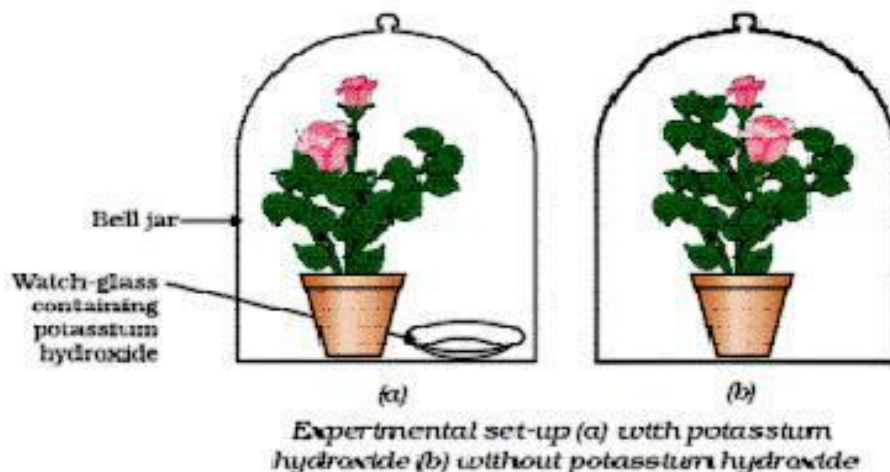


BIOLOGY
TOPIC-NUTRITION AND RESPIRATION

NOTE: DO THE FOLLOWING QUESTIONS IN THE HOMEWORK COPY.

Answer the following questions:

- Q1 After a vigorous exercise you may experience cramps in your leg muscles. Why does this happen?
- Q2 Why are the protein digesting enzymes secreted in inactive forms?
- Q3 Is the passing out of the faecal matter through anus a process of egestion or excretion? Explain.
- Q4 Why does the hydrochloric acid not affect the cells lining the stomach?
- Q5 Why is nose breathing better than mouth breathing?
- Q6 Bile does not contain any enzymes; still it is essential for digestion. Explain.
- Q7 Why does the intestinal lipase action become better after emulsification of fats?
- Q8 The masticated food is better digested. Explain.
- Q9 Why does a chapatti taste sweet after chewing for a while?
- Q10 When Yeast is added to dough of idli and dosa, why does the dough rise? What chemical reaction takes place?
- Q11 Why does aerobic respiration yield more energy than anaerobic respiration?
- Q12 How is the food propelled from one part of the alimentary canal to another?
- Q13 Why does the trachea never collapse when there is insufficient air in it?
- Q14 What prevents the food to enter the wind pipe?
- Q15 Explain the gaseous exchange in tissues.
- Q16 How is cellular respiration different from breathing? Explain.
- Q17 What are the characteristics of a good respiratory surface?
- Q18 Rama ate rajma and rice in her lunch. Explain the various steps by which the components in her food got digested.
- Q19 What is the role of diaphragm in breathing?
- Q20 Why is the leaf considered to be the best site for photosynthesis?
- Q21 Observe the following set up and answer the following questions:



- (a) What does the above set up demonstrate?
- (b) What is the significance of Potassium Hydroxide in this experiment?
- (c) What is the significance of set-up "B"?
- (d) Why is the potted plant destarched before starting the experiment?
- 22) Draw the labelled diagrams of human digestive system and human respiratory system and use soft colours to highlight the important organs of the same.

CHEMISTRY

Q1: Can a combination reaction be redox reaction? Give an example in support of your answer.

Q2: Write balanced chemical equation for the following –

- (a) Calcium oxide + Water = Calcium hydroxide
- (b) Iron + Chlorine = Ferric chloride
- (c) Calcium hydroxide + Carbon dioxide = Calcium carbonate + Water

Q3: How can you prove that Silver is less reactive than copper? (Hint : Use some type of reactions)

Q4: $\text{Fe} + \text{CuSO}_4 (\text{sol.}) = \text{FeSO}_4 (\text{sol.}) + \text{Cu}$. How does the color of solution change in the reaction written above?

Q5: Give an example of photochemical decomposition reaction?

Q6: Suggest any four methods to avoid rancidity in the food reaction?

