

SYLLABUS (2022-23)

CLASS VI

CONTENTS

S.No. Subject

1. English
2. Hindi
3. French
4. Sanskrit
5. Mathematics
6. Science
7. Social Science
8. Computer Science
9. General Knowledge
10. Art Education
11. Physical Education & Health Education

ENGLISH

Learning Objectives -

Reading

To enable the students to -

1. read silently at varying speed depending on the purpose of reading.
2. recognise the organisation of a text.
3. identify the main points of a text.
4. read extensively on their own.

Writing

To enable the students to -

1. express ideas in clear and grammatically correct English, using appropriate punctuation and cohesion devices.
2. write a clear description.
3. expand notes into a piece of writing.
4. use an appropriate style and format to write letters (formal and informal), articles etc.;

monitor, check and revise written work.

Listening

To enable the students to -

1. adopt different strategies according to the purpose of listening (e.g., for pleasure, for general interest, for specific information).
2. understand and respond appropriately to directive language (e.g., instruction, advice, request and warning).
3. understand and interpret messages conveyed in person or by telephone.

Speaking

To enable the students to -

1. operate intelligibly using appropriate word stress, sentence series and intonation pattern.
2. narrate incidents and events, real and imaginary, in a logical sequence.

Textbooks

1. Enhanced English Alive Coursebook- 6 (MCB)
2. Enhanced English Alive Literature Reader- 6 (LR)
3. Collins English Grammar and Composition-6
4. Birbal- The Clever Courtier by Anupa Lal

General Note:

A thorough reading of the text on regular basis is a must as questions from within the lesson will be given in the exams/tests. Questions in the exams are likely to be different from those attempted in the notebooks.

FIRST TERM

Reading Comprehensions

1. MCB -1. Cypress Street
2. Saving Dory

Writing Skills

1. Notice Writing
2. Display Advertisement
3. Informal Letter Writing

Grammar

1. Kinds of Sentences
2. Phrases and Clauses
3. Nouns
4. Nouns: Number
5. Countable and Uncountable Nouns
6. Nouns: Gender
7. Possessive Nouns
8. Verbs
9. Tenses

10. The Present Tense
11. The Past Tense
12. The Future Tense
13. Active and Passive Voice
14. Test 1

Literature and Long Reading Text

- LR - 1. Be the Best (Poem)
- 2. The Pobble Who Has No Toes (Poem)
- MCB - 3. What Can You Do? (Poem)
- LR - 4. Kali and the Rat Snake
- 5. Amigo Brothers
- MCB - 6. Travelling with Grandfather's Zoo
- 7. Eat From the Edges

N.B.: Diary entry from the following chapter is to be done in class and assessed in literature section as long answer (80-100 words)

Kali and the Rat Snake

Birbal – The Clever Courtier Chapters 1 to 11

Note: There will be separate assessment of listening and speaking skills.

Listening Activities to be taken up in the term -

MCB-

1. Children at Work (pg. 124)
2. Saving Dory (pg. 54)
3. The Man on the Island (pg.63)
4. Eat From the Edges (pg. 148)

Creative Writing (Expressions)

1. Imagine you are a shipwrecked sailor rescued from an uninhabited island after four years. Make a survival handbook so that others can learn from your experience. Write the do's and don'ts for survival on an island, including information about the things one would need to survive there. Refer to the chapter 'Robinson Crusoe'. (LR)
2. Read the chapter 'The Girl Who Became Queen'(LR) about Rani Laxmibai's bravery and courage. Write a paragraph describing her personality and strong will power.
3. Read the poem, 'The Laburnum'(LR) and write a diary entry describing a day when you spent some time in the lap of nature and felt relaxed and refreshed.

SECOND TERM

Reading Comprehensions

- MCB - 1. The Tree House (Poem)
2. Children at Work
LR - 3. Hearts and Hands

Writing Skills

1. Dialogue Writing
2. Poster Making
3. E-mail Writing

Grammar

1. Transitive and Intransitive Verbs
2. Agreement of Subject with Verb
3. Finite and Non- Finite Verbs
4. Pronouns
5. Adjectives
6. Grammar on the Go
7. Articles
8. Adverbs
9. Prepositions
10. Conjunctions
11. Interjections
12. Direct and Indirect Speech
13. Phrasal Verbs
14. Prefixes and Suffixes
15. Punctuation
16. Test -2
17. Test - 3

Literature and Long Reading Text

- LR - 1. The Pied Piper of Hamelin (Poem)
MCB - 2. I Speak Sign Language (Poem)
3. Upon the Songs of Whales (Poem)
L.R- 4. Simon Says
5. The Stone
MCB- 6. Operation Blackbeard
7. Fight, Manju, Fight!
8. Powerful Moves

N.B. : Diary entry from the following chapter is to be done in class and assessed in literature section as long answer (80-100 words)

Fight, Manju, Fight!

