

DAV PADMABATI PUBLIC SCHOOL, TANGI

HOLIDAY ASSIGNMENT

STD- VI

SUB- SSC

Q1. Make a poster showing unity in diversity in India.

Q2. Prepare a PPT with 5 slides only to show the Comparative analysis of stone tools prevailing in stone age.

Q3 On a world map show India's relation with other countries in the Iron age civilization.

Science

Q1. Make a collage of the classification of plants and classification of animals. Paste it in the science copy.

MATH

1. Write positive and negative Integer rules with examples.

2. Working model on divisibility rules.

ENGLISH

1. Infer the main value learnt from the young man's act of kindness and relate it with one real-life example from your own experience.

2. Compare the poet's idea of "Leisure" with your school routine and justify which lifestyle you find healthier.

ODIA

୧. ଦଶହରା ଛୁଟି କିପରି କଟାଇଲ ଜଣାଇ ସାଜ ନିକଟକୁ ପତ୍ର ଲେଖ।

HINDI

विलोम शब्दों की तितलियों का निर्माण करें।

-Computer

1. What is Hardware and Software?

2. Write two examples Hardware and Software?

3. What are the types of software?

4. What is Open Office Impress?

5. What is the steps to insert Header and Footer?

6. What is slide transition?

7. Give two examples of Application Software.
8. Write the steps to insert an image from file.
9. What is narration?
10. What are the shapes available in Open Office Impress?

Class VIII – English Holiday Homework

1. Reading (2 Days)

Read any one short story by Ruskin Bond or R.K. Narayan.

Write a one-page summary and mention two life lessons you learnt.

2. Writing Skills (3 Days)

Formal Letter: Write a letter to your Principal expressing gratitude for introducing a new club/activity in school.

Paragraph Writing: In about 120 words, write on “My Favourite Leisure Activity”.

Prepare five interesting questions based on your own paragraph and write their answers.

3. Literature (2 Days)

From your textbook, choose any one poem or story.

Write the meaning of five new words.

Frame three competency-based questions with answers.

4. Grammar (2 Days)

Revise Tenses and Subject-Verb Agreement.

Create ten MCQs (with answers) based on these topics.

5. Fun Task (1 Day)

Design a bookmark with a favourite quotation on reading or learning.

Use recycled materials if possible.

◆ **Instructions:**

Keep your work clean and creative.

Submit on the first day after the holiday.

Marks will be added to internal assessment.

Puja Vacation Holiday Homework

STD VIII

SUB - Odia

୧. ସମାଜସେବାର ମହତ୍ତ୍ୱ ସମ୍ପର୍କରେ ବୁଝି ଏକ ସ୍ୱରଚିତ କ୍ଷୁଦ୍ରଗଳ୍ପ ଲେଖ ।

୨. ଜାତୀୟତା ଭାବ ଉଦ୍ରେକ କରୁଥିବା କାର୍ଯ୍ୟଗୁଡ଼ିକକୁ ନେଇ ଏକ ପ୍ରକଳ୍ପ ପ୍ରସ୍ତୁତ କର ।

SOCIAL SCIENCE

Chapter-4: Mineral and Energy Resources

Project: Comparative Study of Conventional and Non- Conventional Sources of Energy

(Five Pages including Pictures and Flow Chart)

History

Ch- 9 “Establishment of Company Rule in India,”

Prepare one Album on:-

1. Timeline of Expansion: Create a detailed timeline, highlighting key events like the Battle of Plassey (1757), Battle of Buxar (1764), and the Anglo-Mysore Wars. Show how the company transitioned from a trading entity to a political power.

2. Policy Presentation: Ch-11

Research and present on policies such as the Subsidiary Alliance and Doctrine of Lapse - its implications for Indian states. Explain how these policies were used to extend the Company's influence and eventually annex kingdoms.