Q7: In the reaction $4\text{Fe} + 3\text{O}_2 = 2\text{Fe}_2\text{O}_3$. Identify –

- (a) Substance oxidized
- (b) Substance reduced
- (c) Oxidizing agent
- (d) Reducing agent

Q8: What type of chemical reaction are represented by the following equations -

- (a) $\text{NH}_4 + \text{NO}_2 = \text{N}_2 + \text{H}_2\text{O}$
- (b) $\text{AgNO}_3 + \text{NaCl} = \text{AgCl} + \text{NaNO}_3$

Q9: Balance the following equations –

- (a) $\text{Ca}(\text{OH})_2 + \text{HCl} = \text{CaCl}_2 + \text{H}_2\text{O}$
- (b) $\text{NaOH} + \text{H}_2\text{SO}_4 = \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$

NOTE: ASSIGNMENT TO BE DONE IN HOMEWORK COPY

CREATIVE CORNER:

Imagine you are zinc. You have gone to Barbeque Company with your friends, Magnesium and Copper. As you enter, you meet your mocktail friends - Copper Sulphate, Magnesium Sulphate and Ferrous Sulphate. Express through chemical equations,

1]- with whom you 'jelled in' and reacted well

2] -Who remained strangers with you. Give scientific reason for same.

ENGLISH

I. a) Select three poems from the syllabus and highlight the presence of listed literary devices. Explain the literary devices and cite suitable examples from selected poems. Given below is a list of literary devices that you can look for in your poem.

Simile	Refrain	Synecdoche
Metaphor	Hyperbole	Imagery
Personification	Allusion	Antithesis
Alliteration	Transferred Epithet	Onomatopoeia
Repetition	Irony	
Oxymoron	Paradox	

b) Language is an everyday experience. Explore it through music in the holidays! From the above mentioned list, find out as many poetic devices as you can in any one song by the music group, *Owl City*. Cite examples. (You can also pick your favourite artist for doing the same).

II. You are Ruhat/Rehana. You are disturbed by the effect of advertisements on the young impressionable minds of children. Write a letter to the Editor of a National Daily expressing your concern in 150 words

III. You are Alex Mathew, Sports Instructor, Salwan Public School, Mathura Road, Delhi. The Principal of the school has asked you to place an order for buying sports equipment. Write a letter to Messrs Gupta Sports, Sanjivan Market, Chandigarh. Write the order letter for few sports items (minimum 4) in 150 words.

IV. You are Indu, a student of Class XII living at 131, Hans Apartments, Agra. You are interested in pursuing a course in Journalism. Write a letter in response to an advertisement issued by the Asian Institute of Journalism, Delhi, in a national daily, seeking information about suitable courses, eligibility, fee structure, and placement opportunities in 150 words

V. Complete the story on the basis of the clues given below: (200-250 words) 'We were very excited as we had been allotted a bungalow on Khar Road. The day to shift arrived but as we entered the new home. I felt a chill run down my spine....'

VI. Write an interesting and innovative science fiction story (200-250 words). You may take ideas from MCB Unit 3 –Science- D) Letters from the Planet Aurigae.

VII. In the following passage one word has been omitted in each line. Identify the missing word.

	Before	Word	After
Every time astronomers look the	(a)	_____	_____
Universe discover more	(b)	_____	_____
Galaxies. Some parts the universe	(c)	_____	_____
have not looked at	(d)	_____	_____
and are other parts that	(e)	_____	_____
telescopes not see. The best	(f)	_____	_____
estimate by the astronomers that	(g)	_____	_____
there at least 125 billion galaxies out there.	(h)	_____	_____

VIII. Correct the following sentences.

- I did not went to the market.
- It was one of my favourite song.
- The cranberry sauce is a perfect compliment to the turkey dinner.
- The medicine did not affect her the way the doctor had hoped.
- It is high time she improves her behaviour.
- His bear neck burned in the direct sunlight.

IX. Rearrange the following to form meaningful sentences

- a) if/ broke, / it/ fix/ ain't / don't / it
- b) look/ horse/ never / the/ in/ gift / a /mouth/
- c) fonder/ absence/ makes/ heart/the / grow
- d) John/museum/go/wanted/to/the/to

