Holiday Homework
Std X English

Sub : English

- PA II Multiple Assessment :

Time Line on ' The Making of a Scientist'

- PAII Subject Enrichment Activity:

A Comparative Analysis of Odisha & Maharashtra based on Art and Culture, Tradition, Life Style, Cuisine , Heritage Sites etc. with reference to " Glimpses of India"

- Write a letter to the editor of an English daily making a plea to the common people to switch over to solar energy. Give reference to excellent Govt offers .

- You are Kiran Mallick, the Coordinator of your School. You want to place a bulk order for school winter jackets to M/S Sinha Garments , Rourkela. Write a letter in about 120 words regarding the same .Remember to include all the necessary information about quality and quantity of products , school discounts , delivery date and mode of payment.

Grammar

1. Choose the correct reported form:

She said, “I am reading a novel.”

a) She said that she is reading a novel.

b) She said that she was reading a novel.

c) She said that she has been reading a novel.

d) She said that she had been reading a novel.

2. Spot the error:

Neither of his answers are correct.

a) Neither

b) of

c) his

d) are

3. He ____ the train before we reached the station.

a) catches

b) caught

c) had caught

d) has caught

4. Change to passive: Did she complete the assignment?

a) Was the assignment completed by her?

b) Is the assignment completed by her?

c) The assignment was completed by her?

d) Has the assignment been completed by her?

5. Fill with a modal: You ____ not park your car here; it’s a no-parking zone.

a) should

b) must

c) may

d) need

6. Correct the error:
He is more preferable than his brother.
a) Replace “more preferable” with “preferable”.
b) Replace “than” with “to”.
c) Replace “is” with “was”.
d) Replace “his” with “their”.
7. Choose the correct tense: While I ____ TV, the lights went out.
a) watch
b) was watching
c) had watched
d) watched
8. Which sentence is correct?
a) She suggested me to take rest.
b) She suggested that I should take rest.
c) She suggested I to take rest.
d) She suggested for me to take rest.
9. Reported speech: He said to me, “Please help me with this work.”
a) He requested me to help him with that work.
b) He requested me that I help him with this work.
c) He requested me I should help him with that work.
d) He requested that I am helping him with this work.
10. Fill in the blank: You ____ be joking! That can’t be true.
a) might
b) must
c) should
d) will
11. Active voice: The homework has been done by the students.
a) The students did the homework.
b) The students have done the homework.
c) The students had done the homework.
d) The students are doing the homework.
12. Identify the tense: She will have been living here for ten years next July.
a) Future Perfect
b) Future Continuous
c) Future Perfect Continuous
d) Present Perfect Continuous
13. Error spotting:
He did not wrote the letter yesterday.
a) did
b) not
c) wrote
d) yesterday

14. Choose the correct reported speech:
He said, “I will meet you here tomorrow.”
a) He said that he would meet me there the next day.
b) He said that he will meet me there the next day.
c) He said that he would meet me here tomorrow.
d) He said that he will meet me here tomorrow.
15. Change to passive: They are building a new bridge across the river.
a) A new bridge is building across the river.
b) A new bridge was built across the river.
c) A new bridge is being built across the river.
d) A new bridge has been built across the river.
16. Correct the error:
The furniture in this room are very old.
a) Replace “furniture” with “furnitures”.
b) Replace “are” with “is”.
c) Replace “room” with “rooms”.
d) Replace “very” with “too”.
17. Fill with the correct form: I wish I ____ taller.
a) am
b) was
c) were
d) had been
18. Choose the correct modal: You ____ smoke here, it’s forbidden.
a) can’t
b) mustn’t
c) shouldn’t
d) needn’t
19. Find the correct sentence:
a) She is one of the best student in the class.
b) She is one of the best students in the class.
c) She is one of the best students of the class.
d) She is one of the better student in the class.
20. Identify correct passive: Who will clean the room?
a) The room will cleaned by whom?
b) By whom the room will be cleaned?
c) By whom will the room be cleaned?
d) Who the room will be cleaned by?

DAV VEDANTA INTERNATIONAL SCHOOL, LANJIGARH.

