**10TH CLASS HW FOR WINTER BREAK**

**Social Studies Holiday Homework (CLASS 10)**

1) Sample paper (No 1 to No 10) should be solving again and again in home

2) Map Pointing Practice (History)

a) Congress Session in Nagpur, Calcutta, Lahore, Madras

b) Satyagrahas in Champaran, Kheda & Ahmedabad

c) Chauri Chaura, Dandi

3) Map Pointing Practice (Geography)

a) Thermal and Nuclear Stations

b) Major Dams in India

c) Major Ports and Airports in India

d) Major Mineral Mines

4) Source based questions practice for final exam from all the sample papers

5) Multiple choice/ short questions practice from previous 5 years board question papers.

6) 3 marks shorts questions and 5 marks long questions practice of previous 5 years board papers and sample papers.

ENGLISH HOLIDAY HOME- WORK CLASS-X

1. SOLVE THE 10 SAMPLE PAPERS PROVIDED

2. WRITE 2 LETTERS OF EACH TYPE (ENQUIRY, PLACING ORDER, EDITOR & COMPLAINT LETTER)

3. WRITE AN ARTICLE ON -  'DECREASING QUALITY OF ENVIRONMENT'   OR   'HOW CAN WE END CORRUPTION IN INDIA'

MATHEMATIC HOLIDAY HOME- WORK CLASS-X

1. Solve 10 sample questions papers provided by KVS RO Jammu.

2. Solve the Questions Given in the MLL study material provided to you through whats app.( Solve at least 5 questions a day)

3. Solve Previous 5 years board papers .(Solve the Questions relevant to your syllabus only)

**PHYSICS:**

**IMPROTANT QUESTIONS**

**LIGHT – REFLECTION AND REFRACTION**

* Name the mirror that can give an erect and enlarged image of an object.
* Why do we prefer a convex mirror as a rear-view mirror in vehicles?
* The refractive index of diamond is 2.42. What is the meaning of this statement?
* Define 1 dioptre of power of a lens.
* Name the type of mirror used in following situation:
  + Headlights of a car
  + Side/rear –view of a vehicle.
  + Solar furnance.
* 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?

**THE HUMAN EYE AND THE COLOURFUL WORLD**

* What is meant by power of accommodation of the eye?
* What is the far point and near point of the human eye with normal vision?
* Why do stars twinkle?
* Explain why the planets do not twinkle?
* Why does the sun appear reddish early in the morning?
* Why does the sky appear dark instead of blue to an astronaut?

**ELECTRICITY**

* What does electric current mean? Define the SI unit of current. Which device is used to measure current?
* What does potential difference mean? Define the SI unit of potential difference. Which device is used to measure potential difference?
* State Ohm’s law.
* On what factors does the resistance of a conductor depend?
* Will the current flow more easily through a thick wire or a thin wire of the same material, when connected to the same source? Why?
* Why are coils of electric toasters and electric irons made of an alloy rather than a pure metal?
* What are the advantages of connecting electrical devices in parallel with the battery instead of connecting them in series?
* Why does the cord of an electric heater not glow while the heating element does?
* How is a voltmeter connected in the circuit to measure the potential difference between two points?