Civics

Venn Diagram on Lok Sabha & Rajya Sabha

Science

Holiday homework

Physics & Chemistry

1. State and explain law related to gravity.
2. What is buoyant force and upthrust force, what is basic difference
3. The area under the curve acceleration and time gives _ with prove
4. What is inertia, explain its types.
5. What is principle of conservation of momentum, explain
6. Differentiate between combustible and noncombustible substance
7. Draw a labelled diagram of a candle flame and explain what process occurs in each zone
8. Write the measure steps to stop global warming.
9. Prepare 5 assertion reason-based question from each chapter Combustion, Source of energy, Pollution of air
10. Prepare a PPT presentation of Save energy Save Future

Biology

1. solve the biology portion of last half yearly exam question paper .
2. Frame 6 A\R type questions and 4 case based questions by your self.
3. complete the TBQ of the chapter conservation of plants and animal and Microbes friend and foe.
4. prepare a documentation of endangered species ,vulnerable species, endemic species.

5. write a short note on Domestic and global consequences of deforestation.
6. locate biosphere reserves in red ,national park in green and sanctuaries in blue colour in a political map of INDIA.
7. Make a collage of different types of microbes you have studied.
8. Make a table of different microbes and the disease they have caused
Separate for plant ,animals, and human.
9. Elaborate the working mechanism of sewage treatment plant.
10. prepare the survey report on diseases for which vaccination is done in India .

Subject-Computer

1. What is networking?
2. What are the types of network?
3. What is coaxial cable?
4. Explain satellite Communication?
5. What is Title Tag in HTML?
6. Write the HTML code to insert a table.
7. Write the syntax to insert an image in HTML
8. Define HTML Headings Tag.
9. Define Web browser. Write three examples
10. Write the steps to save HTML code.

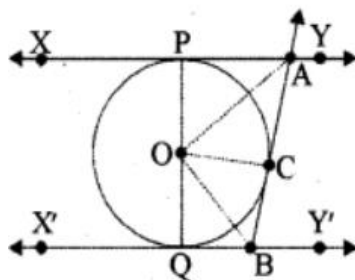
Holiday Homework

Class-X

MATHEMATICS

CLASS-X

1. If Zeba were younger by 5 years than what she really is, then the square of her age would have been 11 more than five times her actual age. What is her age now?
2. Prove that there is no rational number whose square is 6.
3. In Figure, XY and X'Y' are two parallel tangents to a circle with centre O and another tangent AB with point of contact C intersecting XY at A and X'Y' at B. Prove that $\angle AOB = 90^\circ$



4. Find the zeroes of the quadratic polynomial $2x^2 - (1 + 2\sqrt{2})x + \sqrt{2}$ and verify the relationship between the zeroes and coefficients of the polynomial.
5. A train travels at a certain average speed for a distance of 63km and then travels at a distance of 72km at an average speed of 6km/hr more than its original speed. If it takes 3 hours to complete the total journey, what is the original average speed?
6. Prove that if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio. Hence in ΔPQR , prove that a line l intersects the sides PQ and PR of a ΔPQR at L and M respectively such that $LM \parallel QR$. If $PL = 5.7\text{cm}$, $PQ=15.2\text{cm}$ and $MR=5.5\text{cm}$, then find the length of PM (in cm)
7. Show that $\sqrt{2} - \sqrt{5}$ is an irrational number.
8. A quadrilateral ABCD is drawn to circumscribe a circle, as shown in the given

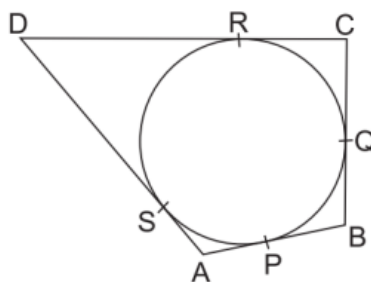
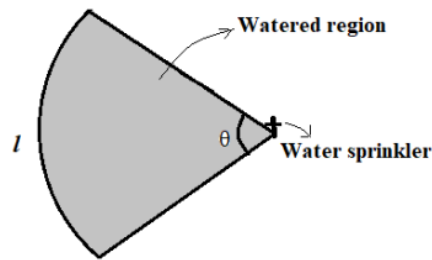


figure. Show that $\frac{AB + CD}{AD + BC} = 1$

9. On a particular day, 50000 people attended a Cricket Test Match between India and Australia in Sydney Cricket Ground. Let x be the number of adults attended the cricket match and y be the number of children attended the cricket match. Cost of an adult ticket was ₹1000 while cost of a child ticket was ₹200. On that day Revenue earned by selling all 50,000 tickets, was ₹4,20,00,000. Find how many adults and how many children attended the cricket match?
10. The numerator of a fraction is 3 less than its denominator. If 2 is added to both of its numerator and denominator then the sum of the new fraction and original fraction is $\frac{29}{20}$. Find the original fraction.
11. A water sprinkler is a device used to irrigate agricultural crops, lawns, landscapes, golf courses, and other areas. Water sprinklers can be used for residential, industrial, and agricultural usage.