DUSHERA HOLIDAY HOMEWORK 2025-26

SUBJECT: MATH

Class-X

Do any FIVE investigative projects and prepare PPTs on any TWO of the following.

Use colour papers, chart papers, A4 paper, Colour pens/pencils etc.

1. A critical analysis of the properties of tangents and secants of circles.
2. A comprehensive discussion of similarity criterions of two triangles and proof of Pythagoras theorem using similarity.
3. A graphical approach to quadratic polynomials: Nature of graphs, roots and coefficients.
4. The chapter as a glimpse: Prepare Mind-maps any five chapters (as per PA-II syllabus).
5. Geometry in Trigonometry: Find the values of 0^o, 30^o, 45^o, 60^o and 90^o geometrically and prepare a table.
6. Convert each T-ratio to all other T-ratios and prepare a table.
7. Central Tendency On Graph: Find Median of a grouped data graphically by
   (i) a less than type cumulative ogive.
   (ii) a more than type cumulative ogive.
   (iii) Both less than and more than type ogive

   Hence, check the accuracy by using formula.
8. Verify the consistency and in-consistency of a pair of linear equations in two variables graphically and establish relation between coefficients and constants for different conditions.
9. Define different parts of a circle and perform an activity to find the area of a circle (by cutting and pasting method). Prepare a table showing lengths, perimeters and areas of different parts of a circle.
10. Think different: Proof of BPT both theoretically and practically.

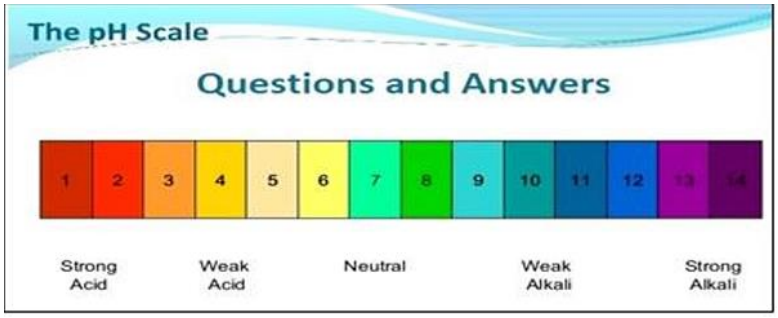
DAV VEDANTA INTERNATIONAL SCHOOL LANJIGARH
POOJA VACATION HOME-WORK-2025-26
CLASS: X
SECTION-A [CHEMISTRY]

1 An excess of carbon dioxide gas is bubbled through lime water.
(a) Will the pH of lime water change? If yes, how? Explain your answer.
(b) Write the balanced equation for the reaction.

2. Tanu takes 500 mL milk each in two bowls P and Q. She adds curd to both the bowls and baking soda only to bowl Q as shown below.
(a) Bowl P - 500 mL milk + 1 teaspoon curd
(b) Bowl Q - 500 mL milk + 1 teaspoon curd + 1 teaspoon baking soda
In which bowl will the milk form into curd faster? Explain your answer.

3. Acid – base indicators are dyes or mixtures of dyes which are used to indicate the presence of acids and bases. Examples are litmus, phenolphthalein, methyl orange etc. these indicators tell us whether a substance is acidic or basic by change in colour. There are some substances whose odour changes in acidic or basic media. These are called olfactory indicators. Onion is an example of olfactory indicator. Acidic nature of a substance is due to the formation of H+ ions in solution whereas formation of OH- ions in solution is responsible for basic nature of a substance.
(a) What is the colour of phenolphthalein in acidic medium? (pink, yellow, colourless, blue)
(b) Name an olfactory indicator other than onion.
(c) What happens to the concentration of H+ ions when an acidic solution is diluted with water?
(d) Can you distinguish between acetic acid and HCl of same concentration using above mentioned indicators? If not, what should be used instead?

4. The pH value of any solution is a number which simply represents the acidity and basicity of that solution. The pH value of any solution is numerically equal to the logarithm of the inverse of the hydrogen ion (H+) concentration.



(a) What will be the pH value for distilled water?
(b) Using above picture can you predict the colour of pH paper when dipped in lime juice?
(c) Why do we use basic tooth pastes commonly?

