PRAGYAN

SENIOR SECONDARY SCHOOL, ITARSI

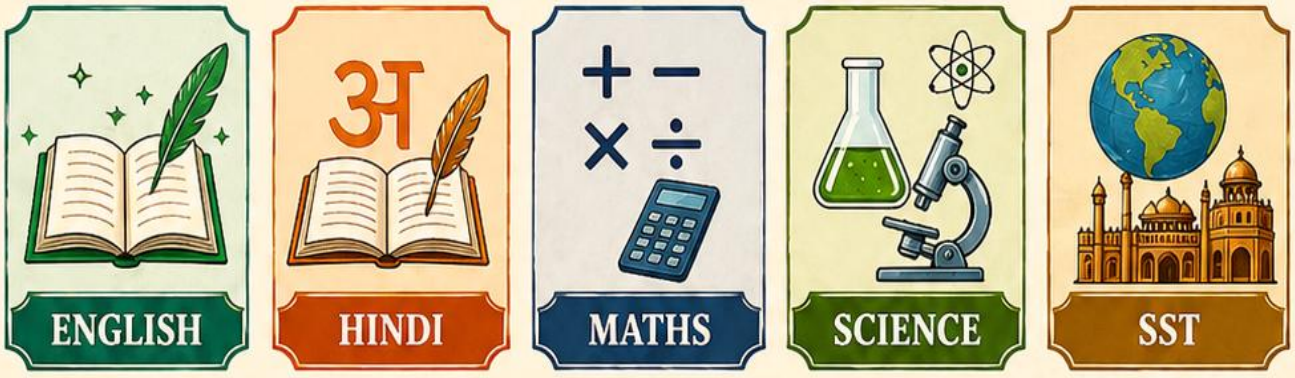
KNOWLEDGE • VALUES • EXCELLENCE

HOLIDAY HOMEWORK

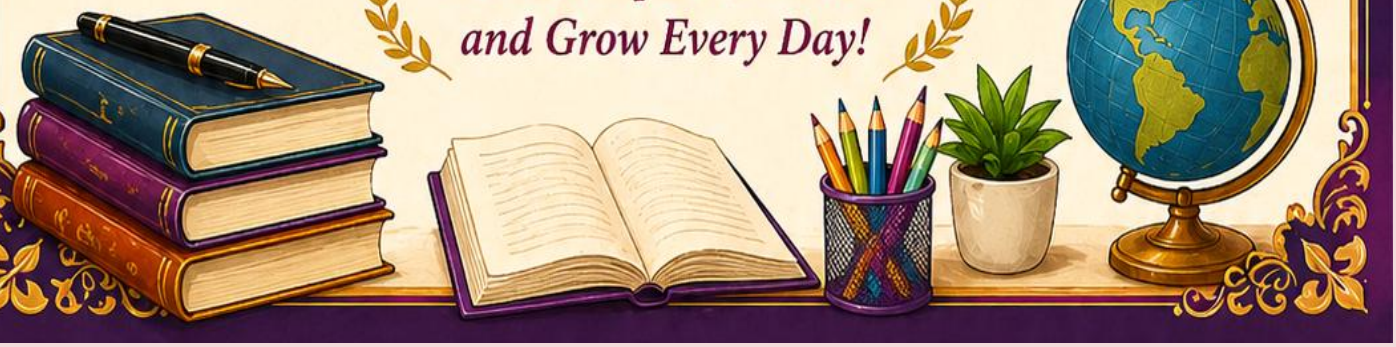
NAME : _____ | CLASS : 10th

ROLL NO. : _____ | SESSION : 20____ - 20____

SUBJECTS



Learn, Explore, Create and Grow Every Day!



English

Writing Skills (PYQ - Last 5 Years)

Solve questions based on formats like formal letters, analytical paragraphs, and story writing from previous year question papers of the last five years. Focus on correct format, proper expression, and maintaining the required word limit.

Reading Skills (PYQ - Last 5 Years)

Solve unseen passages from the last five years including discursive and case-based passages. Answer all comprehension questions carefully with proper understanding of the passage.

Grammar (PYQ - Last 5 Years)

Solve grammar questions from previous year papers covering topics such as tenses, modals, reported speech, and subject-verb agreement.

