

SYLLABUS (2021-22)

CLASS VII

CONTENTS

S.No. Subject

1. English
2. Hindi
3. Sanskrit
4. French
5. Mathematics
6. Science
7. Social Science
8. Computer Science
9. General Knowledge
10. Work Experience
11. Art Education
12. 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. Revised New Pathways Course Book- 7 (MCB)
2. Revised New Pathways Literature Reader- 7 (LR)
3. Collins English Grammar and Composition-7
4. The Adventures of Tom Sawyer by Mark Twain

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 note books.

FIRST TERM

Reading Comprehensions

- MCB - 1. The Flower School
2. The Quest of El Dorado
3. Something Wonderful Happens When You Plant a Seed
LR- 4. All About a Dog

Writing Skills

1. Notice Writing
2. Poster Making
3. Formal Letter Writing
4. Paragraph Writing

Grammar

1. Kinds of Sentences : Meaning
2. Types of Sentences : Structure
3. Nouns
4. Adjectives
5. Pronouns
6. Transitive and Intransitive Verbs
7. Agreement of Subject and Verb
8. Primary and Modal Auxiliaries
9. Expressing the Present
10. Expressing the Past
11. Expressing the Future
12. Active and Passive Voice
13. Test 1

Literature and Long Reading Text

- LR - 1. Mother to Son (Poem)
MCB - 2. Trains (Poem)
3. The Ballad of Mulan (Poem)
LR - 4. When Wishes Come True
5. The Night We Won the Buick
MCB - 6. The Scholarship Jacket
7. A Hero

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)

The Night We Won the Buick

The Adventures of Tom Sawyer - Chapters 1 to 7

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

Listening Activities to be taken up in the term -

- MCB - 1. The Scholarship Jacket (Pg. 30)
2. The Diary of a Space Traveller (Pg. 57)
3. The Narayanpur Incident (Pg. 88)
4. Assessment of Listening Task 1 and 2 (Pg. 175)

Creative Writing (Expressions)

1. An itinerary is a detailed plan for a journey. It includes dates, stops, duration of the stay and a list of places to visit. Think of a city which you would like to visit and plan a two day itinerary for a trip to that city. (Refer to the chapter 'The Diary of a Space Traveller') (MCB).
2. Read the chapter 'The One Who Survived : Ada Blackjack' (MCB) about an extraordinary woman's expedition and the story of lone survival on an island in northern Siberia. Write a paragraph describing what would you do if you were stranded on an island.
3. The chapter 'The Narayanpur Incident' (MCB) is about the courage and heroism depicted by a teacher's family at the time of 'Quit India Movement'. Read the story and think about a real life hero. Write a detailed account describing the heroic deed performed by him and also mention the qualities shown by him.

SECOND TERM

Reading Comprehensions

- MCB -
1. The River
 2. Bidesia Babu
 3. What Lucy Found There
 4. The Listeners

Writing Skills

1. E-mail Writing
2. Message Writing
3. Article Writing
4. Informal Letter Writing

Grammar

1. Adverbs
2. Prepositions
3. Conjunctions
4. Determiners and Quantifiers
5. Articles
6. Direct and Indirect Speech
7. Finite and Non-Finite Verbs
8. Phrases
9. Clauses
10. Transformation and Synthesis
11. Punctuation
12. Grammar on the Go
13. Words : A Mixed Bag
14. Test 2
15. Test 3

Literature and Long Reading Text

- LR -
1. In the Bazaars of Hyderabad (Poem)
 2. Two's Company (Poem)
 3. Daffodils (Poem)
 4. The Happy Prince
 5. Experiments
 6. Packing
 7. Michael
- MCB -
8. Flames in the Forest

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)

Packing

The Adventures of Tom Sawyer - Chapters 8 to 15

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

Listening Activities to be taken up in the term -

1. Flames in the Forest (Pg. 113)
2. The Too-Many Professors (Pg. 136)
3. Guilty (Pg. 167)
4. Assessment of Listening Task 3 and 4 (Pg. 176)

Creative Writing

1. The chapter 'The Too Many professors' (MCB) is about an imaginary professor who invented a marvellous mixture. Imagine you have a brilliant idea for an invention that will be of great use to the mankind but you need help and support. Write a letter to the Department of Science and Technology to convince them help you with funds and resources. Along with the letter, don't forget to attach a labelled drawing of your invention as you have imagined it.

2. Read the poem 'Goodbye Party for Miss Pushpa T.S.' (MCB) that is about the farewell party organised for Ms. Pushpa. You also organised a grand party on your birthday but your friend could not attend it due to her illness. Write an e-mail to her describing the fun she had missed.
3. The chapter 'Guilty' (MCB) revolves around a stolen diamond and has a surprise ending. There is a series of pictures given on the Pg. 164-166 that tell the famous story of Dr. Jekyll and Mr. Hyde written by R.L. Stevenson without the settings. Complete the story by filling in the correct setting in the correct picture frame.

