ENGLISH

S. No.	Subjects	Assignments
1	Literature	**Study about Samuel Taylor Coleridge's life.**
2	Literature	**The Rhyme of an Ancient Mariner**
3	Literature	**The Book Thief by Markus Zusak**
4	Advanced Writing Skills	**Idioms and Thoughts**
5.	Advanced Writing Skills	**Letters of Inquiry, Placing Order & Complaint**

GENERAL INSTRUCTIONS

1. Study thoroughly about the life and works of Samuel Taylor Coleridge. {Word Limit 200—250}

2. Read the poem, **The Rhyme of an Ancient Mariner** & make notes on it. {Word Limit 200—250}

3. **"Today a reader, tomorrow a leader."** To make you aware and socially active we strongly suggest you to read a book "**The Book Thief**" by **Markus Zusak** and act as a critic through your review.

4. **Compose a poem on the theme, 'Peace and Nature'; in about 20 lines.**

5. **Prepare a list of ten idioms and ten thoughts, that you haven't come across and explain its meaning.**

6. **Letter Writing**

a) **Letter of Inquiry –** D. W. University, California offers a correspondence course leading to a short term course in Public Health and Hygiene/ Pandemic Breakout, after Class10. You are Veronica/ Vildron. Write to the Dean, Correspondence Course, D.W. University, for the brochure and prospectus, enquiring about the opportunities after completing the course.

b) **Letter of Placing Order:** You are the Librarian of Lords Senior Secondary School, Chennai. You want to purchase a thesaurus, books on Literature Classics, books for competitive examinations and books for IIT Entrance Examination etc., for the use of

students and staff of your school. Place an order with M/s Waldrudamus, Bangalore, giving the details regarding the mode of dispatch, quantity, the mode of payment etc.

c) **<u>Letter of Complaint</u>**: You live in Lajpat Nagar, New Delhi. Unnecessary honking of vehicles in your area is causing a lot of inconvenience to the locals. Write a letter to the police commissioner of the district complaining against this practice. You are Joshua / Angelina.

<u>**Note**</u>: -**The assignments must be done in the English Language Notebook. Please DO NOT submit on loose sheets/files/folders· The homework must be presented neatly and creatively, with a cover page**.

SOCIAL SCIENCE
<u>TOPIC: CONSUMER AWARENESS</u>

<u>Objectives:</u>

1. 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.

2. Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.

3. 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.

Topics to be covered under the project:

Meaning of Consumer

Concept of Consumer Protection and Common Malpractices

Need for Consumer Protection

Consumer Movements (Case Studies to be mentioned)

Causes of Consumer Exploitation

Rights of Consumers

Responsibilities of Consumers

Ways and Means of Consumer Protection

COPRA

INDIVIDUAL FORMAL HANDWRITTEN REPORT

INSTRUCTIONS AND GUIDELINES TO ON HOW TO WRITE THE PROJECT:

- The other side of the paper i.e., the left side should be used for pasting pictures, newspaper cuttings etc.

- However, lines to write/pictures/watermarks/borders can be printed.

- Cover page also has to be hand written.

- You can use charts/ colored sheets/ any other paper.

- Cover page showing project title, student information, school and year.

- List of Content or Index

- Acknowledgement Preface – (In this section you may thank the people who have helped you in writing the report)

- Introduction - The Introduction should present the aim of the project and the background of investigation.

It should explain why the project is important and interesting.

- Topics with suitable heading

- Planning and activities to be done during the project, if any / if required

- Conclusion – What have you understand about the project, its importance etc.

- Bibliography – This includes references to websites and books / articles consulted while writing the report. While mentioning the website - the correct web address and not just the name of the search engine should be mentioned.

- All photographs and sketches should be labelled and related to the theme.

- Question based on the project report will be asked as Viva test.

Viva test on: 28/8/2023

NOTE: Kindly adhere to the submission date i.e. 28/08/2023.

MATHEMATICS

1) Show that $5 - 2\sqrt{3}$ is an irrational number.

2) Show that $\sqrt{p} + \sqrt{q}$ is irrational where p and q are primes.