Hindi

- ✍ खंड – A (पठन एवं लेखन कौशल)
- अपठित गद्यांश अभ्यास
- किसी भी पुस्तक/समाचार पत्र से 2 गद्यांश चुनें
- 5–5 प्रश्न बनाकर उत्तर लिखें
- पत्र लेखन (कोई 2)
- प्राचार्य को पत्र – पुस्तकालय सुविधा हेतु
- मित्र को पत्र – छुट्टियों का वर्णन
- नगर निगम को पत्र – स्वच्छता अभियान
- अनुच्छेद लेखन (100–120 शब्द)
- मेरा प्रिय त्योहार
- पर्यावरण संरक्षण
- डिजिटल शिक्षा के लाभ
- विज्ञापन लेखन
- खंड – B (व्याकरण)
- अभ्यास करें:
- वाक्य – 10 उदाहरण
- वाच्य– 10 उदाहरण
- अलंकार – 15
- खंड – C (पाठ्यपुस्तक)
- क्षितिज (3 पाठ)
- दो काव्य खंड के पाठों का सार((summary)
- दो गद्यखंड के पाठों का सार(summary)
- कृतिका (2 पाठ)

 संक्षिप्त सार लिखें
  खंड – D (रचनात्मक कार्य / Project Work)
 एक सुंदर प्रोजेक्ट फाइल बनाएं (चित्रों सहित)
 विषय (कोई एक चुनें):
 हिंदी साहित्य के प्रसिद्ध लेखक
 भारत की लोक संस्कृति
 पर्यावरण और हमारा कर्तव्य
 सोशल मीडिया का प्रभाव
 प्रोजेक्ट में शामिल करें:
  कवर पेज
  विषय सूची
  परिचय
  चित्र व विवरण
  निष्कर्ष
  खंड – E (मौखिक गतिविधि)
 भाषण (2 मिनट)
 शिक्षा का महत्व
 समय का सदुपयोग
 जल संरक्षण
 कविता याद करें और प्रस्तुति दें
  विशेष निर्देश
 साफ-सुथरा और सुंदर लिखें
 रंगों और चित्रों का प्रयोग करें
 हर सेक्शन अलग पेज पर बनाएं
 समय पर कार्य पूरा करें
 Tip:
आप अलग-अलग रंगों के पेन, बॉर्डर, स्टिकर और स्केच पेन से इसे और भी आकर्षक बना सकते हैं।

Maths

Complete Project Work creatively.

 SECTION A: PROJECT WORK

 Project 1: Real Numbers in Daily

Show how HCF and LCM are useful in daily life (e.g., school bells, traffic lights).

Activity: Find HCF of 3 numbers using prime factorization method.

 SECTION B: NUMERICAL QUESTIONS

 Chapter 1: Real Numbers

Find LCM and HCF of 12, 18, 30.

Check whether 6n can end with digit 0 for any natural number n.

Prove that √5 is irrational.

Find HCF using prime factorization: 96 and 404.

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 Chapter 2: Polynomials

Find zeroes of polynomial:

$6x^2 - x - 2 = 0$.

$3x^2 - 2\sqrt{6}x+2=0$.

Verify relationship between zeroes and coefficients.

(i) $x^2 - 2x - 8$

(ii) $4s^2 - 4s + 1$

(iii) $6x^2 - 3 - 7x$

(iv) $4u^2 + 8u$

(v) $t^2 - 15$

(vi) $3x^2 - x - 4$

Find cubic polynomial whose zeroes are 1, 2, 3.

 Chapter 3: Linear Equations in Two Variables

Solve graphically:

$x + 3y = 6$

$2x - 3y = 12$

Find solution of:

1) $x + y = 14$

$x - y = 4$

(ii) $s - t = 3$

$s/3 + t/2 = 6$

(iii) $3x - y = 3$

$9x - 3y = 9$

Check whether following equations are consistent:

(i) $x + y = 5$

$2x + 2y = 10$

(ii) $x - y = 8$

$3x - 3y = 16$

(iii) $2x + y - 6 = 0$

$4x - 2y - 4 = 0$

(iv) $2x - 2y - 2 = 0$, $4x - 4y - 5 = 0$

Word problem:

Sum of two numbers is 27 and difference is 3. Find numbers.

 Chapter 4

Word problem:

Product of two consecutive numbers is 56. Find numbers.

✍ SECTION ACTIVITY / EXPERIENTIAL LEARNING

Solve a real-life problem using quadratic equation (like area or speed).

Make a formula chart for all chapters.

Write important theorems:

Relationship of zeroes

Quadratic formula

Science

1. Physics

Topic: Light – Reflection and Refraction

Activity: Create a working model or diagram of a periscope or kaleidoscope or Tesla coil or Electromagnet.

Assignment: Write a report (2-3 pages) on the application of reflection in real life (e.g., rearview mirrors, optical fibers).

Bonus: Record a 2-minute video explaining the concept of total internal reflection.

2. Chemistry

Topic: Chemical Reactions and Equations

Activity: Perform any two simple, safe experiments at home (e.g., vinegar and baking soda reaction, rusting of iron) and record observations.

Assignment: Prepare a handwritten file on the following:

- Types of chemical reactions (with examples and diagrams)
- 5 daily life examples of chemical changes vs physical changes

3. Biology

Topic: Life Processes

Activity: Create a model or diagram (3D/2D) of the human digestive system or Excretory system or Respiratory system.

Assignment: Prepare a research file on:

- Nutrition in humans vs nutrition in amoeba (comparison chart)
- Importance of a balanced diet during summer

Creative Task: Maintain a week-long food diary and reflect on your eating habits.