हिंदी

हिंदी 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 आनंद 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. मौखिक एवं लिखित अभिव्यक्ति के संदर्भ और आवश्यकता के अनुसार समुचित भाषा-शैली व प्रयोग को चुनने की समझ का विकास करना।
8. भाषा की नियमबद्ध प्रकृति को पहचानना और उसका विश्लेषण करना।

नोट: 1. प्रत्येक पाठ से शब्दार्थ, वाक्य-प्रयोग, प्रश्नोत्तर, 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-2 (एन.सी.ई.आर.टी.)
 2. बाल महाभारत कथा (एन.सी.ई.आर.टी.)
 3. हिंदी व्याकरण सुधा - भाग-7 (गोयल ब्रदर्स प्रकाशन)

प्रथम सत्र

वसंत भाग-2

- गद्य पाठ -**
1. मिठाईवाला (कहानी)
 2. रक्त और हमारा शरीर (निबंध)
 3. हिमालय की बेटियाँ (निबंध)

- पद्य पाठ -**
1. हम पंछी उन्मुक्त गगन के
 2. कठपुतली
 3. रहीम के दोहे

पूरक पुस्तक -

बाल महाभारत कथा - 'महाभारत कथा' से लेकर 'यक्ष प्रश्न' तक (पृष्ठ 1 से 49)

- व्याकरण-
1. वर्ण विचार
 2. संज्ञा
 3. लिंग, वचन, कारक
 4. सर्वनाम
 5. विशेषण
 6. पर्यायवाची शब्द (1-20)
 7. विलोम शब्द (1-20)
 8. अनेकार्थक शब्द (1-15)
 9. वाक्यांशों के स्थान पर एक शब्द (1-20)
 10. मुहावरे (1-10)
 11. समश्रुत-भिन्नार्थक शब्द (1-20)

रचना कौशल

1. अपठित-गद्यांश - वीर कुंवर सिंह (वसंत)
 2. अपठित-काव्यांश - एक तिनका (वसंत)
 3. चित्र-वर्णन - 2
 4. संवाद-लेखन 2
 5. विज्ञापन-लेखन - 2
 6. पत्र-लेखन - 2 (औपचारिक एवं अनौपचारिक)
 7. निबंध-लेखन - 2
- ग्रीष्मावकाश के लिए (प्रयोज्य कार्य हेतु) - 1. पापा खो गए (वसंत)
2. अपूर्व अनुभव (वसंत)

द्वितीय सत्र

वसंत भाग -2

- गद्य पाठ -
1. खानपान की बदलती तस्वीर (निबंध)
 2. चिड़िया की बच्ची (कहानी)
 3. नीलकंठ (रेखाचित्र)
- पद्य पाठ -
1. भोर और बरखा
 2. विप्लव गायन
 3. शाम - एक किसान

पूरक पुस्तक

बाल महाभारत कथा - 'अज्ञातवास' से लेकर 'श्रीकृष्ण और युधिष्ठिर' तक (पृष्ठ 52 से 96)

- व्याकरण -
1. क्रिया - कर्म के आधार पर
 2. काल
 3. क्रिया-विशेषण
 4. संबंधबोधक

5. पर्यायवाची शब्द (21-40)
6. विलोम शब्द (21-40)
7. अनेकार्थक शब्द (16-30)
8. वाक्यांशों के स्थान पर एक शब्द (21-40)
9. मुहावरे (11-20)
10. समश्रुत-भिन्नार्थक शब्द (21-40)

रचना कौशल

1. अपठित-गद्यांश - कंचा (वसंत)
2. अपठित-काव्यांश - 2
3. चित्र-वर्णन - 2
4. संवाद-लेखन - 2
5. विज्ञापन-लेखन - 2
6. पत्र-लेखन - 2 (औपचारिक एवं अनौपचारिक)
7. निबंध-लेखन - 2

शीतावकाश के लिए (प्रयोज्य कार्य हेतु) - 1. दादी माँ (वसंत)

2. आश्रम का अनुमानित व्यय (वसंत)

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 सामान्य ज्ञान कराना जिससे संस्कृत के सरलांशों को सुनकर या पढ़कर विद्यार्थी समझ सके एवं मौखिक तथा लिखित अभिव्यक्ति कर सके ।
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 सौंदर्यबोध , 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 कराया जाएगा । भाषिक कार्य में जैसे - प्रश्न-निर्माण, पर्यायवाची, विलोम शब्द, संस्कृत में शब्दों के अर्थ, कर्तृक्रिया-पदचयन, विशेषण-विशेष्य, संज्ञा, सर्वनाम प्रयोग आदि कराये जाएंगे ।
2. रुचिरा के पाठ्यक्रमानुसार पाठों का संमूर्ण अभ्यास तथा समस्त शब्दार्थ करवाये जाएंगे ।
3. श्लोकों का अन्वय रिक्तस्थान के रूप में परीक्षा में आएगा ।
4. अव्यय, संधि, प्रत्यय , संख्या, शब्दरूप और धातुरूप वाक्यों में आयेंगे ।
5. प्रश्नपत्र संस्कृतभाषा में आएगा ।

पाठ्य पुस्तकें -

1. रुचिरा (द्वितीयो भागः)
2. संस्कृत व्याकरण मणिका (7)

प्रथम सत्र

1. रुचिरा

- प्रथमः पाठः - सुभाषितानि
द्वितीय पाठः - दुर्बुद्धिः विनश्यति
तृतीयः पाठः - स्वावलम्बनम्
चतुर्थः पाठः - हास्यबालकविसम्मेलनम्
पंचमः पाठः - पण्डिता रमाबाई
नवमः पाठः - अहमपि विद्यालयं गमिष्यामि

