DAV PUBLIC SCHOOL
SRESHTHA VIHAR, DELHI
HOLIDAYS HOMEWORK
CLASS-X

ENGLISH

Q1. You are A.Rizvi, Head of the Chemistry department of Usmania Sr. Secondary School, Sharanpur. You require various lab apparatuses and chemicals for your laboratory. Write a letter to M/s Om Scientific Works, Sharanpur placing a bulk order for the purchase of various items. Mention all the necessary details of the items as well as the discounts available on the purchase.

Q2. You are Laxman/Laxmi, the Head Librarian of Ramanna Public School, Nellore. Write a letter to Janta Book Depot, Nellore placing bulk order for books needed for the school library. You can invent your own details.

Q3. Accidents in big cities are a common phenomenon. Unfortunately, hardly anyone comes to the rescue of the road victims because of fear of harassment by the police. Now that the Supreme Court has issued guidelines that people who take road victims to a hospital will not be questioned or detained, there is no reason why bystanders/passersby should hesitate to help road victims and thus discharge their duty as responsible citizens. Write a letter to the Editor of a national daily requesting him/her to make people aware of Supreme Court guidelines and urge them to help people in distress. You are Shom/Shobha, 24, Raj Nagar, Kanpur.

Q4. Ram Kumar Mishra is a resident of Ram Nagar, Bhopal. After reading a news paper write-up that Bhopal Development Authority has decided to allot an 80-acre plot of land reserved for a garden and green belt to develop a residential colony, you express your resentment and dismay by writing a letter to the Editor of a national daily asking the authorities to drop this plan.

Q5. Over the years there has been a steady increase in the number of students from different towns and cities of India seeking admission in colleges in the metropolitan cities. As a consequence, colleges in the metros have failed to accommodate the rising number of students due to severe shortage of seats. Write an article for your school magazine drawing attention to the anxiety and pressure faced by students during admission time. Suggest ways to combat the shortage of seats. You are Mohan/Mohita, a student of A.K. International School, Agra.

Q6. Recently a news appeared in the newspapers how a man committed suicide after being snubbed at a Reality show. Write an article advocating a complete ban on the vulgar and indecent Reality Shows on TV. Highlight their damaging impact on students and the youth in general.

Q7. Develop a story with the help of starting lines given below : (150-200 words)
"It was my first exam. I was already late. I dashed towards my scooty and put the key in the ignition. But it wouldn't start. Panicstriken I rushed towards the main road ………………"

Q8. Write a short story on the basis of the beginning lines provided.
"Summer holidays had begun. Mohit was excited. His father had made arrangements for a trip to ………………"

Q9. The following passages have not been edited. There is one error in each line. Write the incorrect word and the correction against any four lines. Remember to underline the word you have supplied. One is done as an example.

		Incorrect	**Correction**
1. In Himalayas, the desert is turning green e.g.		the	a
Climate change in a Indian region of	(a)	_____	_____
Ladakh has shrunk glaciers or has made rainfall	(b)	_____	_____
and temperature unpredictable. Water has	(c)	_____	_____
needed to irrigating the fields.	(d)	_____	_____
Farmers may requiring aid from the government.	(e)	_____	_____

Q10. In the following passages one word has been omitted in each line. Write the missing word, in any four sentences of the given paragraph, along with the word that comes before and the word that comes after it in space provided.

1. Thomas Hardy was younger contemporary of	e.g. was	a	younger
Charles Dickens. His style rather different,	(a) _____	_____	_____
but he was influenced Dickens and achieved	(b) _____	_____	_____
wide literary acclaim in own right, both	(c) _____	_____	_____
as novelist and a poet. While Dickens' novels	(d) _____	_____	_____
tended to set in an urban environment,	(e) _____	_____	_____
Hardy's focus was on the countryside.			

Q11. Prepare a scrapbook on vocabulary builder, word watch and word wise based on the newspaper provided in the school.

Q12. Revise all the lessons done in the class and prepare for a class test in July.

Q13. Complete all the assignments given in the class based on literature, writing skills and grammar.