X. Read the prescribed novel, **'The Story of My Life'** and answer the following short questions:

1. When and where was Helen born?
2. What do you know about Helene's grandfather?
3. Describe the small house in which Helen lived as a infant.
4. What did Helen consider as the paradise of her childhood?
5. How did Helen got her name?
6. How did Helen become blind and deaf?
7. What were the crude signs which Helen used to communicate in her early life?
8. What all did Helen learn when she was five?
9. What did Helen do to attract the attention of some guest in her house
10. What made Helen kick and scream at times?
11. Who was Martha Washington?
12. How did Helen and Martha enjoy Christmas?
13. How do you know Martha was an mischievous as Helen?
14. What memories Helen have about Belle, the dog?
15. Describe the incident of fire and how Helen was saved?
16. What did Helen do after knowing the use of key?
17. Describe the event when Helen was saved.
18. What are the memories Helen has about her father?
19. Why did Helen consider Mildred as an intruder?
20. Why did Helen overturn the cradle?
21. Why did Helen's parents think of having a teacher for her?
22. Why did Helen and her parents go to Baltimore?
23. How did Helen spent her time during the train journey?
24. What advice did Dr. Chisholm give to the family?
25. Describe Helen's meeting with Dr. Bell.
26. What did Dr. Bell advice Helen's father?
27. Describe Helen's feeling as she waited for Miss Sullivan.
28. What did Miss Sullivan give Helen?
29. What was the first word taught by Ann Sullivan?
30. How did Helen react after learning the word "doll"?
31. What were the words Helen learnt in th initial days?
32. How did Ann teach Helen about water?

33. What did Helen learn from nature
34. How did Helen get to know that nature can be dangerous?
35. What memories Helen had about Mimosa Tree?
36. Why couldn't Helen understand the word 'love'?
37. How did the teacher try to teach Helen the meaning of love?
38. How did Helen understand the meaning of an abstract idea?
39. How does a deaf child learn?
40. How did Helen learn to understand sentences?
41. How did Ann Sullivan teach Helen?
42. How did Helen learn Geography?
43. What did Helen learn from 'Chambered Nautilus'?
44. How is Helen praising her teacher?
45. How did Helen study growth of a plant?

Note: The work need to be done on loose register pages/sheets (ruled)

ग्रीष्मावकाश गृहकार्य

कक्षा – X

विषय – हिन्दी

1 ग्रीष्मावकाश में किसी भी साहित्यकार के किसी एक यात्रा संस्मरण की पुस्तक पढ़िए और निम्नलिखित आधार बिन्दुओं पर समीक्षा लिखिए।

- पुस्तक और लेखक परिचय
- कथावस्तु
- पात्र
- संवाद
- समय और परिस्थिति
- वर्तमान संदर्भ में उससे प्राप्त जानकारी की उपयोगिता

2 “शिक्षा का अर्थ रट कर अंक लाना नहीं असल चीज़ है अपने व्यवहार में परिवर्तन” – कथन के आलोक में अपने विचार लिखकर प्रस्तुत कीजिए।

3 ‘ऊर्जा के स्रोत’ विषय को अन्य विषयों के साथ जोड़ते हुए प्रभावशाली विज्ञापन तैयार कीजिए।

- सभी कार्य हल्के हरे रंग की ए-4 साइज़ की शीट पर करें व 4 जुलाई, 2018 को जमा करें।

Mathematics

CHAPTER – PAIR OF LINEAR EQUATION IN TWO VARIABLES

- Find the value of k so that the following system of equation has infinite solutions:
 $3x - y - 5 = 0$, $6x - 2y + k = 0$
- For which values of p , does the pair of equations given below has unique solution?
 $4x + py + 8 = 0$ and $2x + 2y + 2 = 0$
- Determine k for which the system of equations has infinite solutions:
 $4x + y = 3$ and $8x + 2y = 5k$
- Check whether the pair of equations $x + 3y = 6$, $2x - 3y = 12$ is consistent.
- Without drawing the graph, find out whether the lines representing the following pair of linear equations intersect at a point, are parallel or coincident.
 $18x - 7y = 24$; $\frac{9}{5}x - \frac{7}{10}y = \frac{9}{10}$
- Find the value of m for which the pair of linear equations $2x + 3y - 7 = 0$ and $(m - 1)x + (m + 1)y = (3m - 1)$ has infinitely many solutions.
- Find the values of a and b for which the following system of linear equations has infinite number of solutions:
 $2x - 3y = 7$, $(a + b)x - (a + b - 3)y = 4a + b$
- For what value of k will the equations $x + 2y + 7 = 0$, $2x + ky + 14 = 0$ represent coincident lines?
- For what value of p will the following system of equations has no solution;
 $(2p - 1)x + (p - 1)y = 2p + 1$; $y + 3x - 1 = 0$
- Solve for x and y : $= a$, $px - qy = 0$
- Draw the graphs of the equations
 $4x - y - 8 = 0$ and $2x - 3y + 6 = 0$
Also, determine the vertices of the triangle formed by the lines and x -axis.
- Two numbers are in the ratio 4:5. If 30 is subtracted from each numbers, the ratio becomes 1:2. Form the pair of linear equations for the above situation and represent them graphically.
- Solve the following pair of linear equations for x and y :
 $2(ax - by) + (a + 4b) = 0$; $2(bx + ay) + (b - 4a) = 0$
- A number consists of two digits. Where the number is divided by the sum of its digits, the quotient is 7. If 27 is subtracted from the number, the digits interchange their places, find the number.
- Solve for x and y , using cross multiplication method
 $\frac{b}{a}x + \frac{a}{b}y = a^2 + b^2$: $x + y = 2ab$