2. व्याकरणम्

1. अव्यय (रिक्तस्थान के रूप में) समस्त अव्यय शब्द
2. संधि - (वाक्यों में) दीर्घ सन्धिः, गुण सन्धिः
3. प्रत्ययः (वाक्यों में) - क्त्वा
4. शब्द रूप (वाक्यों में) - कवि , मधु , नदी, तद् (तीनों लिंगों में)
5. धातुरूप (वाक्यों में) - पा , चूर् , स्था , दृश् (लट्, लृट्, लङ् लकारों में)
6. वाक्यसंशोधनम्- वचन, लिंग, लकार, पुरुष, तथा विशेष्य-विशेषण पर आधारित

3. 1. अपठित गद्यांशः

2. पत्रलेखनम् - संकेत-आधारितं पत्रम्
3. चित्रवर्णनम् - प्रदत्तचित्र के आधार पर संस्कृत में वाक्य
4. हिंदी से संस्कृत में अनुवाद (पाँच वाक्य)

द्वितीयः सत्रः

1. रुचिरा

- षष्ठः पाठः - सदाचारः
अष्टमः पाठः - त्रिवर्णः ध्वजः
दशमः पाठः - विश्वबन्धुत्वम्
एकादशः पाठः - समवायो हि दुर्जयः
चतुर्दशः पाठः - अनारिकायाः जिज्ञासा
पञ्चदशः पाठः - लालनगीतम्

2. व्याकरणम्

1. उपपद विभक्तियां - उभयतः , परितः , प्रति , सह, विना , नमः, दा , बहिः , अधः , उपरि , निपुण, इन पदों के साथ उपयुक्त विभक्तियों का प्रयोग (उपपद विभक्तियों पर आधारित अशुद्धि - संशोधन, रिक्त स्थानादि)

2. संख्या (वाक्यों में) 1 से 50 तक ।

क्रमवाचक (पूरणार्थक) संख्या - प्रथम से दशम तक तीनों लिंगों में सभी विभक्तियों में प्रायोगिक ज्ञान

3. प्रत्ययः (वाक्यों में) – ल्यप्
4. शब्द रूप (वाक्यों में) - मति , वारि, पितृ , एतद् (तीनों लिंगों में)
5. धातुरूप (वाक्यों में) - पच् , लिख्, कृ , वस् (लट् , लृट् , लङ् लकारों में)

3. 1. अपठित गद्यांशः
 2. पत्रलेखनम् - संकेत-आधारितं पत्रम्
 3. चित्रवर्णनम् – प्रदत्तचित्र के आधार पर संस्कृत में वाक्य
 4. हिंदी से संस्कृत में अनुवाद (पाँच वाक्य)

FRENCH

Learning Objectives

1. To enhance the level of the students both in written and spoken French.
2. To enable the students to express themselves more effectively, naturally and correctly in the productive skill of writing.
3. To enhance the level of vocabulary and strengthen their concepts of grammar.
4. To enable the students to write in an appropriate style for communication purposes.
5. To develop basic understanding, conjugation of verbs in present tense, articles, prepositions, conjunctions, adjectives, imperatives and different expressions.
6. To implement different strategies to make learning French an enjoyable and interesting experience.
7. To acquaint them with French culture and civilization.

General Note :

Questions from within the lessons and related to culture and civilization of France will be asked in the exams/tests.

Textbook : Apprenons Le Français-3

Workbook : Cahier d'exercices-3

Dictionary : Gems Collins French Dictionary

FIRST TERM

Detailed Study

Textbook :

Leçon 1 - La rentrée

Leçon 2 - Il est français?

Leçon 3 - La journée de Mme Lavigne

Leçon 4 - Kalu est malade

Leçon 6 - M. Lavigne cherche un manteau

Workbook : Leçons - 1, 2, 3, 4, 6

Grammar :

1. Les articles (définis, indéfinis, contractés, partitifs)
2. Les verbes réguliers et irréguliers
3. La négation
4. Les adverbes de quantité
5. Le féminin et le pluriel des noms et des adjectifs
6. La position des adjectifs
7. L'infinif après un autre verbe
8. Quelle heure est-il?
9. Les verbes pronominaux
10. Les trois formes d'interrogation
11. L'interrogation négative et 'si'

12. Les expressions avec ‘avoir’
13. Les verbes en ‘yer’
14. Les prépositions et les adverbes de lieux
15. Corrigez la faute
16. Mettez les phrases en ordre

SECOND TERM

Detailed Study

Textbook :

Leçon 0 - La France, qu'est-ce que c'est?