4. Integrated Science Project

Topic: Environmental Awareness

Make a Poster: "Save Water, Save Life" or "Say No to Plastic"

Research Project: Write a 500-word report on any one:

Renewable sources of energy

Impact of pollution on human health

Any local environmental issue in your area (e.g., water scarcity, garbage disposal)

5. Science in Daily Life

Interview Task: Talk to any 1 elder in your home and ask how science has changed their life over the decades. Write a short report.

Optional Reading: Read any science-related article or watch a documentary, and summarize your key learnings.

6. MCQ Practice

Solve 20-25 MCQs from each chapters:

7.Practice Questions

Solve 15-20 questions of each chapter from sample papers or last year's board papers.

8. Write and learn the answers of the following questions

Write the chemical formula of quicklime and slaked lime.

1. What change is observed when iron nails are dipped in copper sulfate solution?
2. Differentiate between a physical and a chemical change with one example each.
3. Write the balanced chemical equation for the reaction of sodium with water.
4. Why is it important to balance a chemical equation?
5. Identify the type of chemical reaction and balance: $BaCl_2 + Na_2SO_4$--------- $NaCl + BaSO_4$
6. What is rancidity? How can it be prevented?
7. Explain the following types of chemical reactions with examples: a) Combination

b) Decomposition

c) Displacement

d) Double displacement

e) Oxidation and Reduction

9.What happens when:

a) Lead nitrate is heated?

b) Silver chloride is kept in sunlight?

Write chemical equations and identify the type of reactions.

10. Balance the following equations:

(a) $HNO_3 + Ca(OH)_2$ $Ca(OH)_2$ à$Ca(NO_3)_2 + H_2O$

(b) $NaOH + H_2SO_4$ $Na_2SO_4 + H_2O$

(c) $NaCl + AgNO_3$ $AgCl + NaNO_3$

(d) $BaCl_2 + H_2SO_4$ $BaSO_4 + HCl$

11.What is the function of stomata?

12. What is the role of bile juice in digestion?

13. Write the equation of photosynthesis.

14. Differentiate between aerobic and anaerobic respiration.

15. What are the differences between arteries and veins?

16. Why is the small intestine longer in herbivores than in carnivores?

17. Mention the role of the diaphragm in breathing.

18.Describe the process of nutrition in Amoeba with a neat diagram.

19.Explain the human respiratory system with a labelled diagram.

20.Describe the structure and functioning of the human heart.

21.What are the steps involved in the process of nutrition in human beings?

22. Explain double circulation in humans with the help of a diagram.

23.Draw a labelled diagram of:

a) Human digestive system

b) Human excretory system

c) Nephron

d) Human heart

24. A person has swollen feet and difficulty urinating.Which organ system may be failing? Why?

25.Why do athletes breathe faster and deeper after heavy exercise?

26. What is the speed of light in vacuum?

27. What type of mirror is used in vehicles as a rearview mirror?

28. Draw ray diagrams for the image formed by a concave mirror when the object is:

a) Beyond C

b) At F

29. State the mirror formula and explain each term.

30. What is the difference between real and virtual images?

31.Define 1 dioptre of power.

32. A concave lens has a focal length of 20 cm. Find its power.

33.Describe the rules for image formation in concave and convex lenses.

34. With the help of ray diagrams, explain the image formation in convex lenses for:

a) Object at 2F

b) Between F and lens

35.A 5 cm tall object is placed 20 cm in front of a concave mirror of focal length 10 cm. Find the position, nature, and size of the image formed.

36. An object is placed 15 cm from a concave mirror of focal length 10 cm. Find the position and nature of the image.

Complete your copy work.

Social Science

Summarise entire 1 chapter in one page do this in all the chapters.. write this in good words and proper manner .

Introduction

[ ] key Concepts

[ ] Important Terms / Definitions

[ ] Main Points / Features

[ ] Examples / Case Studies

[ ] Diagrams / Maps (if any)

[ ] Conclusion

Example :- Chapter: Resources and Development

Introduction

Types of Resources

Resource Planning

Land Resources

Land Degradation & Conservation

Conclusion

Computer

NOTE :- ALL STUDENT HAVE TO COMPLETE THEIR BOTH FAIR COPY PART "A" AND "B" , TEXT BOOK WORK.

Part - A

Unit :-1 and 2

Part - B

Unit :- 1 and 2

Q1 Learn all question and answers of all chapters.

Q2 Describe about communication cycle & skills,types, barriers, feedback and how to make communication effective.

Q3 Give a short brief about self management skills and stress management techniques and working independently or become self reliant.

Q4 Draw the cycle of communication, methods in a sheet.

Q5 Write short brief on Ms word and it's working all formatting features like adding or creating styles, graphics etc.

Q6 Draw a figure of excel spreadsheet in a sheet where you should enter the data using macro VBA Code and also the output. (make a simple code)

Q6 Make a data using scenarios and goal seek in a sheet.

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