3) Show that 12^n can never end with the digit 0 or 5 for any natural number n .

4) If a and b are the If p is a prime number, then prove that $\sqrt{p}$ is irrational.

5) zeroes of a polynomial $px^2 - 5x + q$, then find the values of p and q, where $a + b = ab = 10$.

6) Find a quadratic polynomial, whose zeroes are reciprocals of the zeroes of the polynomial $x^2 - x - 6$.

7) If $47x + 31y = 18$ and $31x + 47y = 60$, then find the value of $x + y$.

8) Find the value of k for which the quadratic equation $(3k + 1)x^2 + 2(k + 1)x + 1 = 0$, has equal roots. Also find these roots.

9) Find the roots of the quadratic equation $9x^2 - 9(a + b)x + \left(2a^2 + 5ab + 2b^2\right) = 0$.

10) Find the solution of the equation $\frac{x-1}{2x+1} + \frac{2x+1}{x-1} = \frac{5}{2}$, $x \neq \frac{-1}{2}$, 1 by factorisation method.

11) A factory kept increasing its output by the same percentage every year. Find the percentage if it is known that the output is doubled in the last two years.

12) If three times the larger of the two numbers is divided by the smaller one, we get 4 as quotient and 3 as remainder. Also, if seven times the smaller number is divided by the larger one, we get 5 as quotient and 1 as remainder. Find the numbers.

13) Draw the graphs of the pair of equations $2x + y = 4$ and $2x - y = 4$. Write the vertices of the triangle formed by these lines and the Y axis. Find the area of this triangle.

14) Find the values of α and β for which the following system of linear equations has infinite number of solutions. $2x + 3y = 7$ and $2\alpha x + (\alpha + \beta)y = 28$.

15) Determine k so that $k^2 + 4k + 8$, $2k^2 + 3k + 6$, $3k^2 + 4k + 4$ are three consecutive terms of an AP.

16) If 0.8, a, 2 are three consecutive terms of an AP, then find the value of a.

17) Which term of the sequence 53, 48, 43, … is the first negative term ?

18) Find the sum of 11 terms of an AP whose middle term is 30.

19) The sum of first six terms of an AP is 42. The ratio of its 10th term to its 30th term is 1: 3. Calculate the first and the 13th term of the AP.

20) Solve the following equation for x:
$$9\left(x^2 + \frac{1}{x^2}\right) - 9\left(x + \frac{1}{x}\right) - 52 = 0.$$

NOTE : Kindly submit positively on 23rd AUGUST 2023.

GENERAL SCIENCE

PHYSICS

QUESTIONS (To be answered in a separate A4 size sheets)

1 The refractive index of carbon disulphide is 1.63. What is the meaning of this statement?

2 A person wants to see the full length image of tall building in a small mirror. Which type of mirror should be used by him?

3 Distinguish between real and virtual images.

4 A ray of light travelling in air enters obliquely into water. Does the light ray bend towards or away from the normal? Why?

5 What is lateral displacement of light? State the factors affecting it.

6 Name the type of mirror used in the following situations:

(i) Head light of a car

(ii) Rear-view mirror of vehicles

(iii) Solar furnace

7 Under what condition will a glass lens placed in a transparent liquid becomes invisible?

8 Draw a ray diagram and also state the nature of the image formed by concave mirror when the object is placed at the center of curvature.

9 Draw a diagram to show dispersion of white light by a glass prism. Label the colors that appear at the two ends of the color band. State the reason why different colored rays deviate differentially in the prism.

10 With a help of a ray diagram, state the meaning of refraction of light. State Snell's law of refraction of light and also express it mathematically.

11 Given below are the refractive indices of a few media. Identify the media in which the speed of light will be highest and lowest respectively.

Medium	Refractive Index
Diamond	2.42
Glass	1.5
Water	1.3
Kerosene oil	1.4

12 Identify the nature of spherical mirror or of lens in the following cases, and draw ray diagrams for each case.

(a) When object is placed between mirror and its focus, image formed is erect, enlarged and behind it.

(b) When object is placed at 2F of the lens image formed is diminished, erect and the same side of the lens as that of the object.