**MAGNETIC EFFECTS OF ELECTRIC CURRENT**

* Why does a compass needle get deflected when brought near a bar magnet?
* Draw magnetic field lines around a bar magnet.
* List the properties of magnetic lines of force.
* Why don’t two magnetic lines of force intersect each other?
* State Fleming’s left-hand rule.
* What is the principle of an electric motor?
* What is the role of the split ring in an electric motor?
* State the principle of an electric generator.
* Name two safety measures commonly used in electric circuits and appliances.
* What precaution should be taken to avoid the overloading of domestic electric circuits?
* When is the force experienced by a current-carrying conductor placed in a magnetic field largest?
* Draw a labelled diagram of an electric motor. Explain its principle and working. What is the function of a split ring in an electric motor?
* Explain the underlying principle and working of an electric generator by drawing a labelled diagram. What is the function of brushes?
* When does an electric short circuit occur?
* What is the function of an earth wire? Why is it necessary to earth metallic appliances?
* **WINTER VACATIONS HOMEWORK (BIOLOGY- 10TH)**
* I. REVISE ALL CLASS NOTES AS WELL AS NCERT QUESTIONS OF BIOLOGY.
* II. SOLVE ATLEAST 10 SAMPLE PAPERS OF SCIENCE NEATLY.
* III. SOLVE QUESTION PAPERS OF PERIODIC TEST-1, HALF YEARLY EXAM AND PERIODIC TEST-2 AGAIN.
* iv. SOLVE THE FOLLOWING VERY IMPORTANT QUESTIONS:
* **LIFE PROCESSES**
* 1. DRAW IN SEQUENCE THE PROCESS OF BINARY FISSION IN AMOEBA.
* 2. EXPLAIN WITH THE HELP OF DIAGRAM, HOW AMOEBA TAKES ITS NUTRITION.
* 3. DIFFERENTIATE BETWEEN ARTERIES AND VEINS.
* 4. THE RATE OF BREATHING IN AQUATIC ORGANISMS IS MUCH FASTER THAN THAT SEEN IN TERRESTRIAL ORGANISMS.
* 5. EXPLAIN HOW WATER AND MINERALS ARE TRANSPORTED IN PLANTS?
* 6. DRAW A NEAT DIAGRAM OF EXCRETORY SYSTEM.
* 7. DESCRIBE THE STRUCTURE AND FUCTIONING OF NEPHRON.
* 8. DRAW A LABELLED DIAGRAM OF HUMAN HEART.
* 9. WHAT IS DOUBLE CIRCULATION AND WHY IT IS NECESSARY IN HUMANS?
* **CONTROL AND COORDINATION**
* 1. NAME ONE PLANT HORMONE WHICH INHIBITS GROWTH. WRITE ITS ONE MORE FUNCTION.
* 2. DESCRIBE AND ACTIVITY TO ILLUSTRATE THE PHENOMENON OF PHOTOTROPISM AND EXPLAIN WHY DOES THIS OCCUR.
* 3. NAME THE HORMONE WHICH IS SECRETED WHEN GROWING PLANTS DETECT LIGHT. MENTION ITS SITE OF SECRETION IN A PLANT.
* 4. DEFINE- REFLEX ACTION, SYNAPSE AND PHOTOTROPISM.
* 5. MENTION THREE CHARACTERISTICS FEATURES OF HORMONAL SECRETION IN HUMAN BEINGS.
* 6. STATE THE FUNCTION OF RECEPTORS IN OUR BODY.
* 7. COMPARE AND CONTRAST NERVOUS AND HORMONAL MECHANISMS FOR CONTROL AND COORDINATION IN THE ANIMALS.
* 8. WHAT IS REFLEX ARC? DRAW A LABELLED DIAGRAM TO SHOW REFLEX ARC ON TOUCHING A VERY HOT OBJECT.
* 9. WRITE THREE MAIN FUNCTIONS OF NERVOUS SYSTEM.
* 10. DRAW THE STRUCTURE OF NEURON AND EXPLAIN ITS FUNCTIONS.
* **HOW DO ORGANISMS REPRODUCE?**
* 1. DEFINE THE TERM PUBERTY? LIST TWO CHANGES OBSERVED IN GIRLS AT THE TIME OF PUBERTY.
* 2. MENTION THE TWO FUNCTIONS OF HUMAN TESTIS.
* 3. DIFFERENTIATE BETWEEN SEXUAL AND ASEXUAL MODE OF REPRODUCTION.
* 4. LIST FOUR ADVANTAGES OF VEGETATIVE PROPAGATION.
