning conductor helps to protect a tall building, aTV tower or a high rising monument.
8. Is it important to have a very good contact between the lower end of a lightning conductor and the earth? If so, why?

9. Write down the safety precautions during lightning in both cases----
    a) When a person caught outside in the open.
    b) When a person present inside a house or building.
10. Write down the overall advantages of lightning.

C. Answer the following questions:

1. Write down how charging is done by rubbing.
2. What do you mean by charging by conduction?
3. What do you mean by charging by induction?
4. Describe an activity to show that non-metallic objects get charged up on rubbing whereas metallic objects do not get charged up on rubbing.
5. Briefly describe an activity to show that like charges repel each other while unlike charges attract each other.
6. Write down the steps by which we can charge a given object by induction.

CHAPTER- 13

A. Answer the following questions:

1. Define the terms weather and climate.
2. Define the terms meteorology and meteorologist.
3. Mention different elements that define the weather at a given place.
4. What is temperature and humidity?
5. How can we measure the relative humidity of the atmosphere?
6. How are the clouds and fog are produced?
7. Define the term precipitation. Write down the different forms of precipitation.
8. What is wind? How is it named? Write down the average speed of wind.
9. What do you mean by atmospheric pressure? How does it indicate an approaching storm and clear sky?
10. Write down the full form of AWS and INSAT.

B. Answer the following questions:

1. Define the term climate. What do you mean by dry climate and cold climate?
2. Mention the essential indicators of climate.
3. Mention the major climatic zones of India. Mention two states each, that fall in these zones.
4. Define the term adaptation. What do you mean by behavioural and structural adaptation? Write down there functions.
5. What is polar regions? Why are they called frigid zones?
6. Write down the climatic conditions of polarregions. Name some important animals of these regions.
7. Name the countries which are under the polar regions.
8. Where generally we can found the tropical rain forests? Name the countries where we can found tropical rainforest.

9. Name the world's largest tropical rainforest.
10. Write down the climatic conditions of tropical rainforest.

C. Answer the following questions:

1. Mention any four adaptation of polar bear to survive in the polar regions.
2. Write down the adaptation of polar bear for swimming under water.
3. What are blubber and rudder? Mention their function.
4. Write down how penguin adapt themselves in polar regions.
5. Write down two adaptive features of penguin for swimming under water.
6. 'The tropical rainforest has a large population of animals'. Explain why it is so?
7. Where can we find tropical rainforest in India? Name the animals that have already adapted to these forests.
8. Write down the adaptive features of red-eyed frog in tropical rainforest.
9. How do monkeys get adapted to tropical rainforest?
10. Why is the lion-tailed macaque so named?
11. Write down the usefulness of cheek pouches of lion-tailed macaque.
12. Mention the usefulness of large beak of Toco Toucan.
13. Mention the important features of big cats that make them as best predators for ruling the tropical rainforest.
14. How many muscles are present in the trunk of elephants?
15. How is the trunk useful to the elephant?

CHAPTER- 14

A. ANSWER THE FOLLOWING QUESTIONS:

1. Define the terms fibre and fabric.
2. Name the fibres obtained from plants and animals.
3. What is wool and fleece?
4. Name the animals from which we can get fleece for making wool.
5. Which wool is most common to us? Name other three varieties of wool.
6. How do woollen clothes protect us from cold in winter?
7. Briefly describe the steps for making wool from fleece.
8. What do you mean by shearing, scouring and sorting of the wool?
9. What do you mean by dyeing? Write down it's purpose.
10. What is yarn? How is it done?

B. Answer the following questions:

1. Write down the purpose of scouring?
2. Write down the uses of longer and shorter yarn threads?
3. What do you mean by sorter's disease? Write down the scientific name of the bacterium responsible for this disease.

4. Write a short note on 'rearing of silkworms'.
5. What is caterpillar or silkworm.
6. What is cocoon?
7. How are silk fibres separated from cocoon?
8. Describe the different stages in the life cycle of a silk moth.
9. Schematically represent the life cycle of silk moth with proper diagram.
10. State the role of silkworms in the production of silk.

CHAPTER- 17

A. Answer the following questions:

1. What do you mean by heating effect of electric current?
2. Write down the factors on which the production of heat normally depends.
3. What do you mean by electrical resistance of a given wire? Write down the factors on which, electrical resistance also dependent.
4. Write down some electrical devices which depend on the heating effect of current for their working.
5. Name the elements used for making nichrome wire.
6. Why is the nichrome used for making wire of heating coils?
7. Write down some serious practical disadvantages of the heating effect of current.
8. Name the metal used for making the filament of an electric bulb. Why is it used to make the filament?
9. What is electric fuse? What is the purpose of these fuse?
10. If the current in the circuit exceeds the specified maximum value, what may be happened?

B. Answer the following questions:

1. Why the current in the circuit of a given appliance exceeds its specified value? Write down the reasons.
2. What do you mean by short circuit, overloading and insulation break down?
3. How does electric fuse protect the appliances from damages?
4. What do you mean by current rating of an electric fuse?
5. Why are the fuse wire of different kinds used for different circuits and different appliances?
6. Which materials are used for making fuse wires and why?
7. Name one alternative device of fuse wire for our household circuits?
8. Write the full form of MCBs. Write down it's principle mechanism of working.
9. What do you mean by magnetic effect of current? Who first established relationship electricity and magnetism?
10. Write down one activity to show the magnetic effect of current.

C. Answer the following questions:

1. Mention the factors on which the magnitude of magnetism normally depends. Also mention the relationship with these factors.
2. What is electromagnet? Describe the structure of an electromagnet.
3. How can be the magnetic strength of an electromagnet increased?
4. Describe an activity to make an electromagnet and to study the factors on which its strength depends.
5. Why do we normally use iron cores for making electromagnet?
6. Name some devices, where electromagnets are used. Write down two other uses of electromagnets.
7. What is solenoid? Draw and describe the structure of a solenoid.
8. What is electrical bell? Draw and describe the structure of an electrical bell.
9. Write down the working mechanism of an electrical bell.
10. What is heating coil? Where is it used?