Leçon 5 - Faire les courses

Leçon 7 - Allons à Paris

Leçon 8 - Les photos de Manuel

Leçon 9 - Au café des Laurent

Leçon 11 - Une journée bien chargée

Workbook : Leçons - 0, 5, 7, 8, 9, 11

Grammar :

1. Les adverbes interrogatifs
2. Les verbes ‘savoir’ et ‘connaître’
3. Les prépositions de lieu
4. Les adjectifs démonstratifs
5. Les verbes irréguliers
6. Les professions
7. L’impératif – affirmatif, négatif et les verbes pronominaux
8. Le passé composé avec ‘avoir’
9. Corrigez la faute
10. Mettez les phrases en ordre

MATHEMATICS

Learning Objectives

Teaching of Mathematics helps the learners to

- acquire knowledge and understand 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 analyse, 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 VII (NCERT)

Practice Book : Maths Ladder - Practice book for Mental Maths Class 7 (Impression)

FIRST TERM

Chapter-1 : Integers

- Introduction
 - Recall
 - Properties of Addition and Subtraction of Integers
 - Multiplication of Integers
 - Properties of Multiplication of Integers
 - Division of Integers
 - Properties of Division of Integers
- Ex. 1.1 to Ex. 1.4 with examples

Practice Book : Page No. 5 to 10

Chapter-2 : Fractions and Decimals

- Introduction
 - How Well have You Learnt about Fractions?
 - Multiplication of Fractions
 - Division of Fractions
 - How Well have you Learnt about Decimal Numbers?
 - Multiplication of Decimal Numbers
 - Division of Decimal Numbers
- Ex. 2.1 to Ex. 2.7 with examples

Practice Book : Page No. 11 to 18

Chapter-5 : Lines and Angles

- Introduction
 - Related Angles
 - Pairs of Lines
 - Checking for Parallel Lines
- Ex. 5.1 and Ex. 5.2 with examples

Practice Book : Page No. 33 to 37

Chapter-6 : The Triangle and its Properties

- Introduction
 - Medians of a Triangle
 - Altitudes of a Triangle
 - Exterior Angle of a Triangle and Its Property
 - Angle Sum Property of a Triangle
 - Two Special Triangles : Equilateral and Isosceles
 - Sum of the Lengths of Two Sides of a Triangle
 - Right-Angled Triangles and Pythagoras Property
- Ex. 6.1 to Ex. 6.5 with examples

Practice Book : Page No. 38 to 43

Chapter-9 : Rational Numbers

- Introduction
 - Need for Rational Numbers
 - What are Rational Numbers?
 - Positive and Negative Rational Numbers
 - Rational Numbers on a Number Line
 - Rational Numbers in Standard Form
 - Comparison of Rational Numbers
 - Rational Numbers Between Two Rational Numbers
 - Operations on Rational Numbers
- Ex. 9.1 and Ex. 9.2 with examples

Practice Book : Page No. 58 to 66

Chapter-13 : Exponents and Powers

- Introduction
 - Exponents
 - Laws of Exponents
 - Miscellaneous Examples using the Laws of Exponents
 - Decimal Number System
 - Expressing Large Numbers in the Standard Form
- Ex. 13.1 to Ex. 13.3 with examples

Practice Book : Page No. 87 to 91

Chapter-14 : Symmetry

- Introduction
- Lines of Symmetry for Regular Polygons
- Rotational Symmetry
- Line Symmetry and Rotational Symmetry

Ex. 14.1 to Ex. 14.3 with examples

Practice Book : Page No. 92 to 95

Vedic Mathematics

1. Multiplication of numbers by “Nikhilam Sutra”
2. Multiplication of numbers by “Urdhava Triyagbhayam” method
3. Squaring of numbers by “Yavadunam” method
4. Division of numbers by 9 using “Nikhilam” method

SECOND TERM

Chapter-3 : Data Handling

- Introduction
- Collecting Data
- Organisation of Data
- Representative Values
- Arithmetic Mean
- Mode
- Median
- Use of Bar Graphs with a Different Purpose
- Chance and Probability

Ex. 3.1 to Ex. 3.4 with examples

Practice Book : Page No. 19 to 26

Chapter-4 : Simple Equations

- A Mind-reading Game
- Setting up of an Equation
- Review of what We Know
- What Equation is?
- More Equations
- From Solution to Equation
- Applications of Simple Equations to Practical Situations

Ex. 4.1 to Ex. 4.4 with examples

Practice Book : Page No. 27 to 32

Chapter-7 : Congruence of Triangles

- Introduction
- Congruence of Plane Figures
- Congruence Among Line Segments
- Congruence of Angles
- Congruence of Triangles
- Criteria for Congruence of Triangles
- Congruence Among Right-Angled Triangles

Ex. 7.1 and Ex. 7.2 with examples

Practice Book : Page No. 44 to 49

Chapter-8 : Comparing Quantities

- Introduction
- Equivalent Ratios
- Percentage - Another Way of Comparing Quantities
- Use of Percentages
- Prices Related to an Item or Buying and Selling
- Charge Given on Borrowed Money or Simple Interest

Ex. 8.1 to Ex. 8.3 with examples

Practice Book : Page No. 50 to 57

Chapter-10 : Practical Geometry

- Introduction
- Construction of a Line Parallel to a Given Line, Through a Point not on the Line
- Construction of Triangles
- Constructing a Triangle when the Lengths of its Three Sides are Known (SSS Criterion)

- Constructing a Triangle when the Lengths of Two Sides and the Measure of the Angle Between them are Known (SAS Criterion)
- Constructing a Triangle when the Measures of two of its Angles and the Length of the side included between Them is given (ASA Criterion)
- Constructing a Right-Angled Triangle when the Length of One Leg and its Hypotenuse are Given (RHS Criterion)

