

HOLIDAY HOMEWORK

CLASS – 10

Subject - Hindi

कक्षा-१०

रचनाकेआधारपरवाक्यकेभेद a4 सीटमेंतैयारकीजिए

अपनीपसंदकाकोईभीएकविज्ञापन a4 सीटमेंतैयारकीजिए

Subject – Science

Physics

Instructions: Answer the following questions based on your understanding of the chapter “Electric Current”. Show all necessary calculations and reasoning.

Section A: Multiple Choice Questions (MCQs)

1. The SI unit of electric current is:
 - a) Coulomb
 - b) Ampere
 - c) Volt
 - d) Ohm
2. The relationship between voltage (V), current (I), and resistance (R) is given by:
 - a) $V = I + R$
 - b) $V = I \times R$
 - c) $V = I / R$
 - d) $V = R / I$
3. A device that converts chemical energy into electrical energy is:
 - a) Resistor
 - b) Battery
 - c) Capacitor
 - d) Inductor
4. Which of the following is true for a series circuit?
 - a) The total resistance is the sum of individual resistances.

- b) The total resistance is less than the smallest individual resistance.
- c) The voltage across each resistor is the same.
- d) The current through each resistor is different.

Section B: Short Answer Questions

- Define electric current and its unit.
- What is Ohm's Law? Write its mathematical expression.
- Explain the difference between conductors and insulators.
- How does the resistance of a wire depend on its length and cross-sectional area?

Section C: Long Answer Questions

- Derive the formula for the equivalent resistance of three resistors connected in series.
- A 12V battery is connected to a resistor of 4Ω . Calculate the current flowing through the circuit.
- Describe the factors affecting the resistance of a material.
- Explain how a fuse works and why it is important in an electrical circuit.

Section D: Numerical Problems

- Calculate the resistance of a wire if the current flowing through it is 3A and the potential difference across it is 9V.
- If a 100W light bulb is connected to a 200V supply, find the current flowing through the bulb.
- A heater uses 1500W of power when connected to a 250V supply. Determine the resistance of the heater.
- Two resistors, 6Ω and 12Ω , are connected in parallel. Calculate the equivalent resistance of the combination.

Submission Guidelines

- Answer all questions in a clear and concise manner.
- Show all your calculations for numerical problems.
- Use appropriate units and significant figures.
- Submit your assignment by [Insert Due Date Here].

This assignment aims to assess your understanding of electric current, its principles, and applications. Good luck!

Chemistry

Chemistry in everyday life:

1. Observe and research how chemistry is applied in your daily life (e.g., cooking, cleaning, personal care products). Make a proper report of it and write applications of it
2. Write any 20 chemical reaction with name.
3. Make flow chart of chapter chemical reaction and equation with all memory tips

Biology

SECTION A (1 mark questions)

(A) Multiple Choice Questions

Q1. Which of the following is the correct equation for the summary of photosynthesis

- a. $6\text{CO}_2 + 12\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 + 6\text{H}_2\text{O}$
- b. $6\text{CO}_2 + \text{H}_2\text{O} + \text{sunlight} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2 + 6\text{H}_2\text{O}$
- c. $6\text{CO}_2 + 12\text{H}_2\text{O} + \text{chlorophyll} + \text{sunlight} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 + 6\text{H}_2\text{O}$
- d. $6\text{CO}_2 + 12\text{H}_2\text{O} \xrightarrow{\text{chlorophyll} + \text{sunlight}} \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 + 6\text{H}_2\text{O}$

Q2. Products of anaerobic respiration in muscles are

- a. Lactic acid and energy
- b. Lactic acid ,carbon dioxide and energy
- c. Lactic acid ,water ,carbon dioxide and energy
- d. Lactic acid , water , and energy