* 5. WHAT ARE SEXUALLY TRANSMITTED DISEASES? GIVE EXAMPLES ALSO.
* 6. STATE THE ROLE OF PLACENTA IN THE DEVELOPMENT OF EMBRYO.
* 7. LIST AND EXPLAIN IN BRIEF FOUR METHODS OF CONTRACEPTION.
* 8. EXPLAIN THE PROCESS OF REGENERATION IN PLANARIA.
* 9. EXPLAIN BUDDING IN HYDRA WITH THE HELP OF DIAGRAMS ONLY.
* 10. WHAT IS THE SIGNIFICANCE OF REPRODUCTIVE HEALTH IN A SOCIETY?
* 11. DEFINE THE TERMS POLLINATION AND FERTILISATION.
* 12. DRAW A WELL LABELLED DIAGRAM OF HUMAN FEMALE REPRODUCTIVE SYSTEM.
* 13. WHAT IS PLACENTA? EXPLAIN ITS FUNCTIONS IN HUMAN FEMALES.
* 14. DIFFERENTIATE BETWEEN SELF AND CROSS POLLINATION.
* **HEREDITY AND EVOLUTION**
* 1. WHY IS DNA COPYING NECESSARY DURING REPRODUCTION?
* 2. THE CHROMOSOMAL NUMBER OF THE SEXUALLY REPRODUCING PARENTS AND THEIR OFFSPRING IS THE SAME. JUSTIFY THE STATEMENT.
* 3. DEFINE WITH EXAMPLE HOMOLOGOUS AND ANALOGOUS ORGANS.
* 4. DEFINE SPECIATION, FOSSILS AND NATURAL SELECTION.
* 5. WRITE CONTRIBUTION OF G.J.MENDEL IN GENETICS.
* 6. HOW SEX IS DETERMINED IN HUMAN BEINGS.
* 7. HOW ARE FOSSILS FORMED? STATE TWO METHODS OF DETERMINING THE AGE OF FOSSILS.
* 8. “A TRAIT MAY BE INHERITED, BUT MAY NOT BE EXPRESSED.” JUSTIFY THE STATEMENT.
* 9. DEFINE EVOLUTION. HOW DOES IT OCCUR?
* **OUR ENVIRONMENT**
* Q1. What do you mean by biological magnification? Give an example.
* Q2. What is the function of ozone in the upper atmosphere?
* Q3. Expand ODS. Name atleast 4 examples.
* Q4. Define food chain. Give example of an aquatic food chain.
* Q5. Name two gases which have replaced CFCs. Ans. HFC & PFC
* Q6. What are trophic levels? Give an example of a food chain and state the different trophic levels in it?
* Q7. Differentiate between biotic and abiotic components of an ecosystem.
* Q8. What is the role of decomposers in an ecosystem?
* Q9. What will be the amount of energy available to the organisms of the 2nd trophic level of a food chain, if the energy available at the first trophic level is 50,000 joules?
* Q10. Which of the following are always at the second trophic level of food chains?
* Carnivores, Autotrops, Herbivores
* Q11. Why are the non biodegradable substances considered harmful for our environment?
* Q12. Suggest any two measures to be taken to reduce the damage caused to ozone layer?
* Q13. Differentiate between biodegradable and non-biodegradable substances and give two examples of each?
* Q14. First trophic level in a food chain is always a green plant. Why?
* Q15. Write any two effects of ozone depletion on our health?
* Q16. What are decomposers? What will be the consequence of their absence in an ecosystem?
* Q17. Why Government of India imposed ban on use of polythene bags?
* Q18. Differentiate between food chain and food web?
* **MANAGEMENT OF NATURAL RESOURCES**
* Q1. Why should biodegradable and non-biodegradable wastes be discarded in two separate dustbins?
* Q2. What is meant by biodiversity? List two advantages of conserving forests and wildlife.
* Q3. List four measures that can be taken to conserve forests.
* Q4. List two advantages associated with water harvesting at the community level.