Ex. 10.1 to Ex. 10.5 with examples

Practice Book : Page No. 67 to 72

Chapter-11 : Perimeter and Area

- Introduction
- Squares and Rectangles
- Area of a Parallelogram
- Area of a Triangle
- Circles
- Conversion of Units
- Applications

Ex. 11.1 to Ex. 11.4 with examples

Practice Book : Page No. 73 to 80

Chapter-12 : Algebraic Expressions

- Introduction
- How are Expressions Formed?
- Terms of an Expression
- Like and Unlike Terms
- Monomials, Binomials, Trinomials and Polynomials
- Addition and Subtraction of Algebraic Expressions
- Finding the Value of an Expression
- Using Algebraic Expressions – Formulas and Rules

Ex. 12.1 to Ex. 12.4 with examples

Practice Book : Page No. 81 to 86

Chapter-15 : Visualising Solid Shapes

- Introduction : Plane Figures and Solid Shapes
- Faces, Edges and Vertices
- Nets for Building 3-D Shapes
- Drawing Solids on a Flat Surface
- Viewing Different Sections of a Solid

Ex. 15.1 to Ex. 15.4 with examples

Practice Book : Page No. 96 to 98

Vedic Mathematics

1. Division by Paravartya - Yojayet Sutra
 - (a) Four digit numbers by two digit numbers
 - (b) Four digit numbers by three digit numbers
2. Multiplication of three numbers by “Nikhilam Navatascaramam Dasatah” Sutra.
3. Multiplication of numbers by “Urdhava Tirayak 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 etc.
- to develop scientific attitude/temper.
- to apply the theoretical knowledge of Science to daily life.
- to make the students abreast with the latest technological developments that have taken

place and their impact on the society.

— to enable the students to develop the process of problem solving and decision making.

Textbook : Science Textbook for Class VII (NCERT)

Assignment Book : Science Exemplar Problems for Class VII

PHYSICS **FIRST TERM**

Chapter-13 : Motion and Time

Slow or fast, speed, measurement of time, measuring speed, distance - time graph.

Chapter-15 : Light

Light travels along a straight line, reflection of light, right or left, playing with spherical mirrors, images formed by lenses, sunlight- white or coloured.

SECOND TERM

Chapter-4 : Heat

Hot and cold, measuring temperature, laboratory thermometer, transfer of heat, kinds of clothes we wear in summer and winter.

Chapter-8 : Winds, Storms and Cyclones

Air exerts pressure, high speed winds are accompanied by reduced air pressure, air expands on heating, wind currents are generated due to uneven heating on the earth, thunderstorms and cyclones, destruction caused by cyclones, effective safety measures, advanced technology has helped.

Chapter-14 : Electric Current and Its Effects

Symbols of electric components, heating effect of electric current, magnetic effect of electric current, electromagnet, electric bell.

CHEMISTRY **FIRST TERM**

Chapter-3 : Fibre to Fabric

Wool, silk

Chapter-5 : Acids, Bases and Salts

Acids and bases, natural indicators around us, neutralisation, neutralisation in everyday life.

Note : Introduction of symbols of some common elements and formulae of some common compounds.

Chapter-16 : Water - A Precious Resource

How much water is available, forms of water, ground water as an important source of water, depletion of water table, distribution of water, water management, what role you can play? Effect of water scarcity on plants.

SECOND TERM

Chapter-6 : Physical and Chemical Changes

Physical changes, chemical changes, rusting of iron, crystallisation.

Chapter-18 : Wastewater Story

Water - our lifeline, what is sewage? Water freshens up - an eventful journey, wastewater treatment plant, better house keeping practices, sanitation and disease, alternative arrangement for sewage disposal, sanitation at public places.

BIOLOGY **FIRST TERM**

Chapter-1 : Nutrition in Plants

Mode of nutrition in plants, photosynthesis - food making process in plants, other modes of nutrition in plants, saprotrophs, how nutrients are replenished?

Chapter-2 : Nutrition in Animals

Different ways of taking food, digestion in humans, digestion in grass eating animals, feeding and digestion in amoeba.

Chapter-7 : Weather, Climate and Adaptations of Animals to Climate

Weather, climate, climate and adaptation.

Chapter-10 : Respiration in Organisms

Why do we respire? Breathing, how do we breathe? What do we breathe out? Breathing in other animals, breathing under water, Do plants also respire?

SECOND TERM

Chapter-9 : Soil

Soil teeming with life, soil profile, soil types, properties of soil, moisture in soil, absorption of water by soil, soil and crops.

Chapter-11 : Transportation in Animals and Plants

Circulatory system, excretion in animals, transport of substances in plants.

Chapter-12 : Reproduction in Plants

Modes of reproduction, sexual reproduction, fruits and seed formation, seed dispersal.

Chapter-17 : Forests : Our Lifeline

Visit to a Forest.