Birbal – The Clever Courtier Chapters 12 to 21

Note: There will be separate assessment of listening and speaking skills.

**Listening Activities to be taken up in the term-
MCB-**

1. Operation Blackbeard (pg.25)
2. Arunima Sinha: On Top of the World (pg. 94)
3. The Story of the Anklet (pg.137)
4. Fight, Manju, Fight! (pg.83)

Creative Writing (Expressions)

1. Your uncle is an explorer. You accompanied him on a submarine in the Indian Ocean. Write an email to your friend describing the experience. Include the following points in your e-mail.
 - Feelings on boarding a submarine for the first time (fear, excitement or curiosity)
 - Expectations
 - Any responsibility undertaken by you
(Refer to the chapter 'The Man on the Island'(MCB)
2. Imagine you are studying Journalism and got the rare opportunity to interview a famous personality. Write a dialogue between you and him, in the form of an interview. Include the following points.
 - His mental ability
 - His perseverance
 - Motivational talk
(Refer to the chapter 'Arunima Sinha: On Top of the World'. (MCB)
3. Read the chapter 'The Story of the Anklet'(MCB) and imagine yourself to be the king of Madurai. Write an account describing the way you would have handled the case of the anklet theft.

हिन्दी

हिन्दी शिक्षण का उद्देश्य :

1. भाषा की बारीकी को समझना और सौन्दर्यबोध की क्षमता का विकास करना ।
2. दृश्य या श्रव्य माध्यमों की सामग्री को पढ़कर, देखकर और सुनकर समझने तथा उस पर स्वतंत्र व स्वाभाविक, मौखिक एवं लिखित प्रतिक्रिया व्यक्त करने की क्षमता का विकास करना ।
3. विभिन्न साहित्यिक विधाओं का आनन्द उठाने की क्षमता का विकास करना ।
4. पठित, लिखित और सुने हुए भाषिक ज्ञान से संबंधित सामग्री का तार्किक दृष्टि से अध्ययन करने की प्रवृत्ति का विकास करना ।

5. अपने भावों व विचारों को सहज, स्वाभाविक और शुद्ध अभिव्यक्त करने की क्षमता का विकास करना।
6. शब्दों, मुहावरों, लोकोक्तियों का सुचिंतित प्रयोग करने की क्षमता का विकास करना।
7. भाषा की नियमबद्ध प्रकृति को पहचानना और उसका विश्लेषण करना ।
8. मौखिक एवं लिखित अभिव्यक्ति के संदर्भ और आवश्यकता के अनुसार समुचित भाषा-शैली व प्रयोग को चुनने की समझ का विकास करना।

नोट :

1. प्रत्येक पाठ से शब्दार्थ, नए शब्द, वाक्य प्रयोग, प्रश्नोत्तर और निबंधात्मक प्रश्न करवाए जाएँगे ।
2. परीक्षा में पाठ के मध्य से प्रश्न पूछे जाएँगे; अतः पाठ को ध्यानपूर्वक पढ़ना आवश्यक है ।

पाठ्य पुस्तकें

1. वसंत भाग-1 (एन.सी.ई.आर.टी)
2. रामायण सार (आर्य पब्लिशिंग कंपनी)
3. हिंदी व्याकरण सुधा – भाग-6 (गोयल ब्रदर्स प्रकाशन)

प्रथम सत्र

वसंत भाग-1

गद्य-पाठ -

1. बचपन
2. नादान दोस्त
3. ऐसे-ऐसे

पद्य-पाठ -

1. वह चिड़िया जो (कविता)
2. चाँद से थोड़ी-सी गप्पें (कविता)

पूरक-पुस्तक

रामायण सार -

1. बाल-कांड (राम-जन्म, राम-विवाह)
2. अयोध्या-कांड (कैकेयी के दो वरदान, राम का वन-गमन, चित्रकूट में राम-भरत मिलन)
3. अरण्य-कांड (दंडकवन, सीताहरण, सीता की खोज)

व्याकरण -

1. भाषा, लिपि और व्याकरण
2. वर्ण और वर्णमाला

3. संज्ञा
4. लिंग, वचन और कारक
5. सर्वनाम
6. पर्यायवाची शब्द (1 से 15 तक)
7. विलोम शब्द (1 से 20 तक)
8. वाक्यांशों के लिए एक शब्द (1 से 20 तक)
9. अनेकार्थक शब्द (1 से 10 तक)
10. मुहावरे (1 से 10 तक)