13 Can refractive index of a medium be less than unity? What is the value of refractive index of vacuum?

14 Why does a light ray incident on a rectangular glass slab immersed in any medium emerges parallel to itself? Explain using a diagram.

15 For a concave mirror draw ray diagram to show the reflected ray when ray of light incident obliquely on the pole of the mirror.

SECTION B (NUMERICAL PROBLEMS)

16 Speed of light in glass is 2×10^8 m/s and its refractive index is 1.5. What is the speed of light in medium whose refractive index is 4/3?

17 The image of a candle flame placed at a distance of 45cm from a spherical lens is formed on a screen placed at a distance of 90cm from the lens. Identify the type of lens and calculate its focal length. If the height of the flame is 2cm, find the height of its image.

18 At what distance should an object be placed from a convex lens of focal length18cm to obtain an image at 24cm from it on the other side. What will be the magnification produced in this case?

19 An object of height 6cm is placed perpendicular to the principal axis of a concave lens of focal length 5cm. Determine the position, size and nature of the image if the distance of the object from the lens is 10cm.

20 An object is kept at a distance of 18cm,20cm 22cm and 30cm from a lens of power+5D.
(a) In which case or cases would you get magnified image?

(b) Which of the magnified image can be obtained on a screen?

CHEMISTRY

1. Write the balanced chemical equation for each reaction and mention the type of chemical reaction that takes place when:

(i) A magnesium ribbon is burnt in air.

(ii) Limestone is heated.

(iii) Potassium iodide solution is added to a solution of lead nitrate.

(iv) Electricity is passed through acidified water.

(v) Ammonia and hydrogen chloride are mixed with each other.

(vi) Iron reacts with steam.

(vii) Magnesium reacts with dil. HCl.

(viii) Copper is heated in air.

(ix) Silver bromide is exposed to sunlight.

(x) Potassium bromide + Barium iodide--------> Potassium iodide + Barium bromide.

(xi) Aluminum + Bromine-------> Aluminum bromide.

(xii) Calcium carbonate---------> Calcium oxide + Carbon dioxide.

(xiii) Silver chloride-------> Silver + Chlorine.

(xiv) Zinc + Silver nitrate ------> Zinc nitrate + Silver.

(xv) Barium hydroxide + Ammonium chloride-----> Barium chloride + Ammonium hydroxide.

2. (a) Write the chemical name and formula of marble.

(b) It has been found that marbles of Taj Mahal are getting corroded due to development of industrial areas around it. Explain this fact giving a chemical equation.

(c) (i) What happens when CO_2 is passed through lime water?

(ii) What happens when CO_2 is passed in excess through lime?

3. (a) Three acidic solutions A, B and C have pH = 0, 3 and 5 respectively.

(i) Which solution has highest concentration of H^+ ions?

(ii) Which solution has the lowest concentration of H^+ ions?

(b) How concentrated sulphuric acid can be diluted? Describe the process.

4. Solve all in text questions [blue questions] and exercise questions of Chapter 1 & 2.

BIOLOGY

1. Complete the NCERT exercise questions/answers from chapter "Control and Coordination"
2. Complete record Book.
3. All diagrams with labeling from Life Processes.

SECOND LANGUAGE

HINDI

हिंदी व्याकरण अभ्यास कार्य पुस्तिका में निम्नलिखित अभ्यास पूरे कीजिए-

अपठित गद्यांश-   अभ्यास प्रपत्र – 1,2,3,&4

अनुच्छेद व पत्र लेखन-   अभ्यास प्रपत्र-1

सूचना लेखन-   अभ्यास प्रपत्र -5

लघु कथा लेखन-   अभ्यास प्रपत्र-9

FRENCH

I- Donnez l'adjectif du:

a- jour ....

b- semaine ....

c- mois..

d- année :...

II- Parlez des systèmes éducatifs en France et en Inde.

....
....
....
....
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....
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....

III- Donnez la forme nominale des verbes suivants :

Arriver = ...

Entrer = ...

Sortir = ...

Étudier = ...

S'intéresser = ...

Soulager = ...

Partir = ...

Consommer = ...

Encourager = ...

Acheter = ...