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 the 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-II : Textbook in History for Class VII (NCERT)
2. Social and Political Life-II : Textbook in Civics for Class VII (NCERT)
3. Our Environment : Textbook in Geography for Class VII (NCERT)
4. Atlas - Oxford School Atlas

FIRST TERM

Our Pasts-II

Chapter 1 : Tracing Changes Through A Thousand Years

Chapter 2 : New Kings and Kingdoms

Map Work : Kanauj and important temple towns

Chapter 3 : The Delhi Sultans

Map Work : Delhi, Devagiri

Chapter 5 : Rulers and Buildings (**PROJECT**)

Chapter 9 : The Making of Regional Cultures

Map Work : Bengal, Orissa (Puri), Rajasthan, Uttar Pradesh, Kerala, Himachal Pradesh

Social and Political Life-II

Chapter 1 : On Equality

Chapter 2 : Role of the Government in Health

Chapter 3 : How the State Government Works

Chapter 4 : Growing up as Boys and Girls

Our Environment

Chapter 1 : Environment

Diagram : Domains of the Environment

Chapter 2 : Inside Our Earth

Diagram : Interior of the Earth

Chapter 3 : Our Changing Earth

Diagram : A Volcano; Features made by a river

Chapter 4 : Air

Diagram : Layers of the Atmosphere

Chapter 5 : Water

Diagram : Water Cycle

Map Work : World Political Map : Ocean currents - Labrador, Gulf stream, California, Brazilian, Kuroshio, West Australian, Oyashio.

World Political Map : Largest Great Lake of North America, longest river, largest river, water body that separates Europe and Africa, largest inland body of water- Caspian sea, An inlet of the Indian ocean- Red sea.

SECOND TERM

Our Pasts-II

Chapter 4 : The Mughal Empire

Map Work : Panipat, Areas under control of Babur- Delhi and Agra

Chapter 6 : Towns, Traders and Craftspersons

Map Work : Surat, Hampi, Masulipatnam, New trading centres of the 18th century,

Chapter 7 : Tribes, Nomads and Settled Communities (**PROJECT**)

Chapter 8 : Devotional Paths To The Divine

Map Work : Regions associated with major Bhakti saints

Chapter 10 : Eighteenth-Century Political Formations

Map Work : Old Mughal provinces in the 18th century (Awadh, Bengal and Hyderabad) , City plundered by Nadir Shah in 1739- Delhi, Capital of Marathas in the 18th century- Poona, Capital of Ranjit Singh- Lahore, Region under the control of Jats - Delhi and Agra, New capital of Sawai Raja Jai Singh- Jaipur

Social and Political Life-II

Chapter 5 : Women Change the World

Chapter 6 : Understanding Media

Chapter 7 : Markets Around Us

Chapter 8 : A Shirt in the Market

Chapter 9 : Struggles for Equality

Our Environment

Chapter 6 : Natural Vegetation and Wildlife

Map Work: World Political Map: Major Grasslands of the World- Savannas, Steppes, Downs, Velds, Campos, Prairies, Pampas, Llanos

Chapter 7 : Human Environment - Settlement, Transport and Communication

Map Work : World Political Map : Some important sea ports and airports of the world

India Political Map : Cities connected in Golden Quadrilateral.

Chapter 8 : Human Environment Interactions - The Tropical and the Subtropical Region

Map Work : World Political Map : River Amazon, areas drained by Amazon River; the equator and the countries passing through the equator, Continent in which the Amazon Basin is located- South America

India Political Map : River Ganga, River Brahmaputra, Tributaries of river Ganga

Chapter 9 : Life in the Deserts

Map Work : World Political Map : Continent where Sahara desert lies, countries situated on the boundaries of Sahara desert

India Political Map : Ladakh, Zojila pass, Zaskar Range, Karakoram Range, Srinagar, Kargil and Leh

COMPUTER SCIENCE

Learning Objectives-

- to familiarize the students with concept of computer fundamentals
- to develop basic skills for website designing using HTML
- to familiarize the students with Internet ethics and safeguard.

Textbook: IT Planet- Petabyte (Class 7)

FIRST TERM

Lesson 1: Computer Virus

- Computer Virus
- Malware
- E-mail Virus
- Ransomware Virus
- Antivirus Program
- Precautions against Computer Virus

Lesson 7: HTML-Introduction

- Introduction to HTML
- HTML5
- Text Editors
- Web Browser for HTML5

Lesson 8: HTML- Creating Web Page

- HTML5
- Creating and Saving a Web Page
- Basic HTML Tags
- Displaying Web Page in a Web Browser
- Modifying Paragraph Text
- Heading Tag
- Formatting Text

SECOND TERM

Lesson 2: Number System

- Introduction
- Number System
- Conversion of Number Systems
- Bits and Bytes

Lesson 6: Internet- Ethics & Safeguard

- Internet
- Protecting yourself from potential threats on the web
- Role of Parents and Teacher

Lesson 9: HTML- Images, Links & Table

- Images in a Web Pages
- Inserting Images
- Creating List
- Links in Web Page
- Creating Links
- Tables in Web Page
- Creating a Table

For Practical Session Only

Lesson 3: Animate- Layers & Animation

Lesson 4: Photoshop- Introduction

Lesson 5: Photoshop- Layers and Filters

GENERAL KNOWLEDGE

Learning Objectives

The course in General Knowledge will help learners :

- enhance their general awareness.
- improve their reasoning and thinking skills.
- prepare for competitive exams.
- understand and analyse the situations.