रचना-कौशल -

1. अपठित-गद्यांश -
(क) पेपरमेशी
(ख) संसार पुस्तक है
2. अपठित-पद्यांश - मैं सबसे छोटी होऊँ
3. चित्र-वर्णन- 2
4. संवाद-लेखन- 2
5. निबंध-लेखन- 2

ग्रीष्मावकाश (प्रयोज्य कार्य हेतु) -

1. पार नज़र के
2. साँस-साँस में बाँस

द्वितीय सत्र

वसंत भाग-1

गद्य पाठ -

1. टिकट-अलबम
2. नौकर

पद्य पाठ -

1. साथी हाथ बढ़ाना (कविता)
2. झाँसी की रानी (कविता)
3. वन के मार्ग में (सवैया)

पूरक - पुस्तक

रामायण सार -

1. किष्किंधा - कांड (राम-सुग्रीव मित्रता)

2. सुंदर-कांड (लंका में हनुमान)
3. लंका-कांड (लंका पर चढ़ाई, लंका विजय, विभीषण का राज्याभिषेक)
4. उत्तर-कांड (राम-राज्य)

व्याकरण -

1. विशेषण
2. क्रिया (कर्म के आधार पर)
3. क्रिया-विशेषण
4. विराम-चिह्न
5. पर्यायवाची शब्द (16 से 30 तक)
6. विलोम शब्द (21 से 40 तक)
7. वाक्यांशों के लिए एक शब्द (21 से 40 तक)
8. मुहावरे (11 से 20 तक)

रचना-कौशल -

1. अपठित- गद्यांश - लोकगीत
2. अपठित- पद्यांश - मत बाँटो इंसान को
3. चित्र-वर्णन- 2
4. संवाद-लेखन- 2
5. विज्ञापन-लेखन- 2
6. पत्र-लेखन (अनौपचारिक-पत्र)- 2
7. निबंध-लेखन- 2

शीतावकाश (प्रयोज्य कार्य हेतु) -

1. अक्षरों का महत्त्व
2. जो देखकर भी नहीं देखते

FRENCH

Learning Objectives:

1. To acquaint the students with the Culture and Civilisation of France.
2. To develop speaking and listening skills by teaching the pronunciation of the alphabets in French and accents.
3. To explain the concept of linking greetings for different moments of the day.
4. To enable the students to express themselves more effectively, naturally, and correctly in the productive skill of writing.
5. To enable the students to write in an appropriate style for communication purposes.

6. To enhance the level of vocabulary and strengthen their concepts of grammar.
7. To develop the basic understanding of the conjugation of verbs with different subject pronouns, to differentiate between definite and indefinite articles, colours, numbers, adjectives etc.
8. To implement different strategies to make learning French an enjoyable and interesting experience.

Textbook : Apprenons le Français-1

Workbook : Cahier d'exercices-1

Dictionary: Collins Gem

General Note:

Question from within the lessons and related to Culture and Civilisation of France will be asked in the exams/tests, so the students must ensure a thorough reading of the text.

FIRST TERM

Detailed Study

Textbook : Leçon 0 : Vous connaissez la France ?

Leçon 1 : Les salutations

Leçon 2 : Comptons ensemble

Leçon 3 : Les copains

Leçon 4 : Devinez

Leçon 5 : Dans la classe

Workbook : Leçons-0, 1, 2, 3, 4, 5

Grammar :

1. L'alphabet
2. Les nombres de 1 à 100
3. Les accents
4. Les salutations
5. Les pronoms sujets
6. Les verbes être et avoir
7. Les articles indéfinis
8. Le pluriel des noms
9. Qu'est-ce que c'est ? / Qui est-ce ?
10. Les professions
11. Les adjectifs
12. Corrigez la faute
13. Chassez l'intrus

SECOND TERM

Detailed Study

Textbook : Leçon 6 : Les amis de Caroline

Leçon 7 : Quel jour sommes-nous ?

Leçon 8 : La famille de Manuel

Leçon 9 : Les vacances

Leçon 10 : Le drapeau de mon pays

Workbook : Leçons 6, 7, 8, 9, 10.