5. Salt, in chemistry, substance produced by the reaction of an acid with a base. A salt consists of the positive ion (cation) of a base and the negative ion (anion) of an acid. The different type of salts are:

TYPE OF SALT	TYPE OF ACID	TYPE OF BASE	EXAMPLE
Neutral pH = 7	Strong Acid	Strong Base	NaCl, K2SO4
Acidic pH < 7	Strong Acid	Weak Base	NH4Cl, Mg(NO3)2
Basic pH > 7	Weak Acid	Strong Base	Na2CO3, CH3COOK

(i) CH3COOK What will be the nature of magnesium sulphate ?
(ii) Give the formula of salt formed by weak acid and weak base?
(iii) From which acid and base is potassium hydrogen carbonate is formed?

6. Samples of five metals ‘A’, ‘B’, ‘C’, ‘D’ and ‘E’ were taken and added to the following solution one by one. The results obtained have been tabulated as follows.

Metal FeSO4 CuSO4 ZnSO4 AgNO3 Al2(SO4)3 MgSO4 respectively..

Metal	$FeSO_4$	$CuSO_4$	$ZnSO_4$	$AgNO_3$	$Al_2(SO_4)_3$	$MgSO_4$
A	No reaction	Displacement	No reaction	Displacement	No reaction	No reaction
B	Displacement	Displacement	No reaction	Displacement	No reaction	No reaction
C	No reaction	No reaction	No reaction	Displacement	No reaction	No reaction
D	No reaction	No reaction	No reaction	No reaction	No reaction	No reaction
E	Displacement	Displacement	Displacement	Displacement	No reaction	No reaction

Use the above table to answer the following questions about the given metals.
(a) Which of them is most reactive and why?
(b) What would you observe if ‘B’ is added to CuSO4?
(c) Arrange ‘A’, ‘B’, ‘C’, ‘D’ and ‘E’ in the increasing order of reactivity.
(d) Container of which metal can store zinc sulphate and silver nitrate solution?
(e) Which of the above solution(s) can be stored in a container made of any of these metals and why?
7. A reddish brown vessel developed a green coloured solid X when left open in air for a long time. When reacted with dil H_2SO_4 . it forms a blue coloured solution along with brisk effervescence due to colourless & odourless gas Z. X decomposes to form black coloured oxide Y of a reddish brown metal along with gas Z. Identify X. Y. & Z.

8. An aqueous solution of metal nitrate P reacts with sodium bromide solution to form yellow not of compound O which is used in photography. O on exposure to sunlight undergoes decomposition reaction to form metal present in P along with reddish brown gas. Identify P & O. Write the chemical reaction & type of chemical reaction

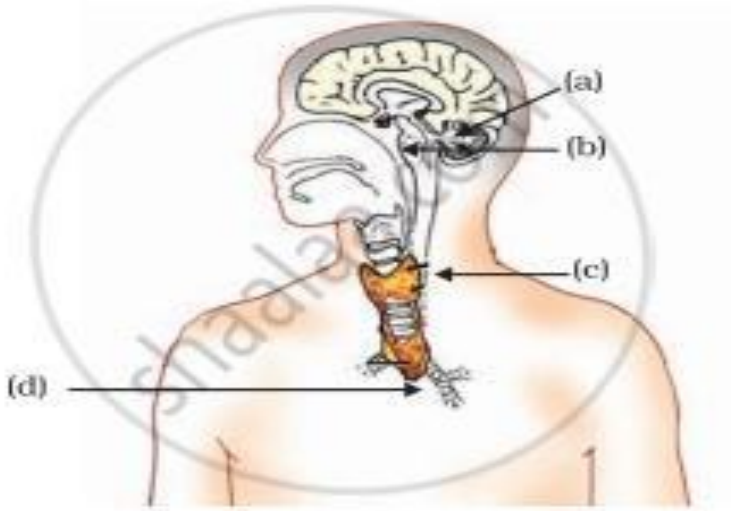
9. A student has mixed the solutions of lead (II) nitrate and potassium iodide,
(i) What was the colour of the precipitate formed? Can you name the compound precipitated?
(ii) Write the balanced chemical equation for this reaction.
(iii) What type of reaction is it?
10. A non-metal A which is the largest constituent of air, when heated with H2 in 1 : 3 ratio in the presence of catalyst (Fe) gives a gas B. On heating with O2, it gives an oxide C. If this oxide is passed into water in the presence of air, it gives and acid D which act as a strong oxidising agent.
(a) Identify A, B, C and D.
(b) To which group of periodic table does this non-metal belong?