IV- Ecrit une lettre à un(e) ami(e) canadien(ne) lui parlent du système éducatif en France/ en Inde.

V- Mettez ces pronoms relatifs dans des phrases:

a- Lequel:

....

b- Laquelle:

....

c- Lesquels:

....

d- Lesquelles:

....

VI-Mettez les pronoms : qui/que/ ou/ dont, dans des phrases.

a- Qui

....

b- Que

....

c- Ou

....

d- Dont

....

VII- Ton cousin ta écrit il te parle de son travail et combien cela lui plait, rédige cette lettre d'environ 80 mots.

VIII- Conjuguez ces verbes au plus que parfait :

1/ être

Je	Nous
Tu	Vous
Il	Ils
Elle	Elle

2/ avoir

Je	Nous
Tu	Vous
Il	Ils
Elle	Elle

3/emprunter

Je	Nous
Tu	Vous
Il	Ils
Elle	Elle

4/ Descendre.

Je	Nous
Tu	Vous
Il	Ils
Elle	Elle

MALAYALAM

ഉപന്യാസം തയ്യാറാക്കുക .

1. മാറുന്ന ലോകവും മാനവികതയും
2. വിദ്യാർത്ഥികളും രാഷ്ട്രീയവും

കത്ത് തയ്യാറാക്കുക .

1. ബാലാവകാശങ്ങളെക്കുറിച്ചു കുട്ടികൾക്ക് ഒരു ബോധവൽക്കരണ ക്ലാ സ് സംഘടിപ്പിക്കണമെന്നാവശ്യപ്പെട്ടുകൊണ്ട് ബാലാവകാശ കമ്മീഷ ൻ ചെയർമാന് കത്ത് തയ്യാറാക്കുക .

2. വിദ്യാലയ കലാസാഹിത്യവേദിയുടെ സെക്രട്ടറിയായ താങ്കളുടെ നേ തൃത്വത്തിൽ കുറ്റിപ്പുഴ കൃഷ്ണപിള്ള ജന്മദിനംസമുചിതമായി ആച രിക്കുവാൻ തീരുമാനിച്ചു എന്ന് കരുതുക . സ്കൂൾ ബോർഡിൽ പ്ര സിദ്ധികരിക്കാൻ ഒരുക്ഷണക്കത്തു തയ്യാറാക്കുക

പത്രവാർത്ത തയ്യാറാക്കുക .

1. അതിജീവനമാണ് പ്രതിരോധത്തിന്റെ പ്രകടിത രൂപം . വൈകല്യങ്ങ ളെ അതിജീവിച്ചു പഞ്ചഗുസ്തി മത്സരത്തിൽജനറൽ വിഭാഗത്തിൽ ഒ ന്നാം സ്ഥാനം കരസ്ഥമാക്കിയ പൂർവ വിദ്യാർത്ഥി ജോബിൻ സെബാ സ്റ്റ്യന് നിങ്ങളുടെസ്കൂളിൽ സ്വീകരണം നൽകി എന്ന് കരുതുക . പ്രസ്തുത സമ്മേളനത്തിന്റെ പത്രവാർത്ത തയ്യാറാക്കുക .

2. ഒരു നാടോടി സ്ത്രീയെയും അവരുടെ കുട്ടിയെയും നാട്ടുകാർ പൊതി രെ തല്ലി .ഈ സംഭവത്തെ ഒരുപത്രവാർത്തയാക്കി മാറ്റുക .

TAMIL

a. Non detail

1. புயலிலே ஒரு தோணி

2. கோபல்லபுரத்து மக்கள்

b. கட்டுரை:

நோயற்ற வாழ்வே குறைவற்ற செல்வம்

ARABIC

1- تاج محل

2- القلعة الحمراء

3- مكتبة المدرسة

4- اسرتی

5- ملعب المدرسة

6- مدرستی

الموضوع لايقل عن 10 جمل

URDU

۱۔اردوزبان پر دو سوالفاظ کامضمون لکھیے۔

۲۔ایک چارٹ پرمرزاغالب اورمیرتقی میرکے پانچ پانچ اشعارخوش خط لکھیے۔