A water sprinkler is set to shoot a stream of water a distance of 21 m and rotate through an angle which is equal to complementary angle of 10° .



- i) What is the area of sector in terms of arc length?
- ii) What is the area of the watered region (in terms of π)?
- iii) (A) If the radius(r) changes to 28m, find the angle θ so that the area of the watered region remains the same.

OR

(B) If the radius(r) is increased from 21m to 28m and the angle remains the same, what is the increase in the area of the watered region?

Holiday Home work for Biology

1. Practice answers of Biology questions of all sets came in last half-yearly exam.
2. TBQ answers of the chapter control coordination.
3. Structure of neuron and neuromuscular junction
4. Draw the sequence of events which occur when a bright light is focused on your eyes.
5. Draw the diagram of human brain and mention the role of different parts present in it.
6. Diagrammatic representation of the functions of different plant hormone.
7. Design an experiment to show hydrotropism.
8. List out the endocrine glands and their specific functions.
9. Role of hypothalamus in regulating the functions of master gland.
10. Prepare 6 A\&R question and 4 case based from the chapters “Do you know section” “what you have learnt section” “tables”.

Puja Vacation Holiday Homework

Sub - Odia

୧. ସାମ୍ପ୍ରତିକ କାଳରେ ମାତୃଭାଷା ପଠନର ଉପାଦେୟତା ସମ୍ପର୍କରେ ତୁମ ଲିଖିତ ଏକ ପ୍ରବନ୍ଧ ପ୍ରକାଶନ ନିମନ୍ତେ ଏକ ଦୈନିକ ସମ୍ବାଦପତ୍ରର ସମ୍ପାଦକଙ୍କ ନିକଟକୁ ପତ୍ର ଲେଖ।

୨ . ବିଭିନ୍ନ ସ୍ଥାନରେ ପ୍ରଭାତ କାଳୀନ ଜୀବନଚର୍ଯ୍ୟାକୁ ନେଇ ଏକ ସଚିତ୍ର ପ୍ରକଳ୍ପ ପ୍ରସ୍ତୁତ କର ।

PHYSICS

1. Priya has 3 resistors each of **resistance $2\ \Omega$** .

2. Which of the following resistances will she NOT be able to get by combining these resistors in different combinations? How they connected?

A. $0.67\ \Omega$

B. $0.75\ \Omega$

C. $3\ \Omega$

D. $6\ \Omega$

3. A person near point is 45 cm and far point is 2 m, which type of lens is used for suitable vision ?

4. .Rohan lit an incense stick in his room and after an hour he observed that sunlight entered

into the room through a small gap in window, is he able to see the path of light beam, Explain

5. A cylindrical copper wire of length l and radius r having resistance R and another copper wire having length $2l$, radius $2r$, What is its resistance and resistivity.

6. Is Ohm's law valid for variable temperature, explain.

CHEMISTRY

1. Prepare 5 assertion reason based question from each chapter Chemical reaction and equation, Acid base and salt and metal and non-metal

2. Design a concept map on chemical properties of Acid and base

3. Why does aqueous solution of acid conduct electricity

4. Design an activity to show acidic character of (i) dry HCl gas

(ii) HCl solution

5. Construct one case-based question from chapter Metal and non-metal.

Subject-IT

11. What is communication?

12. What are types of communication?

13. Write Communication cycle.
14. Explain parts of Speech.
15. What are the benefits of Self management skill.
16. Explain stress management techniques.
17. What is Hyperlink.
18. What is the use of Goalseek and Solver?
19. Write the steps to insert a template.
20. What is Macro?