MATHS

The only way to learn mathematics is to do mathematics

1. Choose the correct alternative
   (i) If the pair of linear equation is consistent then the lines will be
   (a) Parallel
   (b) always coincident
   (c) intersecting or coincident
   (d) always intersecting
   (ii) The pair of equations $y = 0$ and $y = -7$ has
   (a) One solution
   (b) Two solutions
   (c) Infinitely many solutions
   (d) No solution
   (iii) One equation of a pair of dependent linear equations is $-5x + 7y = 2$. The second equation
   can be
   (a) $10x + 14y + 4 = 0$
   (b) $-10x - 14y + 4 = 0$
   (c) $-10x + 14y + 4 = 0$
   (d) $10x - 14y = -4$
   (iv) $(x^2+1)^2 - x^2 = 0$ has
   (a) Four real roots
   (b) two real roots an AP with d $=-16$
   (c) no real roots
   (d) one real root
   (v) The famous mathematician associated with finding the sum of the first 100 natural numbers is
   (a) Pythagoras
   (b) Newton
   (c) Gauss
   (d) Euclid

(vi) The list of numbers -10,-6,-2,2………is
(a) an AP with d = -16
(b) an AP with d = 4
(c) an AP with d =-4
(d) not an AP

(vii) If $ax^2 + bx + c = 0$ has equal roots then a =
(a) $\frac{b^2}{4c}$
(b) $\frac{-b^2}{4c}$
(c) $\frac{b}{2c}$
(d) $\frac{-b}{2c}$

(viii) If p and q are the roots of the equation $x^2 - px + q = 0$ then
(a) p=1, q= -2
(b) p =1, q= 0
(c) p = -2, q= 0
(d) p = -2, q= 1

(ix) If the common difference of an AP is 5 then what is $a_{18} - a_{13}$
(a) 5
(b) 20
(c) 25
(d) 30

(x) In a right triangle ABC, AB = $\frac{x}{2}$, BC = x+ 2 and CA = x + 3,then x =
(a) 5
(b) 10
(c) 12
(d) 14

2. Find the value of p and q for which the equations
   $4x + 5y = 2$: $(2p + 7q) x + (p + 8q) y = 2q - p + 1$ have infinitely many solutions.
3. By the method of factorization find the roots of the quadratic equation
   $a^2x^2 - (a^2 b^2+ 1) x + b^2 = 0, a \neq 0$
4. The sum of first n terms of an AP is given by $(n^2 + 8n)$. Find the 12th term of the AP .
   Also find the nth term of the AP.
5. Solve the equation :
   $1 + 4 + 7 + 10 |+ \ldots\ldots\ldots + x = 287$
6. Find the values of x + y and x- y when
   $28x + 17 y = 73$; $17x \backslash + 28y = 62$

7. In a competitive examination , one mark is awarded for each correct answer while ½ mark is deducted
for every wrong answer. Jayanti answered 120 questions and got 90- marks .How many questions did
she answer correctly ?
8. In the centre of a rectangular lawn of dimensions 50 m by 40 m, a rectangular pond has to be constructed so that the area of the grass surrounding the pond would be 1184 m^2. Find the length and breadth of the pond.
9. How many numbers lie between 10 and 300 which when divided by 4 leave remainder 3?
10. Find the sum of the integers between 100 and 200 that are (i) divisible by 9 (ii) not divisible by 9

> Optional exercise 3.7 (from Ch- linear equation in two variables) and 5.4 (from Ch - Arithmetic Progression)

Holiday homework to be done in assignment register

MATH ART

Each student has to make one model from any topic of your curriculum

(either of class 9th or 10th) related to question from your text book. (for example Right circular cone is generated when right triangle is revolved)

SCIENCE

BIOLOGY
TOPIC-NUTRITION AND RESPIRATION

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 faecal matter through anus a process of egestion or excretion? Explain.

04 In each of the following situations what happens to the rate of photosynthesis?

(a) Cloudy days

(b) No rainfall in the area

(c) Good manuring in the area

(d) Stomata get blocked due to dust

Q5 Design an experiment to show transpiration in plants.

Q6 Bile does not contain any enzymes; still it is essential for digestion. Explain.

Q7 If salivary amylase is lacking in the saliva , which events would be affected in the mouth cavity?

Q8 The masticated food is better digested. Explain.

Q9 Raman ate rajma and rice in lunch. Explain the various steps by which the components in her food got digested.