Textbook: G.K. WHIZ -7 (FRANK EMU BOOKS)

FIRST TERM

NATURE

- Animals in Cold Regions
- Desert Animals
- A Little World
- Few Forests
- Here are Herbs

INDIA

- Bharat Ratna Awardees
- Kings and Emperors
- Yesterday and Today
- High Hills
- Places of Worship
- Count on Courage

WORLD

- The Freezing Cold
- The United Nations
- Leaders' Homes
- Parliaments
- Women and the Nobel

LANGUAGE

- Legendary Writers
- Name Game
- Books by Women
- Platform for Playwrights
- One Liners

SCIENCE

- Human Body
- Glands
- Social Networking Services

SPORTS

- Olympic Greats
- The Grand Slam Winners

ENTERTAINMENT

- Latino Dance and Music
- Puppetry

SECOND TERM

NATURE

- Hello Health Life Skills
- Animals that Adapt
- One of a kind
- The One-horned Rhino
- Gone from the Earth

INDIA

- Heritage Sites
- Offbeat Places
- Make in India
- Northeast Miscellany
- Words of Wisdom

WORLD

- Lesser known Places
- Train Travel
- Travel Tips Life Skills
- Natural Wonders
- Years Gone by

LANGUAGE

- Contrary Proverbs
- Newspapers
- Phobias
- Languages

SCIENCE

- Robotics in India
- Sports Injuries
- What is the Disease?

SPORTS

- Sports Legends
- Famous for Sports
- Playing Sports

ENTERTAINMENT

- Radio Jockey

Test Paper 1

Test Paper 2

WORK EXPERIENCE

Learning Objectives :

To help the pupils to develop essential knowledge and understanding in terms of :

- acquainting themselves with productive activities in the community
- understanding facts and scientific principles involved in various forms of work
- knowing the sources of raw material and understanding the use of tools and equipment in the production of goods and services
- understanding the utility of productive work and services to the community
- developing abilities for self-evaluation of performance and entrepreneurship

ENGLISH LITERARY CLUB

FIRST TERM

1. Vocabulary enhancing exercises (using Dictionary) and various oral and paper-pen games
2. Newspaper Reading
3. News Report Writing
4. Rewriting the endings
To rewrite the endings or last chapters of various novels and stories by Sherlock Holmes, O'Henry, Saki etc.
5. Spell Check
6. Quotations and Idioms
7. To write short poems with illustrations on a given topic

SECOND TERM

1. Just a Minute
2. Radio Show
3. Spin-a-Yarn (weaving stories from a given beginning)
4. Dumb Charades (idioms, phrases, quotations)
5. Character Dramatisation from various stories from the text book or other stories
6. Reading poems for pleasure and appreciation
7. Group Discussion (i) Importance of Reading
(ii) Manners maketh a Man

हिंदी साहित्यिक समिति

प्रथम सत्र

1. कविता-पाठ (प्रकृति, साहस, शिक्षाप्रद)
2. नारे (समाज कल्याण से संबंधित)

3. समाचार-लेखन तथा वाचन
4. कहानी-रचना (कहानी लेखन व वाचन)
5. दोहा, कवित्त (तुलसीदास, कबीर, वृंद, भूषण)

द्वितीय सत्र

1. चरित्र-अभिनय (पौराणिक, ऐतिहासिक या अन्य)
2. शब्दकोश देखना एवं निर्माण करना
3. कहानी का नाट्य रूपांतरण
4. लघु एकांकी मंचन (स्वच्छता, पर्यावरण, एकता)
5. प्रेरक प्रसंग - वाचन (महात्मा गांधी, वल्लभभाई पटेल, चन्द्रशेखर आज़ाद आदि महान व्यक्तियों से जुड़े प्रेरक प्रसंग)

MATHEMATICS CLUB FIRST TERM

1. Colour the butterfly – Solving integers
2. Mental Athletics
3. Arranging the jumbled months of the calendar
4. Finding the area of cross roads using strips
5. Magic square on fractions
6. Nets of 3D objects
7. Comparison of perimeter and area of plane figures

SECOND TERM

1. Verification of Triangle's Inequality Property
2. Creative designing using only mathematical shapes (square, rectangle, trapezium, parallelogram etc.)
3. Designs with the help of compass
4. Cutting the figures with rotational symmetry of order 1 or more and identify its centre of rotation
5. Making different designs using tangrams
6. Complete the series.
7. Card Game – finding the probability using cards

ELECTRONICS AND ECO CLUB

FIRST TERM

1. 'Zero Garbage Concept' - Making of compost pit
2. Poster making on hazards of e-waste
3. Making water level indicator
4. Green drive with sacred and medicinal herbs
5. Making a portable projector
6. Making natural mosquito repellents

SECOND TERM

1. Making home-made air purifier
2. Campaign on energy conservation
3. Making 100% energy free generator
4. Making file folder from eco-friendly material
5. Powerpoint presentation on water pollution - Problems and Solutions
6. Making an advertisement on therapeutic products

**FINE ART
FIRST TERM**

1. Landscape in water colours
2. Caricature making
3. Foliage study
4. Rajasthani 'Folk-Art'
5. Cityscape in Pointillism

SECOND TERM

1. Poster making
2. Nature study
3. Paper collage
4. Composition in Oil Pastels
5. Mosaic Painting

**HANDICRAFT
FIRST TERM**

1. Picture Patchwork
2. Door hanging
3. Spray painting
4. Letter box
5. Puppet making

SECOND TERM

1. Pen Stand
2. Bangle Box
3. Table Mats
4. Paper Flower
5. Photo Frame

**CONNOISSEURS CLUB
FIRST TERM**

1. Tri colour rawa idli
2. Power packed cereal
3. Bonsai plant making
4. Cup cakes
5. Gel candle
6. Jewellery designing with drinking straws
7. Supreme veggie pizza
8. Tie and dye (two or three colours)
* Hankies / Table mats - 6