SECTION-B [BIOLOGY]

1. Draw the structure of a neuron and explain its function.

2. What are the major parts of the brain? Mention the functions of different parts. .

3. Label the glands a,b,c and d in the given figure. Write the functions of each labelled gland.



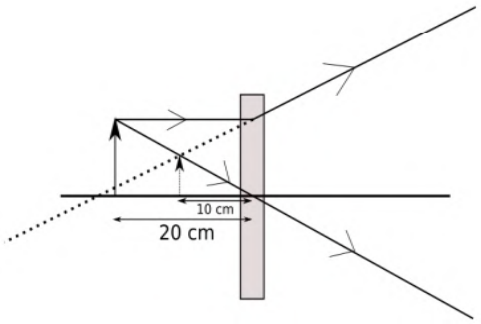
4. Injections are given to the cattle for the production of milk.
(i). Do you think it is a right practice.
(ii) What harm is this practice causing us?
5. Mayank‟s father never bothered to check the brand/contents of the salt he had purchased from the market. Mayank noticed that her sister had developed swollen neck. The doctor advised her to eat iodised Salt.
i) Name the disease from which Mayank's sister suffered.
ii) Why the doctor has advised her to eat Iodised Salt?
6. Explain the role of mouth in digestion of food.
7. What are the functions of gastric glands present in the wall of the stomach?
8. Why and how does water enter continuously into the root xylem?
9. Make a chart on A4size paper using any art work for demonstrating monohybrid and dihybrid cross.
10. State the role of the following in human digestive system:
(a) Digestive enzymes (b) Hydrochloric acid (HCl) (c) Villi

SECTION-C [PHYSICS]

Competency Based Questions

1. While walking along the riverbank, Trupti found a smooth, milky white stone. When a ray of sunlight fell upon it, she observed that the stone appeared bluish in colour and the light that passed through it appeared orange in colour. (a) Identify the phenomenon that Trupti observed as sunlight fell upon the stone. (b) How would the size of the stone particles compare to the wavelength of visible light? [2]

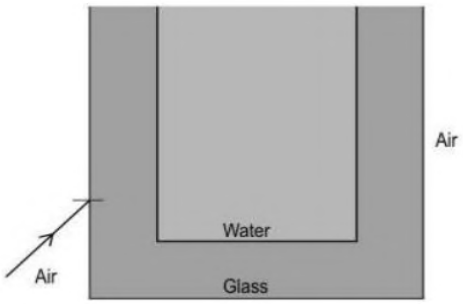
2. The above image shows the formation of an image with an optical instrument. A. Identify the optical instrument (shown schematically as a rectangle) in the image. B. What type of image is formed in this case? C. Based on the measurements given in the image, calculate the focal length of the instrument.



[2]

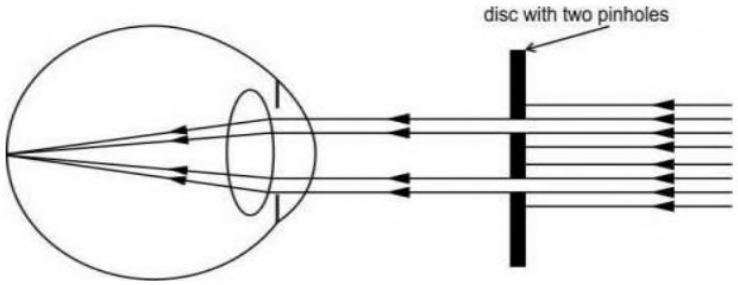
3. A copper wire has a length $L = 2\text{m}$, a cross-sectional area $A = 0.5\ \text{mm}^2$, and resistivity $\rho = 1.7 \times 10^{-8}\Omega\text{m}$. Calculate the resistance of another wire made of the same material whose length is twice the length of the wire but has the same cross-sectional area. [2]

4. A light ray is incident on the wall of a glass tank as shown below. Draw a rough diagram of the path of the light ray as it passes through the glass tank and the water and emerges again into air.