16. A train travels at a certain average speed for a distance of 63 km and then travels at a distance of 72 km at an average speed of 6km/hr more than its original speed. If it takes 3 hours to complete total journey what is the original average speed ?

17. Solve the following system of linear equations graphically:

$$3x + y - 12 = 0; x - 3y + 6 = 0$$

Shade the region bounded by the lines and x -axis. Also, find the area of shaded region.

18. Solve for x and y : $\frac{148}{x} + \frac{231}{y} = \frac{527}{xy}$

$$\frac{231}{x} + \frac{148}{y} = \frac{610}{xy} \quad x \neq y, y = 0$$

19. 8 men and 12 boys can finish a piece of work in 10 days while 6 men and 8 boys can finish it in 14 days. Find the time taken by one man alone and that by one boy alone to finish the work.

20. Solve for x and y :

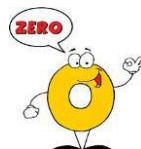
$$\frac{3}{3x-y} + \frac{2}{3x+y} = 2$$

$$\frac{10}{3x-y} + \frac{2}{3x+y} = \frac{11}{2} \quad (3x - y \neq 0, 3x + y \neq 0)$$

LET'S MAKE MATHS FUN

Make one colourful poster on interesting maths fact on A-3 size sheet.

For example



INTERESTING FACT ON ZERO

Zero is the only number that can't be represented in Roman numerals
Zero is the only number which has many names such as nought, naught, nil, zilch and zip.

HOLIDAYS HOMEWORK

CLASS X

PHYSICS

- Q1. 10^{20} electrons, each having a charge of 1.6×10^{-19} C, pass from a point A towards another point B in 0.1 s. What is the current in ampere? What is its direction?
- Q2. Show that one ampere is equivalent to a flow of 6.25×10^{18} elementary charges per second.
- Q3. A wire of 10 ohm resistance is stretched to thrice its original length. What will be its (i) new resistivity and (ii) new resistance?
- Q4. A cylindrical wire is stretched to increase its length by 10%. Calculate the percentage increase in resistance.
- Q5. Two wires of equal lengths, one of copper and other of manganin have the same resistance. Which wire will be thicker? (Resistivity of copper < Resistivity of manganin)
- Q6. Two wires of equal cross-sectional area, one of copper and other of manganin have the same resistance. Which one will be longer?
- Q7. Two wires A and B are of same metal, have the same area of cross-section and have their lengths in the ratio of 2:1. What will be the ratio of currents flowing through them respectively when the same p.d is applied across the length of each of them?
- Q8. The temperature of the filament of an electric bulb is 2700°C when it glows. Why is it not burnt up at such a high temperature?
- Q9. A toaster produces more heat than a light bulb when connected in parallel to the 220V mains. Which has a greater resistance?
- Q10. Three bulbs 40W, 60W and 100W are connected to 220V mains. Which bulb will glow brightly if they are connected in series?
- Q11. A 100W and a 500W bulbs are joined in parallel to the mains. Which bulb will glow brighter?
- Q12. Why does a bulb not become dim when another bulb of same power in parallel circuit is switched on?