SECOND TERM

1. Triple decker chutney sandwich
2. Green oats cake
3. Mask making
4. Chocolate making/Fruity chocolate
5. Moong Dal Cheela
6. Cheese and herb dip
7. Pretty 3-D picture
8. High fibre hearts

**WESTERN DANCE
FLAMENCO, JAMAICAN, HIP HOP, JIVE**

1. Body movements
2. Exercise (warming work out)
3. Stretching exercise for Flexibility of Body
4. Dance on Western Music with Prop
5. One Dance On Self Composition

शास्त्रीय नृत्य तथा लोक नृत्य

ऑडिसी

- | | |
|------------------|------------|
| 1. भूमि प्रणाम | 4. त्रिभंग |
| 2. सरस्वती वंदना | 5. अरसा |
| 3. गणेश वंदना | 6. ताल |

लोक नृत्य

- | | |
|--------------------|---------------------------|
| 1. बिहू (असम) | 3. गरबा , डांडिया(गुजरात) |
| 2. घूमर (राजस्थान) | 4. भांगड़ा (पंजाब) |

MUSIC

Theory :

1. 10 अलंकार
2. तीनताल व झपताल तालों का अध्ययन
3. तालबद्ध अलंकार
4. तराना
5. आरोह -अवरोह, स्थायी- अंतरा
6. भजन, गज़ल की परिभाषा
7. अलंकार व अलंकार के नियम

Practical :

1. अलंकारों का अभ्यास
2. तालबद्ध अलंकारों का अभ्यास
3. राग - भूपाली
4. सरगम गीत - राग भूपाली
5. भजन - मेरा आपकी कृपा से
6. लोकगीत - गुजराती लोक गीत
7. संस्कृत श्लोक - ' असतो मा सद्गमय'
8. English Songs- 'Oh Come All Ye Faithful'
'We Three Kings Of Orient'
9. प्रार्थना तथा देशभक्ति गीतों का अभ्यास
10. Patriotic Songs- 1. बदलेंगे तक्रदीर हम
2. भारत वंदे मातरम्
11. वाद्ययंत्र- Casio, Congo, Harmonium

YOGA

A- Introduction to Yoga

Some General Instructions

B- Yogasana

- Padmasana
- Bhujangasana
- Vajrasana
- Makarasana
- Chakrasana
- Shavasana
- Gomukhasana
- Pachimottanasana

- Surya-Namaskar
- Sarvangasana
- Mandukasana
- Kurmasana
- Janu-sirsasana
- Simhasna

C- Yogic Sukshma - Vyayama

- Samarana-sakti-Vikasana
- Buddhi-Tatha-Dhriti-Sakti-Vikasaka
- Netra-Sakti-Vikasana
- Karna-Sakti-Vikasana
- Medha-Sakti-Vikasana
- Kapola-Sakti-Vikasana
- Griva-Sakti-Vikasana
- Udara-Sakti-Vikasana (5 types)
- Kati-Sakti-Vikasana (5types)
- Purna-Bhuja-Sakti-Vikasana

D. Yogic-Sthula-Vyayama

1. Sirsasana
2. Utkurdan
3. Satvanga-pushti
4. Hrd-gati (The locomotive exercise)

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 artforms.

Textbook -Art Redefined Book-5

FIRST TERM

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

Art Redefined Book-5

Pages 3 to 34

SECOND TERM

Art Redefined Book-5

Pages 35 to 70

MUSIC, DANCE AND DRAMA

Theory:

1. Concept of Art Education
2. Basic knowledge of performing art
3. Definition of Sangeet, Shudh Swara, Taal
4. Written work of taal-‘Ek Taal, Teen Taal’
5. Kinds of Dance
6. Basic elements of Dance and Drama
7. 10 Alankars

Practical:

1. Practice of Alankars
2. Practice of Taal
3. Practice of prayers and songs from diary
4. Bengali folk song
5. One patriotic song
6. English Songs – ‘We See A Peaceful World’
‘Hall Of Fame’
7. Exercises of Western Dance Forms
8. Foot work of different Western Dance, Classical Dance Form & Folk Dance
9. Footwork of Dance Drama & Nukkad Natak
10. Bhajan- Hey Radha Madhav, Hey Krishan Murari

PHYSICAL EDUCATION AND HEALTH EDUCATION

Learning Objectives

- To develop a scientific point of view regarding Health and Physical Education.
- To give knowledge about balanced diet and nutrition.
- Effect of exercises on cardiovascular system.
- Effect of diet on overall development of students.

Theory

- Effects of exercises on Respiratory system.
- Knowledge about communicable diseases and their effects on our health.
- Knowledge of sports injuries, first-aid and treatment.
- Knowledge of all physical exercises related with major games and their benefits.

Practical: (Games and Sports)

1. Basketball
2. Volleyball
3. Cricket
4. Badminton
5. Table Tennis
6. Throwball