Draw the normal at each interface. [3]

5. An autorefractor, which is used to automatically measure the refractive errors in a person's eye, makes use of the Scheiner principle explained below. Parallel rays of light from a distant object are limited to two parallel bundles of light using a disc with two pinholes. For an eye with no refractive error, the rays would be focused on the retina, where only one spot can be observed.

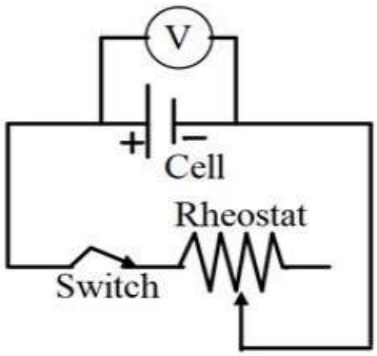


(a) For a myopic eye, how many spots will be observed on the retina?

(b) Draw a diagram showing how the light rays fall on the retina of a myopic eye?

(c) What could be the reason for the observation? [3]

6. Observe the electric circuit above and answer the questions that follow.

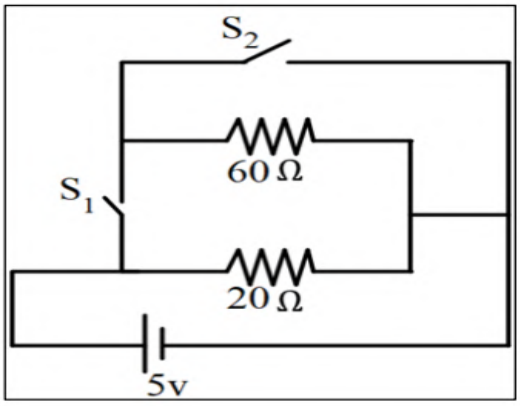


(a) If we increase the current in the above circuit using a rheostat, will the reading of the voltmeter decrease or increase?

(b) Give a reason for your answer in 'a'.

(c) The present reading of the voltmeter is 2V, and the current in the circuit is 0.8A. Calculate the potential drop when the current in the circuit becomes 1 A. Given E = 3V. [3]

7. In the below circuit diagram, calculate the power consumed in the circuit when:



(a) the switch S_1 is closed, and the switch S_2 is open.
(b) the switch S_2 is closed, and the switch S_1 is open. [3]

8. The above image is that of a Digital Single Lense Reflector (DSLR) Camera which are used to take high resolution photographs by professional photographers. The second image of the above two is a schematic diagram of how an image is formed on the sensor of the camera. Based on your understanding of the lenses, answer the following questions.

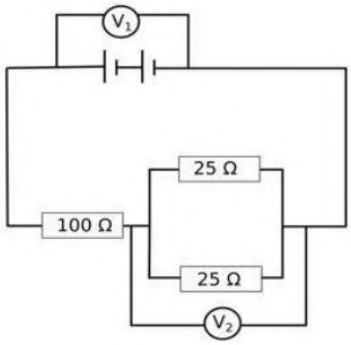
(A) What type of lens is used in the DSLR camera shown in the image?

(B) What type of image is formed on the sensor?

(C) A photographer is using a DSLR camera with a lens of focal length $f = 50$ mm to take a close-up photograph of a small object. The lens projects an image onto the camera sensor that is located 60 mm behind the lens. Calculate the object distance (i.e., the distance between the object and the lens).