Grammar :

1. Les articles définis
2. Les nationalités
3. Le verbe <<aller>>
4. Les verbes en groupe <<ER>>
5. Mettez au pluriel
6. Les couleurs (féminin et pluriel)
7. Mettez les phrases en ordre
8. Corrigez la faute
9. Chassez l'intrus

संस्कृत

संस्कृत शिक्षण के उद्देश्य :-

1. संस्कृतभाषा एवं साहित्य के प्रति जिज्ञासा उत्पन्न करना ।
2. अर्थबोध के साथ संस्कृत गद्यांश को पढ़ने की क्षमता विकसित करना तथा संस्कृत श्लोकों को स्मरण कर सस्वर वाचन करने की योग्यता उत्पन्न करना ।
3. संस्कृतभाषा का सामान्यज्ञान कराना जिससे संस्कृत के सरलांशों को सुनकर या पढ़कर विद्यार्थी समझ सकें एवं मौखिक तथा लिखित अभिव्यक्ति कर सकें ।
4. संस्कृत में श्रवण-भाषण-वाचन से लेखन-कौशल तथा भाषागत कौशल का विकास करना।
5. दृश्य-श्रव्य साधनों को ध्यानपूर्वक देखकर, पढ़कर तथा सुनकर उन पर अपेक्षित क्रियाएँ करने में समर्थ होना ।
6. विद्यार्थियों में सौन्दर्यबोध, कल्पनाशीलता तथा चिन्तन की क्षमता का विकास करना।

सामान्य निर्देश :

1. रुचिरा में से परीक्षा हेतु पठित गद्यांशों, श्लोकों, संवादों पर आधारित प्रश्नोत्तर का अभ्यास करवाया जाएगा। भाषिक कार्य में जैसे- प्रश्न-निर्माण, पर्यायवाची, विलोम-शब्द, कर्तृ-क्रिया-पदचयन, विशेषण-विशेष्य, संज्ञा, सर्वनाम-प्रयोग आदि करवाये जाएंगे ।
2. रुचिरा के पाठ्यक्रमानुसार पाठों का सम्पूर्ण अभ्यास तथा समस्त शब्दार्थ करवाये जाएंगे।
3. पाठों का कथाक्रम और श्लोकों का अन्वय परीक्षा में आएगा ।
4. कारक, संख्या, विशेषण-विशेष्य सम्बन्धित नियम, अव्यय, शब्दरूप और धातुरूप वाक्यों में आएंगे ।
5. प्रश्नपत्र संस्कृतभाषा में आएगा ।

पाठ्य-पुस्तकें -

1. रुचिरा (प्रथमो भागः)
2. संस्कृत व्याकरण मणिका (6)

प्रथम सत्र

1. रुचिरा-

1. प्रथमः पाठः - शब्दपरिचयः - I
2. द्वितीयः पाठः - शब्दपरिचयः - II
3. तृतीयः पाठः - शब्दपरिचयः - III
4. चतुर्थः पाठः - विद्यालयः
5. पञ्चमः पाठः - वृक्षाः
6. षष्ठः पाठः - समुद्रतटः
7. सप्तमः पाठः - बकस्य प्रतीकारः
8. दशमः पाठः - कृषिकाः कर्मवीराः

2. व्याकरण-

1. वर्णसंयोजनम्, वर्णवियोजनम्
2. कारक और विभक्तियों का सामान्य परिचय (वाक्यों में)
3. विशेषण प्रकरण - विशेषण-विशेष्य सम्बन्धित नियम (वाक्यों में प्रयोग)
4. शब्दरूप (वाक्यों में) - बालक, बालिका, फल, किम् (तीनों लिंगों में)
5. धातुरूप (वाक्यों में) - (लट् और लृट् लकार) धातुएँ - पठ्, गम्, पा, नी
6. वाक्यसंशोधनम् - वचन, लिंग, पुरुष, लकार, कारक तथा विशेषण-विशेष्य पर आधारित

3.

1. अपठित-गद्यांश
2. चित्रवर्णनम् - प्रदत्तचित्र के आधार पर संस्कृत में वाक्य
3. हिंदी से संस्कृत में अनुवाद (पाँच वाक्यों का)

द्वितीय सत्र

1. रुचिरा-

1. अष्टमः पाठः - सूक्तिस्तबकः
2. नवमः पाठः - क्रीडास्पर्धा
3. एकादशः पाठः - पुष्पोत्सवः
4. द्वादशः पाठः - दशमः त्वं असि
5. त्रयोदशः पाठः - विमानयानं रचयाम
6. चतुर्दशः पाठः - अहह आः च
7. पञ्चदशः पाठः - मातुलचन्द्र !!