* Q5. List four advantages of water stored in the ground as “groundwater”.
* Q6. List four products formed by burning of coal.
* Q7. What is the importance of forest as a resource?
* Q8. Suggest a few useful ways of utilising waste water.
* Q9. What is meant by Chipko andolan? What important role was played by Chipko andolan?
* Q10. What will be the effect of loss of biodiversity?
* Q11. Why do we need to manage our resources carefully?
* Q12. Why should we conserve forests and wildlife?
* Q13. List two advantages and two disadvantages of building dams.
* Q14. Differentiate between biodegradable and non biodegradable substances with the help of one example each.
* Q15. Differentiate between exhaustible and inexhaustible resources of energy. Give one example of each.
* Q16. What are fossil fuels? “Burning fossil fuels may lead to intense global warming.” Justify the statement.
* Q17. What is meant by three types of ‘R’ to save the environment? Explain with examples how would you follow the 3-R’s in your school to save the environment.
* Q18. List two problems that may arise by planting trees of single variety over vast tracts of a forest.
* Q19. What change would you suggest in your home in order to be environment friendly?
* **QUESTIONS FROM PRACTICAL OR ACTIVITY**
* 1. MENTION THE STEPS IN THE PREPARATION OF TEMPORARY MOUNT OF STAINED LEAF PEEL?
* 2. WHAT IS THE SHAPE OF GUARD CELL IN MONOCOT AND DICOT PLANTS?
* 3. WHY IS EPIDERMAL PEEL GENERALLY TAKEN FROM LOWER SURFACE OF DICOT LEAF?
* 4. WHILE PREPARARING A TEMPORARY STAINED MOUNT OF A LEAF PEEL, HOW IS THE EXTRA STAIN REMOVED?
* 5. WHICH LIGHT INFLUENCES THE OPENING OF STOMATA?
* 6. WHAT ARE THE FUNCTIONS OF STOMATA?
* 7. WHY WAS THE TEMPORARY STAINED MOUNT OF A LEAF PEEL PINKISH RED UNDER THE MICROSCOPE?
* 8. NAME THE PLANT HORMONE WHICH GIVES SIGNALS OF CLOSING OF STOMATA?
* 9. NAME THE IONS WHICH ARE HELPFUL IN OPENING AND CLOSING OF STOMATA?
* 10. NAME THE FACTORS WHICH INFLUENCES THE OPENING AND CLOSING OF STOMATA?
* 11. WHY ARE INNER WALLS OF GUARD CELLS ARE THICK AND OUTER WALLS ARE THIN?
* 12. A STUDENT CONDUCTED AN EXPERIMENT TO SHOW THAT CO2 IS RELEASED DURING RESPIRATION. LIST TWO PRECAUTIONS HE/SHE MUST TAKE FOR CORRECT OBSERVATION?
* 13. WHY GERMINATION SEEDS SHOULD BE USED FOR EXPERIMENT?
* 14. WHY GERMINATION SEEDS SHOULD BE MOIST?
* 15. WHAT IS THE ROLE OF KOH IN THE EXPERIMENT?
* 16. A STUDENT SETS UP THE APPARATUS FOR THE EXPERIMENT TO SHOW THAT CO2 IS RELEASED DURING RESPIRATION. AFTER TWO HOURS WHAT WOULD HE OBSERVE?
* 17. NAME A UNICELLULAR ORGANISM.
* 18. DRAW THE DIAGRAM OF BINARY FISSION IN AMOEBA?
* 19. NAME THE METHOD OF REPRODUCTION IN YEAST WITH DIAGRAM.
* 20. NAME THE TWO ORGANISMS WHICH REPRODUCE BY BUDDING?
* 21. WRITE TWO PRECAUTIONS WHILE IN IDENTIFICATION OF DIFFERENT PARTS OF AN EMBRYO OF A DICOT SEED?
* 22. GIVE TWO EXAMPLES OF MONOCOT?
* 23. WHAT IS EMBRYO?
* 24. WHAT ARE THE DIFFERENT CONDITIONS FOR THE GERMINATION OF SEEDS?
* CHEMISTRY
* REVISION OF ALL THE CHAPTERS.
* PRACTICE NCERT INTEXT QUESTION/EXERCISE QUESTION.
* SOLVE MCQ/REASONING/ONE WORD QUESTION.
* REVISION OF IMPORTANT CONCEPTS AS SHOWN IN CLASS