Class X – English Holiday Homework

Duration: 10-Day Break | Session 2025-26

Submission: On the first English period after reopening

(Neat handwriting, originality and thoughtful answers will earn extra marks.)

1. Reading & Vocabulary (Day 1–2)

Read any article/editorial from *The Hindu* / *The Indian Express* or *Times of India* on **youth and technology**.

Write a summary in 80–100 words.

List **five new words** from the article, **write their meanings**, and **use each in your own sentence**.

2. Writing Skills (Day 3–4)

Attempt any two of the following (about 120–150 words each):

- a) **Letter to the Editor** – Express your concern about the rise of junk food consumption among teenagers and suggest measures to promote healthy eating.
- b) **Article** – The Role of Sports in Building Character.
- c) **Story** – Begin with:
“The old train station was silent until I heard a faint cry for help...”

3. Literature – Extrapolative & Competency Tasks (Day 5–7)

(Refer to your Class X First Flight & Footprints Without Feet textbooks)

Answer the following in 60–80 words each:

1. (*Two Stories about Flying*) Imagine you are the young seagull's sibling. Write a diary entry describing your feelings after watching his first flight.
2. (*Nelson Mandela: Long Walk to Freedom*) "Freedom is indivisible; the chains on any one of my people were the chains on all of them." How can this thought be applied to contemporary social issues?
3. (*The Midnight Visitor*) – If Ausable had failed to outwit Max, what could have been the possible consequences for the secret paper? Create an alternate ending.

4. Question Framing Practice (Day 8)

Using any one prose lesson and one poem from First Flight:

Frame five different types of questions (1 each of the following):

1. Factual
2. Inferential
3. Vocabulary based
4. Reference to Context
5. HOTS (Higher Order Thinking)

Provide model answers for each question (30–40 words each).

(Example lessons: "A Letter to God", "Dust of Snow")

5. Grammar & Editing (Day 9)

Revise Reported Speech and Subject–Verb Agreement.

Prepare five original sentences for each rule and convert them as required (e.g., direct → indirect).

Do one editing task: Write a short paragraph of 80 words with eight grammatical errors and correct them.

6. Creative

Reflection

(Day 10)

Choose one:

- A. *Compose a poem (12–14 lines) on Resilience or Dreams.*
- B. *Prepare a poster on “Save the Earth – Save Ourselves” with a catchy slogan and a short write-up (50 words).*

STD -X SOCIAL SCIENCE

History Ch-2

Album making on Indian Nationalist Movement-1916-1947 (Major event and personalities)

D.Politics Ch-3

Differences in gender, religion and caste impact the practicing healthy or otherwise in a democracy.

Economics Ch-2

Collect information from news paper about the role of organised and unorganised sectors providing employment and the challenges faced by them.

GEOGRAPHY ch-3

Newspaper cutting- on water scarcity, pollution of water, areas suffering from drought or flood.

(Write a brief note on the above)

HINDI

1. तोप कविता को चित्र सहित अपनी कॉपी में लिखिए ।
2. तोप का एक मॉडल बनाइए।
3. सौनिक जीवन की चुनौतियों को ध्यान में रखते हुए एक अनुच्छेद लिखिए।
4. फिल्म का समाज पर प्रभाव विषय पर अनुच्छेद लिखिए ।
5. रवींद्रनाथ ठाकुर को नोबेल पुरस्कार पाने वाले पहले भारतीय होने का गौरव प्राप्त है । उनके विषय में और जानकारी एकत्र कर परियोजना पुस्तिका में लिखिए।