2. व्याकरण-

1. अव्यय प्रयोगः (रिक्त स्थान के रूप में) - समस्त अव्यय शब्द
2. संख्या (वाक्यों में) - 1 से 20 तक
क्रमवाचक (पूरणार्थक) संख्या- प्रथम से दशम तक, पुल्लिंग में सभी विभक्तियों में प्रायोगिक ज्ञान
3. शब्दरूप (वाक्यों में) - भानु, अस्मद्, मुनि, युष्मद्

4. धातुरूप (वाक्यों में) – (लट् और लृट् लकार) धातुएँ - स्था, लिख्, दृश्, नम्
 5. वाक्यसंशोधनम् – वचन, लिंग, पुरुष, लकार, कारक तथा विशेषण-विशेष्य पर आधारित
3. 1. अपठित – गद्यांश
2. पत्रलेखनम् – संकेताधारितं पत्रम्
3. चित्रवर्णनम् – प्रदत्तचित्र के आधार पर संस्कृत में वाक्य
4. हिंदी से संस्कृत में अनुवाद (पाँच वाक्यों का)

MATHEMATICS

Learning Objectives

Teaching of Mathematics helps the learners to -

- acquire knowledge and understanding terms, symbols, concepts, principles, processes, proofs etc.
- consolidate the Mathematical knowledge and skills acquired at the primary level.
- develop mastery of basic algebraic skills.
- develop drawing skills
- apply mathematical knowledge and skills to solve real life problems by developing abilities to analyze, to see interrelationship involved, to think and reason.
- develop interest in Mathematics as a problem solving tool in various fields.
- develop reverence and respect towards great Mathematicians, particularly towards the Indian Mathematicians for their contributions to the field of Mathematics.

Textbook : Mathematics - Textbook for Class VI (NCERT)

Practice Book : Maths Ladder - Practice book for Mental Maths (Impression) – CLASS 6

FIRST TERM

Chapter 1 : Knowing Our Numbers

- Introduction
- Comparing Numbers
- Large Numbers in Practice
- Using Brackets
- Roman Numerals

Ex. 1.1 to 1.3 with examples

Practice Book : Page no. 5 to 11

Chapter 2 : Whole Numbers

- Introduction
- Whole Numbers
- The Number Line
- Properties of Whole Numbers
- Patterns in Whole Numbers

Ex. 2.1 to 2.3 with examples

Practice Book : Page no. 12 to 14

Chapter 3 : Playing With Numbers

- Introduction
- Factors and Multiples
- Prime and Composite Numbers

- Tests for Divisibility of Numbers
- Common Factors and Common Multiples
- Some More Divisibility Rules
- Prime Factorisation
- Highest Common Factor
- Lowest Common Multiple
- Some Problems on HCF and LCM

Ex. 3.1 to 3.7 with examples

Practice Book : Page no. 15 to 21

Chapter 4 : Basic Geometrical Ideas

- Introduction
- Points
- A Line Segment
- A Line
- Intersecting Lines
- Parallel Lines
- Ray
- Curves
- Polygons
- Angles
- Triangles
- Quadrilaterals
- Circles

Ex. 4.1 to 4.6 with examples

Practice Book : Page no. 22 to 26

Chapter 5 : Understanding Elementary Shapes

- Introduction
- Measuring Line Segments
- Angles - Right, Straight, Acute, Obtuse and Reflex
- Measuring Angles
- Perpendicular Lines
- Classification of Triangles
- Quadrilaterals
- Polygons
- Three Dimensional Shapes

Ex. 5.1 to 5.9 with examples

Practice Book : Page no. 27 to 34

Chapter 7 : Fractions

- Introduction
- A Fraction
- Fraction on the Number Line
- Proper Fractions
- Improper and Mixed Fractions
- Equivalent Fractions
- Simplest Form of a Fraction
- Like and Unlike Fractions
- Comparing Fractions
- Addition and Subtraction of Fractions

Ex. 7.1 to 7.6 with examples

Practice Book : Page no. 41 to 49

Vedic Mathematics

1. Addition by “Ekadhikena Poorvena” Method
2. Subtraction by “Ekanyunena Poorvena” Method
3. Squaring of numbers by “Urdhava Sutra”
4. Multiplication by 11 using “Urdhava Tiryak Sutra”

SECOND TERM

Chapter 6 : Integers

- Introduction
 - Integers
 - Addition and Subtraction of Integers with the help of a Number Line (and also without using number line)
- Ex. 6.1 to 6.3 with examples

Practice Book : Page no. 35 to 40

Chapter 8 : Decimals

- Introduction
 - Tenths, Hundredths
 - Comparing Decimals
 - Using Decimals - Money, Length, Weight
 - Addition of Numbers with Decimals
 - Subtraction of Decimals
- Ex. 8.1 to 8.6 with examples

Practice Book : Page no. 50 to 57

Chapter 9 : Data Handling

- Introduction
 - Recording Data
 - Organisation of Data
 - Pictograph - Interpretation and Drawing of a Pictograph
 - A Bar graph - Interpretation and Drawing of a Bar graph
- Ex. 9.1 to 9.4 with examples

Practice Book : Page no. 58 to 64

Chapter 10 : Mensuration

- Introduction
 - Perimeter
 - Area
- Ex. 10.1 to 10.3 with examples

Practice Book : Page no. 65 to 73

Chapter 11 : Algebra

- Introduction
- Matchstick Patterns
- The Idea of a Variable
- More Matchstick Patterns
- More Examples of Variables
- Use of Variables in Common Rules
- Expressions with Variables
- Using Expressions Practically
- What is an Equation?