Q10 When Yeast is added to a dough of idli and dosa, why does the dough rise? What chemical reaction takes place?

Q11 How is the food propelled from one part of the alimentary canal to another?

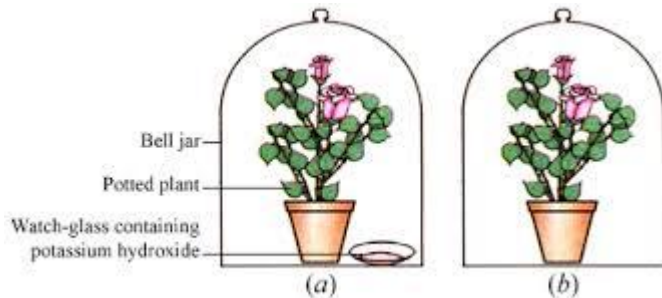Q12 Why does the trachea never collapse when there is insufficient air in it?

Q13 What prevents the food to enter the wind pipe?

Q14 Explain the gaseous exchange in tissues.

Q15 How is cellular respiration different from breathing? Explain.

Q16 What are the characteristics of a good respiratory surface?

Q17 Observe the following set up and answer the following questions?

(a) What is the role of potassium hydroxide in this experiment?

(b) Why are both the potted plants kept in dark first?

(c) In which of the set ups the starch test would be positive and why?

MULTIPLE CHOICE QUESTIONS:

Q1 The inner lining of stomach is protected by one of the following from hydrochloric acid:

(a) Pepsin

(b) Mucus

(c) Salivary amylase

(d) Bile

Q2 The opening and closing of stomatal pore depends upon?

(a) Oxygen

(b) Temperature

(c) Water in the guard cells

(d) Concentration of carbon dioxide in stomata

Q3 During the deficiency of oxygen in the tissues of human beings, pyruvic acid is converted into lactic acid in the:

(a) Cytoplasm

(b) Chloroplast

(c) Mitochondria

(d) Golgi body

Q4 Oxygen liberated during photosynthesis comes from:

(a) Water

(b) Chlorophyll

(c) Carbon dioxide

(d) glucose

CHEMISTRY (CHEMICAL REACTIONS AND EQUATIONS)

Q 1.   Multiple Choice questions   :

I.   Identify the colour of ferrous sulphate crystals   :

(a) Blue   (b)   Pale green   (c)   Black   (d)   Yellow

II. What is the valency of Sulphate ion in Na_2SO_4?

(a) 0   (b)   1   (c)   2   (d)   3

III. The reaction in which heat is released is called   :

(a) Photolytic reaction   (b)   Exothermic reaction   (c)   Electrolytic reduction

(d) Endothermic reaction

IV. Ammonia gas reacts with water to give :

(a) Ammonium hydroxide   (b)   Ammonium hydride   (c)   Ammonium oxide

(d) Ammonium chloride

V. Which of the following are characteristics of Ionic compounds?

(a) hard   (b) have high melting point   (c) crystalline   (d) all of these

Q 2 Fill in the following blanks:

(a) A substance which cause addition of hydrogen or removal of oxygen from other substance is called _____

(b) A reaction in which an insoluble product formed during the reaction of two ionic compounds in aqueous solution is called _____ reaction.

(c) When lead nitrate powder is heated _____ gas is evolved.

(d) When acid is added to lime stone _____ gas is evolved.

Q 3. State True or False:

(a) When Ferrous Sulphate is heated, a smell of burning Sulphur is obtained due to the formation of Sulphur dioxide.   (T/F)

(b) The gas which is collected in double the amount in the electrolysis of water experiment is oxygen. (T/F)

(c) Zinc can liberate hydrogen on reacting with dilute Nitric acid.   (T/F)

(d) A substance whose solution in water we use for white - washing is Calcium oxide.   (T/F)

(e) An oxidising agent either supplies oxygen in a reaction or removes hydrogen.   (T/F)

Q 4. Give reason why?

(a) Iron articles lose their shine gradually.

(b) Fried food should be kept in air tight container

(c) Copper Sulphate solution can be stored in silver container but Silver nitrate solution cannot be stored in copper vessel.

(d) Corrosion is harmful.

(e) Copper does not liberate hydrogen on reacting with dilute Sulphuric acid.