DAV PADMABATI PUBLIC SCHOOL TANGI, CUTTACK

HOLIDAY HOMEWORK Class-XI

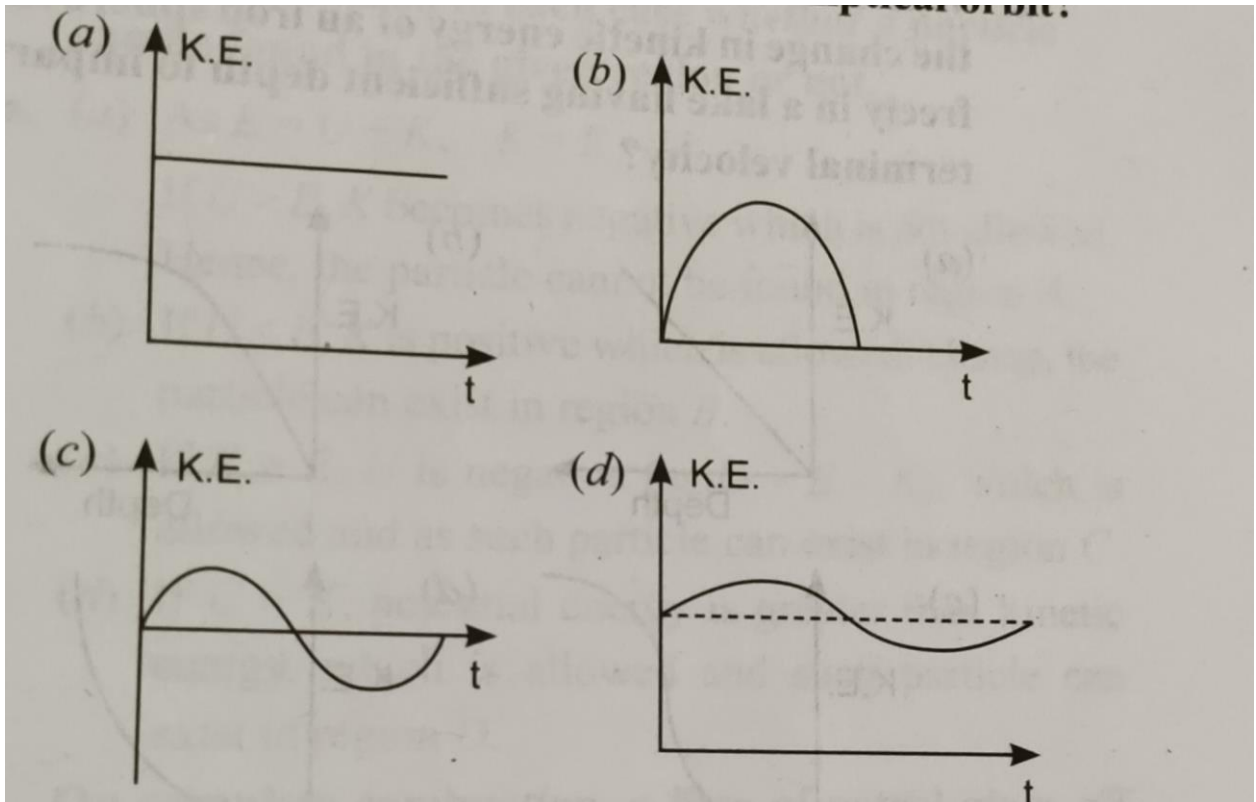
Mathematics

1. Redefine the function $f(x) = |x - 2| + |2 + x|, -3 \leq x \leq 3$
2. Find the range of $f(x) = 1 - |x - 2|$
3. The domain of the function f defined by $f(x) = \sqrt{4 - x} + \frac{1}{\sqrt{x^2 - 1}}$ is equal to _____.
4. Find the value of $\cos^4 \frac{\pi}{8} + \cos^4 \frac{3\pi}{8} + \cos^4 \frac{5\pi}{8} + \cos^4 \frac{7\pi}{8}$
5. If $|z + 1| = z + 2(1 + i)$, then find the value of z .
6. If $|z_1| = 1, (z_1 \neq -1)$ and $z_2 = \frac{z_1 - 1}{z_1 + 1}$, then show that the real part of z_2 is zero.
7. Find the complex number satisfying the equation $z + \sqrt{2}|z + 1| + i = 0$
8. Solve for $x, \frac{|x-2|-1}{|x-2|-2} \leq 0$
9. Find the number of different words that can be formed from the letter of the word 'TRIANGLE', so that no vowels are together.
10. If $nC_{r-1} = 36, nC_r = 84$ and $nC_{r+1} = 126$, then find the value of rC_2
11. A group consist of 4 girls and 7 boys. In how many ways can a team of 5 members be selected, if the team has
 - (i) No girls
 - (ii) At least one boy and one girl
 - (iii) Atleast three girls