— Solution of an Equation

Ex. 11.1 to 11.5 with examples

Practice Book : Page no. 74 to 78

Chapter 12 : Ratio and Proportion

— Introduction

— Ratio

— Proportion

— Unitary Method

Ex. 12.1 to 12.3 with examples

Practice Book : Page no. 79 to 84

Chapter 13 : Symmetry

— Introduction

— Making Symmetric Figures : Ink-blot Devils

— Figures with Two Lines of Symmetry

— Figures with Multiple (more than two) Lines of Symmetry

— Reflection and Symmetry

Ex. 13.1 to 13.3 with examples

Practice Book : Page no. 85 to 89

Chapter 14 : Practical Geometry

— Introduction

— The Circle - Construction of a circle when its radius is given

— A Line Segment- Construction of a line segment of a given length and copy of a given line segment

— Perpendiculars - Construction to a given line through a point on it and a point not on it

— The Perpendicular Bisector of a Line Segment

— Angles - Constructing an angle of a given measure and a copy of an angle of unknown measure

— Bisector of an Angle

— Angles of special measures - Construction of angles of measure 30° , 60° , 90° , 120° , etc.

Ex. 14.1 to 14.6 with examples

Practice Book : Page no. 90 to 94

Vedic Mathematics

1. Multiplication by “Nikhilam Navatas Caramamdasatah” Sutra

2. Division by Nikhilam Method. (Division of two digit numbers by one digit numbers)

3. Operations of mixed “Vinculum” Numbers

4. Instant subtraction by “Nikhilam Sutra”

SCIENCE

Learning Objectives

The objectives of teaching Science are:

- to strengthen the knowledge acquired at primary level
- to emphasize the acquisition of scientific knowledge
- to appreciate nature and sensitise the students about the environment
- to understand scientific language i.e. symbols, formulae, terms etc.
- to develop scientific aptitude/temper
- to apply the theoretical knowledge of Science to daily life

— to update the students with the latest technological developments that have taken place.

Textbook - Science Textbook for Class VI (NCERT)

Assignment Book – Science Exemplar Problems for Class VI (NCERT)

FIRST TERM

Chapter 1: Food - Where does it come from?

Food variety, food materials and sources, plant parts and animal products as food, what do animals eat?

Chapter 2: Components of food

What do different food items contain? What do various nutrients do for our body? Balanced diet, deficiency diseases.

Chapter 3: Fibre to Fabric

Variety in fabrics, fibres, some plant fibres, spinning cotton yarn, yarn to fabric, history of clothing material.

Chapter 6: Changes Around Us

Can all changes always be reversed? Could there be other ways to bring a change?

Chapter 10: Motion and Measurement of Distances

Story of transport, How wide is this desk? Some measurements, standard units of measurements, correct measurement of length, measuring the length of a curved line, moving things around us, types of motion.

Chapter 12: Electricity and Circuits

Electric cell, a bulb connected to an electric cell, an electric circuit, electric switch, electric conductors and insulators.

Chapter 13: Fun with Magnets

Magnetic and non-magnetic materials, poles of magnet, finding directions, make your own magnet, attraction and repulsion between magnets.

Chapter 16: Garbage In, Garbage Out

Dealing with garbage, vermicomposting, think and throw, recycling of paper, plastics - boon or a curse?

SECOND TERM

Chapter 4: Sorting Materials into Groups

Objects around us, properties of materials.

Chapter 5: Separation of Substances

Methods of separation - hand picking, threshing, winnowing, sieving, sedimentation, decantation and filtration, evaporation, use of more than one method for separation, can water dissolve any amount of a substance?

Chapter 7: Getting to Know Plants

Herbs, shrubs and trees, stem, leaf, root, flower.

Chapter 8: Body Movements

Human body and its movements, gait of animals.

Chapter 9: The Living Organisms – Characteristics and Habitats

Organisms and the surroundings where they live, habitat and adaptation, a journey through different habitats, characteristics of organisms.

Chapter 11: Light, Shadows and Reflections

Transparent, opaque and translucent objects, what exactly are shadows? A pinhole camera, mirrors and reflections.

Chapter 14: Water

How much water do we use? Where do we get water from? Water cycle, back to the oceans, what if it rains heavily? What happens if it does not rain for a long period? How can we conserve water? Rain water harvesting.