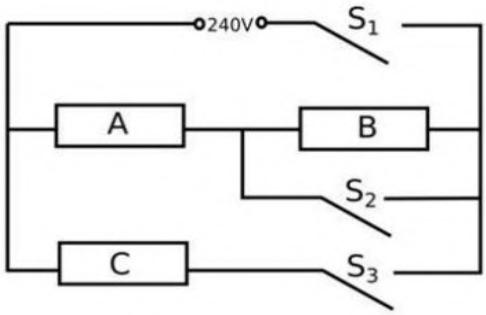
(D) A photographer is using a DSLR camera to take a picture of a flower. The flower is positioned 150 mm away from the camera lens. The actual height of the flower is 80 mm, and the image height formed on the camera's sensor is measured to be 20 mm. Calculate the focal length of the camera lens. [4]

9. The arrangement of resistors shown in the above figure is connected to a battery. The power dissipation in the 100Ω resistor is 81 W. Calculate



(i) the current in the circuit
(ii) the reading in the voltmeter V_2
(iii) the reading in the voltmeter V_1 [5]

10. An electric heater consists of three similar heating elements A, B and C, connected as shown in the figure. Each heating element is rated as 1.2 kW, 240 V and has constant resistance. S_1, S_2 and S_3 are respective switches.
The circuit is connected to a 240 V supply.



(i) Calculate the resistance of one heating element.
(ii) Calculate the current in each resistor when only S_1 and S_3 are closed.
(iii) Calculate the power dissipated across A when S_1, S_2 and S_3 are closed. [5]

DAV VEDANTA INTERNATIONAL SCHOOL, LANJIGARH

HOLIDAY HOME WORK (2025-2026)

CLASS-X **SUBJECT- SOCIAL SCIENCE**

Geography:

1. Prepare a project on the Lifelines of the National Economy. (Transportation)

Holiday H W. 24**-X-Hindi**

1. अनुच्छेद लिखिए-आत्मविश्वास का महत्व
2. अपने मनपसंद दो वस्तुओं का विज्ञापन बनाइए।
3. किन्हीं दो विषयों पर सूचना बनाकर लिखिए।
4. अपने मनपसंद किसी विषय पर सुंदर अक्षरों में लिखें -

-स्वरचित कविता अथवा कहानी अथवा विवरण अथवा यात्रावृत्तां।

HOLIDAY HOME WORK SUB –SKT CLASS-X

1.विसर्ग संधेः जस्त्व सन्धेः च सर्वान् नियमान् लिखन्तु |

2.**तिरुक्कुरल् सूक्तिःशौरभं** इति पाठस्य अन्वयं लिखत |

3. **तिरुक्कुरल् सूक्तिःशौरभं** इति पाठस्य एकं श्लोकं स्वीकृत्य CHATR PAPER मध्ये लिखत |

4.सर्वेषाम् पाठानां समासं शब्दार्थतः लिखत |

Holiday homework (2025-26)

ଦଶମ ଶ୍ରେଣୀ (ଓଡିଆ)

୧- 'ଓଡ଼ିଶାର ଅରଣ୍ୟ ସମ୍ପଦ ' – ବିଷୟରେ ଏକ ପ୍ରବନ୍ଧ ଲେଖ ।

(ଉପକ୍ରମ , ଓଡ଼ିଶାର ବିଭିନ୍ନ ଅରଣ୍ୟସ୍ଥାନ , ଅରଣ୍ୟ ଜାତ ଦ୍ରବ୍ୟ , ଅରଣ୍ୟ ସମ୍ପଦର କ୍ଷୟ , ତାର ପ୍ରଭାବ , ଅରଣ୍ୟ ସମ୍ପଦର ସୁରକ୍ଷା , ଉପସଂହାର)

୨ – ମାନବ କଲ୍ୟାଣରେ ବିଜ୍ଞାନ – ସମ୍ପର୍କରେ ଏକ ରଚନା ଲେଖ ।

(ଉପକ୍ରମ , ଦୈନନ୍ଦିନ ଜୀବନରେ ବିଜ୍ଞାନର ପ୍ରଭାବ , ଉପକାର , ଅପକାର , ଉପସଂହାର)

୩ – 'ସବୁଜ ପୃଥିବୀ ' ବିଷୟରେ ଏକ ଶୀର୍ଷକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ ଯେ କୌଣସି ସମ୍ବାଦ ପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ଏକ ପତ୍ର ଲେଖ । ।

୪ –'ରକ୍ତ ଦାନ ମହତ ଦାନ ' ବିଷୟରେ ଏକ ଶୀର୍ଷକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ ଯେ କୌଣସି ସମ୍ବାଦ ପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ଏକ ପତ୍ର ଲେଖ । ।