PHYSICS

1.

a) Which of the following diagrams shown most closely the variation of kinetic energy of earth as it moves once around the sun in an elliptical orbit



b) A man squatting on the ground gets straight up and stand. The force of reaction of ground on the man during the process is ____

- i) constant and equal to mg in magnitude
- ii) constant and greater than mg in magnitude
- iii) variable but always greater than mg
- iv) at first greater than mg and later becomes equal to mg

c) The dimensions of power is ____

2. Case based questions

Work is said to be done by a force acting on a body provided the body is displaced actually in any direction except in a direction perpendicular to the direction of the force. Mathematically $w = f \cdot s = FS \cos \theta$, the energy is the capacity of a body to do work and the power on the body

$$P = W/t = F \cdot s/t = F \cdot V$$

Both work and energy are measured in Joule while power is measured in watt

- (i) If a box is pushed through 4.0 m across a floor offering 100 N resistance then the work done by the applied force is
- (a) 100 J (b) 0 J
(c) 400 J (d) 25 J
- (ii) In the above case, the work done by the gravity is
- (a) 981 J (b) 0 J
(c) 400 J (d) 25 J
- (iii) SI unit of the power in terms of joule is
- (a) J.s (b) $\frac{J}{s}$
(c) Jm (d) $\frac{J}{m}$
- (iv) A truck draws a tractor of mass 1000 kg at a steady rate of 20 m/s on a level road. The tension in the coupling is 2000 N, then the power spent on the tractor is
- (a) 400 kW (b) 40 kW
(c) 2000 kW (d) 1000 kW

Or

- (iv) From the above question, the work done on the tractor for 2 minute is
- (a) 2400 kJ (b) 4800 kJ
(c) 2000 kJ (d) 1500 kJ

3. Body is moving unidirectionally under the influence of a source of constant power, its displacement is proportional 't' calculate how the displacement is proportional to 't' ?

4.

An electron and a proton are detected in a cosmic ray experiment, the first with kinetic energy 10 keV, and the second with 100 keV. Which is faster, the electron or the proton? Obtain the ratio of their speeds. (electron mass = 9.11×10^{-31} kg, proton mass = 1.67×10^{-27} kg, $1 \text{ eV} = 1.60 \times 10^{-19} \text{ J}$).

5. State and prove work -energy theorem.

6. Prove that the mechanical energy of a freely falling body is conserved.

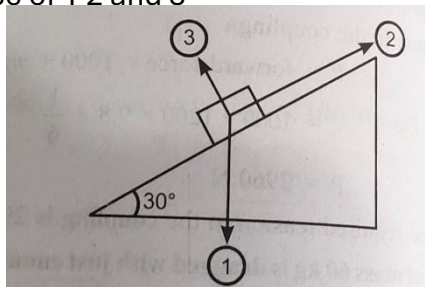
1. An aircraft executes horizontal loop of radius 1 km with a steady speed of 900 km/hour. compare its centripetal acceleration with the acceleration due to gravity (g)

2. Calculate the expression of work done on a body inclined at an angle θ for moving down covers a displacement of s meter

3. Weight of 50 gram and 40 gram are connected by a string passing over a smooth pulley if the system travels 2.18 m in the first 2 second find the value of acceleration.

4. A block of wood having Mass 3 kg is resting on the surface of a rope incline surface inclined at an angle θ shown in figure.

a) name the force of 1 2 and 3



b) if the coefficient of static friction is 0.2 calculate the value of all the three forces.

Holiday homework for class XI

1. Practice all three sets of questions of Biology of last half yearly exam
2. Vividly go through the concepts of cell cycle and cell division.
3. All the examples of plant kingdom
4. 4 phyla of animal kingdom along with their examples.

5. Placentation
6. Family solanacea
7. T.S. of monocot root and dicot root diagram.
8. Urinogenital structures of frog diagram
9. Structure of nucleotides and nucleoside.
10. Structure of haemoglobin.
11. 10 A/R type question and 10 case based questions by yourself

Class XI – English Holiday Homework

Duration: 10-Day Break | Session 2025-26

Submission: On the first English period after reopening

(Neat presentation and originality will be rewarded.)