Chapter 15: Air Around Us

Is air present everywhere around us? What is air made up of? How does oxygen become available to animals and plants living in water and soil? How is the oxygen in the atmosphere replaced?

SOCIAL SCIENCE

Learning Objectives :

The course in Social Science will help learners:

— develop an understanding of the processes of change and development - both in terms of time and space, through which human societies have evolved.

- deepen the knowledge and understanding of environment in its totality, their interactive processes and effects on future life of people.
- develop scientific temper by promoting the spirit of enquiry and following rational and objective approach in analysing and evaluating data and information as well as views and interpretations.

Textbooks :

1. Our Pasts-I : Textbook in History for Class VI (NCERT)
2. Social and Political Life-I : Textbook for Class VI (NCERT)
3. The Earth Our Habitat : Textbook in Geography for Class VI (NCERT)
4. Atlas - Oxford School Atlas

FIRST TERM

Our Pasts-I

Chapter-1 : What, Where, How and When?

Map Work : A site for hunting and gathering, sites where early agriculture developed, sites where first cities flourished

Chapter-2 : From Hunting - Gathering to Growing Food

Map Work : Important Palaeolithic sites, Important Neolithic sites

Chapter-3 : In the Earliest Cities

Map Work : Important Harappan Cities, River around which Harappan civilization flourished

Chapter-4 : What Books and Burials Tell Us (Project)

Chapter-5 : Kingdoms, Kings and An Early Republic

Map Work : Important Janapadas and Mahajanapadas

Social and Political Life-I

Chapter-1 : Understanding Diversity

Chapter-2 : Diversity and Discrimination

Chapter-3 : What is Government?

Chapter-4 : Key Elements of a Democratic Government

The Earth : Our Habitat

Chapter-1 : The Earth in the Solar System

Diagram : Solar System

Chapter-2 : Globe : Latitudes and Longitudes

Diagram : Heat Zones, Grid

Chapter-3 : Motions of the Earth

Diagram : Day and Night on the Earth due to Rotation, Revolution of the Earth and Seasons

Chapter-4 : Maps

Diagram : Components of a map - Directions and Symbols

SECOND TERM

Our Pasts-I

Chapter-6 : New Questions and Ideas

Map Work : The place where Buddha attained enlightenment, the place where teachings of Mahavira are available in original form

Chapter-7 : Ashoka, The Emperor Who Gave Up War

Map Work : Important cities of the Mauryan Empire, the place where Ashoka fought his last battle, places where inscriptions have been found (Rock edicts and Pillar edicts)

Chapter-8 : Vital Villages, Thriving Towns

Chapter-9 : Traders, Kings and Pilgrims

Map Work : Three ruling families of the South-Cholas, Cheras and Pandyas, Centre of Buddhist Learning

Chapter-10 : New Empires and Kingdoms

Map Work : Important towns of Gupta Empire, Important towns of Harsha's Empire

Chapter-11 : Buildings, Paintings and Books (Project)

Social and Political Life-I

Chapter-5 : Panchayati Raj

Chapter-6 : Rural Administration

Chapter-7 : Urban Administration

Chapter-8 : Rural Livelihoods

Chapter-9 : Urban Livelihoods

The Earth : Our Habitat

Chapter-5 : Major Domains of the Earth

Map Work : Political Map of World (Continents and Oceans), Ural Mountains, Isthmus of Panama

Diagram : Layers of the Atmosphere

Chapter-6 : Major Landforms of the Earth

Map Skills - Page 46

Diagram : Fold mountain, Block mountain, volcanic mountain

Chapter-7 : Our Country - India

Map Skills - Page 55

Additional Map Work : Political Map of India (States and Union Territories), India and its Neighbours, Major Physical Divisions of India.

Chapter-8 : India : Climate, Vegetation and Wildlife

COMPUTER SCIENCE

Learning Objectives:

- to develop the basic skills of using various tools of MS Excel
- to develop the basic skills of programming using Python Turtle
- to familiarize the students with the concept of Artificial Intelligence

Textbook: Coding with Computer-6

FIRST TERM

Lesson 2: More on MS Excel

- Open an Existing Workbook
- Adding a Worksheet

- Deleting a Worksheet
- Setting Row Height and Column Width
- Calculation in Spreadsheet
- Use 'Autosum' Feature

Lesson 3: Cell Referencing and Charts in MS Excel

- Cell Referencing
- Define Relative, Absolute and Mixed Referencing
- Charts
- Create and Modify the Chart

Lesson 4: Computer Languages, Coding and Kids

- Different Categories of the Software
- Compiler and Interpreter
- Programming Languages
- What is Coding?