SOCIAL -SCIENCE

I. Read, learn and revise the chapters of the first term examination.

II. Prepare chapter wise glossary of the chapters mentioned below:

- History- Nationalism in Indo China, Work, life and leisure
- Political science - Federalism, Democracy and diversity
- Economics- Money and Credit, Globalisation, Consumer awareness
- Geography- Resource and Development, Agriculture

Note: 1. glossary should be made in the class work registers of the respective subjects.
2. There should be minimum 10 terms from each chapter

III. Prepare a pictorial project from Chapter 5 political science (popular struggles and movements).

General instructions:

- Both the case studies should be covered.
- Information should be taken from the book or the internet.
- Project should be of minimum 10 pages. (5 pages each).
- The students must mention the bibliography at the end of the project.
- Project will be assessed on the basis of originality, timely submission, and content accuracy.

Note: The above work should be done in the project file.

IV. Economics project (Money and credit)

Choose any one topic:

1. Currency

- Old form, new form (changes across different societies),
- Demand deposits and cheque (new form of currency, plastic money, problems associated with each form of currency).

2. Banks

- Different types of banks public sector, regional rural banks etc. their strength, different types of accounts offered by the banks, current interest rate charged by the banks on loans and offered on deposits, what are the other facilities offered like overdraft, credit –debit card etc. lending mechanism.

3. RBI (Reserve bank of India)

- Introduction: years of existence, number of regional offices, name of present governor etc.
- Its role: deciding upon the key rates such as CRR (cash reserve ratio), SLR (liquidity ratio) etc.
- Giving loans to the banks as well as to government
- Any other role
- Explain their supervisory role over the banks.

4. Different credit arrangements

- What is credit
- Explain different credit arrangements – public sector banks, cooperatives, self help groups
- Informal lending (money lenders, friends, relatives etc.)
- Differentiate between formal and informal source of credit using images.(interest rate, collateral, term and mode of repayment etc.)

- Statistical data to show what % of loan requirement are met by different sources mentioned above.
5. Self Help Group (SHG's)
- Meaning, arrangement (members)
 - Method of operation
 - Role of women
 - Other advantages
 - Number of SHG's in India
 - Role of SHG's in availing bank loans

Guidelines for the project:

1. The project prepared should be made from eco-friendly products
2. The Project Report should be handwritten by the students themselves and comprise of not more than 15 foolscap pages.
3. Layout of the project
 - Project title, name, school, year, roll.no.
 - Certificate of authenticity (to be pasted)
 - Index
 - Acknowledgement (acknowledging the institution, the places visited and the persons who have helped.)
 - Preface –name of the project, problem statement/ objective of the project
 - Introduction
 - Summary of the topic
 - Activities done during the project
 - Observations and findings
 - Conclusions (summarized suggestions or findings, future scope of the study)
 - Learning outcome –life skills and values
 - Bibliography (books, website, films referred etc.)
 - Main draft of the project
 - Thank you
 - Include pictures related to the topic, map, graph, bar diagram, pie chart, brochures/ pamphlets, logo, flow chart etc.)

Date of submission - 9th July 2018

The distribution of marks over different aspects relating to Project Work is as follows:

S.NO.	MARKS
1. Content accuracy and originality	1
2. Presentation and creativity	1
3. Process of Project Completion: Initiative, cooperativeness, participation and punctuality	1
4. Viva or written test for content assimilation	2

V. Geography ISA project

The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

Out of 17 SDGs, **Goal 12 - Responsible Consumption and Production** aims at “doing more and better with less.” Using eco-production methods and reducing the amount of waste we are targets of Goal 12.



friendly
generate

Working towards empowering our students, we at DAV Public School, Sreshtha Vihar have chosen SDG 12 for the Project 'Water Wise', with special reference to Responsible Consumption and Production of Water.

Students of class X will investigate the reasons for drought in Cape Town and Latur and present their findings in a presentation using Sway software under the following headings:

- a) Location (affected areas to be marked on the map)
- b) Reasons for drought in both the places.
- c) Steps taken by respective governments.
- d) Present scenario.
- e) Techniques of water conservation (traditional and modern)
- f) Responsible consumption and production of water

Rubrics for assessment

- 1) Content - 2 marks
- 2) Creativity in Presentation - 2 marks
- 3) Timely submission - 1 mark

कक्षा दशमी
विषय संस्कृत

मणिका अभ्यास पुस्तके पेज संख्या 103 से 127 तक करो ।

1. अपठित गद्यांश
2. पत्राणि
3. चित्रवर्णनम्
4. अनुच्छेद लेखनम्
5. संवाद लेखनम्

French

Make an advertisement in French on A4 sheet of any colour while using proverbs, French expressions and gestures.