1. Reading & Vocabulary (Day 1–2)

Read any one editorial from The Hindu / The Indian Express.

Write a summary in 80–100 words.

Note five new words: give their meanings and frame your own sentences.

2. Writing Skills (Day 3–4)

Attempt any two of the following (about 150 words each):

- a) Speech – *Social Media: A Friend or a Foe for Teenagers*
- b) Letter to the Editor – *Expressing concern about increasing road accidents involving youngsters and suggesting solutions.*
- c) Notice Writing – *Your school is organising a Literary Fest 2025. Draft a notice inviting participants.*

3. Literature (Snapshots) (Day 5)

Snapshots – *Mothers Day*:

Frame three value-based questions and answer them in 30–40 words each.

4. Grammar Quick Practice (Day 6 -8)

A. Revise Tenses, Modals, and Determiners. Prepare a mind map for each topic.

B. Create a Personal Vocabulary Journal:

Collect 15 new words from your reading and write:

Word:

Part of speech:

Meaning:

One sentence of your own:

5. Creative Touch (Day 9–10)

Choose any one:

A. Write a short story (150–180 words) beginning with
“It was a rainy evening when I found an old photograph tucked inside a book...”

OR

B. Compose a poem of 12–14 lines on Hope or Changing Seasons.

C. PUJA VACATION HOME WORK CLASS

XI(CHEMISTRY)

D. 1. Calculate number of sulphate ions
present in 100 ML OF 0.001M H_2SO_4

E. 2. Calculate the weight of 12.004×10^{23} atoms of
carbon

F. 3. 1 g of Mg burnt in a closed vessel which
contain 0.1g of O_2

G. (i) which reactant left in excess

H. (ii) Find the weight of excess reactant

I. 4. Calculate the radius of first Bohr's orbit of a
hydrogen atom

J. 5 Calculate the ionisation energy of hydrogen
atom in ground state

- K.6. What will be the wavelength of the emitted radiation when an electron jumps from third orbit to first orbit
- L. 7. How many photons of light having a wavelength of 4000\AA are necessary to provide 1J of energy
- M. 8. Calculate angular and radial node for following subshell
- N. (i) 3p
- O. (ii) 1s
- P. (iii) 4f
- Q. 9. Arrange the following shell in the order of increasing energy
- R. 3d, 4p, 4s, 3p, 4d
- S. 10. Write the electronic configuration of following species (i) Cu^{2+}
- T. (ii) Al^{3+}
- U. (iii) Mn^{2+}
- V. (iv) Fe^{3+}
- W. (v) Zn^{2+}
- X. 11. Among the alkali metal which element do you expect to be least electronegative and why
- Y. 12. Distinguish electron affinity and electronegativity
- Z. 13. Explain why cations are smaller and anions are larger in radii than their parent atoms

AA. 14. Draw the MOT diagram of following species

BB. (i) O_2^{2-}

CC. (ii) N_2^+

DD. 15. Predict the hybridisation of following molecule

EE. (I) BeCl_2

FF. (ii) ICl_5

GG. (iii) SF_6

HH. (iv) CCl_4

II. 16. State third law of thermodynamics

JJ. 17. Draw the graph of exothermic and endothermic reaction

KK. 18. For an isolated system $\Delta U = 0$, what will be ΔS

LL. 19. Enthalpy of combustion of carbon to CO_2 is $-393.5 \text{ kJ mole}^{-1}$. Calculate heat released upon formation of 35.2 g of CO_2 from carbon and dioxygen gas

MM. 20. For the reaction

NN. $\text{2Cl(g)} \rightarrow \text{Cl}_2(\text{g})$ what are the sign of ΔH and ΔS

Class-XI

Subject-Computer Science

1. What is Hardware and Software?
2. What are the types of software?
3. Convert $(10.25)_{10}$ to $(\quad)_2$

4. Convert $(12.2)_8$ to $(\quad)_{10}$.
5. Convert $(153)_8$ to $(\quad)_2$.
6. Write the truth table and draw logic diagram of NOT Gate.
7. What is the difference between List and Tuple.
8. Explain any three types of error.
9. Write a python program to check if a number is odd or even.
10. Write a python program to find factorial of a number.