SECOND TERM

Lesson 5: Learn to Program with Scratch

- Scratch Anatomy
- The Built-in Image Editor
- The Foundation of Programming
- The First Game
- Saving the Project

Lesson 7: Python-Turtle

- Programming with Turtle
- Code to Draw Basic Geometrical Shapes using Turtle: Square, Rectangle, Triangle, Circle
- Saving Program
- Changing the Screen Colour, Pen Size and Turtle Shape

Lesson 8: Artificial Intelligence and Internet of Things

- Introduction to AI
- Types of Artificial Intelligence
- What is Internet of Things (IoT)?
- Applications of IoT
- Products where IoT is used

For Practical Sessions Only

- Lesson 1: Mail Merge in MS Word
- Lesson 6: Be a Perfect Programmer with Scratch

GENERAL KNOWLEDGE

Learning Objectives

The course in General Knowledge will help learners:

- grow both personal as well as academic level.
- improve their reasoning and thinking skills.
- prepare for competitive exams.
- understand and analyse the situation.

Textbook: G.K.WHIZ – 6 (FRANK EMU BOOKS)

FIRST TERM

1. Nature

- Newborn Animals
- Green Friends
- Save Them
- National Animals
- See Giants and Dwarfs

2. India

- Indian Sportswomen
- Indian Martial Arts

3. World

- World Trip
- Magic of Museums

- Famous Places
- The 20th Century
- Man-made Marvels
- Carbon Footprint

4. Language

- Best Openers
- Camping Trip
- Book Awards
- Writers of Different Languages

5. Science

- Computer Words
- Alternative Therapies
- The Beyond
- Illness and Diseases

6. Sports

- Sports Terms
- Mascots
- Unusual Team Sports
- We are a Team

7. Entertainment

- Movies
- All about Music

Test Paper 1

Test Paper 2

SECOND TERM

1. Nature

- Hunting Animals
- Insects and Bugs
- Pick the Plant
- Circle of life - Making Compost Life Skills
- Plant Mania
- Health from Plants

2. India

- The House Sparrow
- Desh ka Apna Channel

3. World

- Tribals of the World
- Looking Back
- Governments
- Special Names
- Money for Me Life Skills
- Fiery Mountains
- Cities of the world

4. Language

- I Spy
- Figures of Speech
- Round the Sound
- Mythical Greek Figures

5. Science

- Measuring Instruments
- Chemistry Check
- Stephen Hawking
- Great Inventors

6. Sports

- Devendra Jhajharia - Javelin Thrower
- Commonwealth 2018
- Game to Name
- Indian Premier League

Test Paper 1

Test Paper 2

ART EDUCATION

Learning Objectives -

- Introduce the students to new media and technique and their use for creative expression and making objects of common use.
- Refine the sense of appreciation of the beauty of nature and the basic elements of art forms.

Textbook - Art Redefined Book 4

FIRST TERM

1. Know about colours (Primary. Secondary and Neutral)
2. Basic colouring strokes and techniques.

Art Redefined Book - 4

Pages 3 to 33

SECOND TERM

Art Redefined Book – 4

Pages 34 to 66

ART EDUCATION MUSIC, DANCE AND DRAMA

Learning Objectives

To identify what makes a performance effective.

To demonstrate an understanding of the relationship between artists and artworks

To explore and learn about the ways in which dance, music and drama communicate the feelings and help us express them.

Theory

1. Concept of Art Education
2. Basic Knowledge of Performing Art
3. Definition of Music, Saptak and Taal
4. 10 Alankaars
5. Written work of Teen Taal, Dadra and Keherwa
6. Knowledge of Classical Dance and Folk Dance
7. Knowledge of Western Dance Forms
8. Basic knowledge of Theatre and Drama

Practical

1. Practice of Alankaars
2. Practice of Taal
3. Practice of Prayers and Songs from School diary
4. Practice of Drama and Nukkad Natak
5. Folk Song (Sikkim and Punjab)
6. Bhajan (Hey Raam, Guru Meri Pooja)
7. Exercises of Classical Dance and Western Dance
8. Practice of Voice Modulation and Anchoring

PHYSICAL EDUCATION AND HEALTH EDUCATION

Learning Objectives

- to make the students physically, mentally and emotionally fit
- to develop team-spirit
- to develop qualities like co-operation and good sportsmanship
- to be familiar with the effects of exercises

Theory:

1. Aims and objectives of Physical Education and Health Education.
2. Knowledge of communicable diseases and their effects on our health.
3. Give brief knowledge about major games (indoor and outdoor games)
4. Knowledge of first aid treatment during games

Practical

1. Volleyball
2. Basketball
3. Badminton
4. Table Tennis
5. Cricket
6. Warming up and Cooling down exercises
7. Free hand exercise