Q 5 What happened when   :

(a) Hydrated Copper Sulphate is heated.

(b) Silver Chloride kept in Sunlight.

(c) Electricity is passed through acidified water solution.

(d) Magnesium ribbon burnt in air.

(e) Dilute hydrochloric acid added to zinc.

Explain giving suitable chemical equation.

Instructions

1. Read Chapter Acids, Bases and Salts. Make a list of difficult words and write their meaning.

2. Make a list of all Chemical equations from the Chapter Acids, Bases and Salts.

3. Do all the work on A 4 Size ruled sheets.

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 cylinderical 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?

PROJECT WORK

Learning is the process of acquiring new knowledge, behavior, skills, values or preferences. It is always believed that "Learning becomes permanent when it is leaned through experience". Therefore, to ignite young minds and promote experiential learning

students are required to prepare a science model (preferably working and with low cost recyclable material) or an activity on any of the topics listed below. Shortlisted projects or models will be showcased in the science exhibition to be held in the school.

For roll nos. 1- 17
- o Electricity
- o Magnetic Effects of current
- o Sources of Energy
- o Light Reflection and refraction
- o Human Eye and the colourful world
- o Toys and Games showcasing concepts of Electricity, magnetism etc.

For roll nos 18 to 34
- o Role of chemistry in health
- o Chemistry in waste management
- o Agriculture chemistry
- o Kitchen chemistry
- o Diagnostic chemistry
- o Chemistry involved in handling pollution
- o Chemistry behind beauty products
- o Effects of dye on different types of fabric
- o Acidity in tea
- o Effect of sodium carbonate on foaming capacity of a soap

For roll nos 35 onwards
- o Working of human systems eg working model of excretory system.
- o Contributions of biology in human welfare eg the potential benefits of stem cells in the treatment of diseases.
- o Microbes in human welfare
- o Animal cloning and its advantages
- o Human impact on ecosystems eg oil spills, eutrophication of water bodies, bio magnification etc.
- o Genetics- DNA fingerprinting and its prospects, Mendelian genetics, transgenic crops etc.

Task-2

Students also need to prepare 10 questions for Quiz each from Physics, Chemistry and Biology. The topics for quiz are

Physics: Electricity and magnetism

Chemistry: Acids and Bases

Biology: Life Processes

SOCIAL SCIENCE

GEOGRAPHY

1) Map Work

Locate and label the following on the political map of India--

A) Major soil types

B) Dams of India- salal, Bhakhra Nangal, Tehri, Rana Pratap Sagar, Sardar Sarovar, Hirakud, Nagarjuna Sagar, Tungbhadra

C) Major areas of rice and wheat

Largest/ major producer states of sugarcane, tea, coffee, rubber cotton and jute

2) Write any 10 difficult words with their meaning each from chapter no. 1,2,3 and 4

3) Frame 5 Multiple choice questions and 5 one word answer type question each from chapter no. 1,2,3 and 4.

HISTORY

1. Textbook: India & the Contemporary world, NCERT(2019thEdition)

To prepare **objective type** questions- for example: one word answer, fill in the blanks, match the following, odd-one out etc.

Chapter(s)	Section(s)
1. Nationalism in Europe	X-A, B, C
2. Nationalism in India	X-D, E, F

(To be done in home-work notebook)

(Handwriting should be neat and readable)

POLITICAL SCIENCE

1. Textbook: Democratic Politics II, NCERT (2019th Edition)

Read term-1 chapters thoroughly.

Chapter I- Power Sharing

Chapter II- Federalism

Chapter III- Democracy and Diversity

Chapter IV- Gender, Religion and Caste

2. Underline difficult words/ terms and write their meanings in the textbook itself.

3. Mark definitions if any also.

ECONOMICS

1. Read and underline the difficult words for the following chapters and then write them in the notebook along with their meaning

 i) Money and Credit

 ii) Globalization and the Indian economy

 iii) Consumer Rights

2. Compute the BMI for any of your three family members and comment on their health status.

3. Analyse the trend in the contribution of the three sectors in India's GDP and employment in last five years. Use data from official website or document only. Use pie charts or bar diagrams to show the data. (source can be: Economic survey of last five years, ministry of statistics and programme implementation etc)

Project Work

1. Every student has to compulsorily undertake any one project on the following topics:

Consumer Awareness OR

Social Issues OR

 Sustainable Development

2. Objective: The overall objective of the project work is to help students gain an insight and pragmatic understanding of the theme and see all the Social Science disciplines from interdisciplinary perspective. It should also help in enhancing the Life Skills of the students. Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.