Q3. Which of the following statements are true about respiration

- a. During inhalation , ribs move inward and diaphragm is raised

- b. In alveoli exchange of gases takes place i.e. oxygen from blood into alveolar Air
- c. Haemoglobin has greater affinity for carbon dioxide than oxygen
- d. Alveoli increase the surface area for absorption of gases

i. A & d ii. B & c iii. A & c iv. B & d

Q4. The main function of the urinary bladder is to

- a. Control the pressure of urine in the urinary bladder
- b. Take the urine from the kidney to the urinary bladder
- c. Filter blood and remove the urine
- d. Connect the parts of the excretory system

(B) Assertion and Reasoning

Direction : in the following questions , a statement of assertion (A) is followed by a statement of reason (R) . Mark the correct choice as :

- a. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)
- b. Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A)
- c. Assertion (A) is true but reason(R) is false
- d. Assertion (A) is false but reason(R) is true

Q5. Assertion: aerobic respiration requires less energy as compared to anaerobic

Respiration .

. Reason : mitochondria is the power house of the cell .

Q6. Assertion: human heart is four chambered .

Reason : vena cava is the only artery that supplies deoxygenated blood to the heart

Q7. Assertion: energy is required to carry on different life processes

Reason : energy is obtained in the form of ATP in mitochondria (C) Answer very briefly

Q9. Enzyme digests starch

Q10. Which is the largest gland in the human body ?

Q11. List a difference between pepsin and trypsin

SECTION B (3 mark questions) Q12.

Name the following :

- a. The process in plants that links light energy with chemical energy
- b. The cell organelle where photosynthesis occurs
- c. Cells that surround the stomatal pore
- d. An enzyme secreted from the gastric glands in the stomach that acts on proteins

Q13. How are alveoli designed to maximize the exchange of gases?

Q14. Answer as directed

- a. Write two water conducting tissues present in plants ? how does water continuously enter into the root system ?

Subject –Social Science

1.Children will make a project on the given Subject.

Students will make a Collage Pictorial presentation on India Natural vegetation and Wildlife
Endangered species of flora and fauna in India.

2. Make chart on 3 organs of government .

3..Map skill Draw Map of India on a 4 sheet and label all states with capitals.

4.Locate and label the following items on the given map with appropriate symbols. 1. Egypt 2. Madagascar 3. Sierra Leone 4. Mediterranean sea

Make 10 terms and 10 mcq of every chapter of history, geography, Political science and economics in fair notebook.

Computer

MAKE A PROJECT FILE ON ANY ONE OF THE FOLLOWING TOPICS AS PER GIVEN ROLL NO.

1. INTRODUCTION TO HTML (ROLL NO. -1 TO 10)
2. INSERTING IMAGES, TABLES AND LINKS IN HTML (ROLL NO. -11 TO 20)
3. HTML FORMS AND CSS (ROLL NO. -21 to 30)
4. CYBERETHICS (ROLL NO. -31 to 45)

Subject - English

Grammar & Writing

Complete advanced exercises worksheets based on different topics of grammar such as on syntax , tenses, narration, modals , determiners and gap fillings

Write Five formal letters & ten Analytical Paragraphs in your fair Notebook

(preferably Bar graph & Pie chart)

Literature

Read and learn the chapters done till now (Read two Pages daily to enhance the fluency in reading)

Reading

Read Auto Biography of Nelson Mandela and write a research paper on him.

Creative-

Make a chart on any poet , author, dramatist, novelist or any topic of grammar i.e. Tenses, parts of speech, figures of speech, modals, subject verb agreement, determiners , narration , active passive voice, etc.

Vocabulary Building*

Learn and use 20 new words from the provided vocabulary list. Write sentences using each word in Grammar Notebook.

Vocabulary List: [Abate, Bane, Candid, Debacle, Eloquent, Facetious, Garrulous, Hackneyed, Iconoclast, Juxtapose, Kudos, Laconic, Myriad, Nefarious, Obfuscate, Pragmatic, Quintessential, Rancor, Serendipity, Tenacious, Fastidious , Inscrutable, Lassitude ,Malleable ,Nebulous, Reclusive)

Enjoy your summer break while engaging in these educational activities!

Subject - Maths

- Solve given worksheet.

- make portfolio on any topic from class 10 maths ncert