If required, students may go out for collecting data and use different primary and secondary resources to prepare the project. If possible, various forms of art may be integrated in the

project work.

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

S.NO.	Aspects	Marks
a.	Content accuracy, originality and analysis	2
b.	Presentation and creativity	2
c.	Viva Voce	1

4. The projects carried out by the students in different topics should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.

5. All documents pertaining to assessment under this activity should be meticulously maintained by concerned schools.

6. *A Summary Report should be prepared highlighting:*

7. It is to be noted here that the projects and models prepared should be made from eco-friendly products without incurring too much expenditure.

8. *The Project Report* should be handwritten by the students themselves.

Instructions:

1.Domains to be used as authentic sources: .edu, .gov, .org

2.Search engines to be used:

google, bing, yahoo, as.com, ol.com, baird, duckduckgo, internet archive

3. Prescribed books:

1. India and the Contemporary World-II (History) - Published by NCERT

2. Contemporary India II (Geography) - Published by NCERT

3. Democratic Politics II (Political Science) - Published by NCERT

4. Understanding Economic Development - Published by NCERT

5. Together Towards a Safer India - Part III, a textbook on Disaster Management - Published by CBSE.

Note: Please procure latest reprinted edition (2019) of prescribed NCERT textbooks.

3. IMPORTANT:

(i) Project to be done individually.

(**ii)** Work should be properly researched.

(iii)Should follow the following pattern

Attractive cover page with title •Certificate of authenticity • Abstract (briefly explaining the objective of the project) • Table of contents • Introduction • Main Content• Results and discussion • Summary/conclusions • References • Appendices (if used)

iv) No writing to be done on left side and should be covered with relevant photos, diagrams or data tables

v) Any data or fact should be presented with the source.

(vi) Bibliography/references to be given at the end of the project work. (Plagiarism will not be accepted).

**Submission**: _5th July 2019. (Marks will be deducted for late submissions)_

हिंदी

1 ग्रीष्मावकाश में उमेश पंत की यात्रा संस्मरण 'इंनरलाइन पास' 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 उद्देश्य नौकरी प्राप्त करना नहीं व्यवहार में परिवर्तन लाना होता है" – 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 सफेद रंग की ए—4 साइज़ की शीट पर करें व प्रथम सप्ताहांत जुलाई, 2019 को जमा करें।

संस्कृत

1. पर्यावरणं व्यायामं च विषये विंशतिः वाक्यानि लिखत ।

2. धटिका निर्माणं कृत्वा 1 से 12 पर्यन्तं चित्रसहितेन लिखत ।
   तत्र सपाद , पादोन , सार्ध प्रयोगं भवेत् ।

3. पाठ 1,2,3 से कठिन शब्दार्थ लिखिए ।

4. अव्ययीभाव और तत्पुरुष समास के दस दस समस्तपद और उनका विग्रह लिखिए ।

FRENCH

- Students can show their talent in a unique way by performing a French song in a video recording.
- Do revision of all the chapters that have been done in the class.
- Do written expressions of chapter 1-4 from entre jeune.

COMPUTER SCIENCE

Make a Project according to your Roll No. on any one of the topics given below:

* Artificial Intelligence
* Digital India
* Augmented Reality
* Virtual Reality
* Green IT
* Societal Impact of IT

Roll No: 1-10
Visual Presentation using any Presentation Software like PowerPoint, Impress etc.
Roll No: 11-20
Movie using any Movie Making Software like Movie Maker, Aftereffects etc.
Roll No: 21-30
Animation/Game using Scratch or Kodu
Roll No: 31-40
Story using Digital Storytelling tools like Sway, Paint 3D, Photo story etc.
Roll No: 41 onwards
3D Model

Projects are to be submitted for grading in pen drives to the respective Computer Teachers by 6th July 2019. Shortlisted projects will be showcased in the Computer Science exhibition to be held in school.