

Government of Maharashtra



सत्यमेव जयते

**PRIMARY EDUCATION CURRICULUM - 1988**  
(Standards. I to V)

(As sanctioned under G.R. No. PTC/1087/[355/87] SE- 5, Dated 5th May 1989,  
of Dept. of Edn. and Employment, Govt. of Maharashtra)



महाराष्ट्र राज्य शैक्षणिक संशोधन  
अभिलेखन परिषद, पुणे.

MAHARASHTRA STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING,

NIEPA DC



D11347

**PROMOTER**  
**MAHARASHTRA STATE - DEPT. OF EDUCATION**

**Editor & Publisher**

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National Institute of Educational

Research and Administration.

17-B, Sadashiv Marg,

New Delhi-110016

DOC, No.

Date

D-11347

15-02-2002

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Kumthekar Marg, Sadashiv Peth,

Pune - 411 030

Telephone No. 443138

**Printer**

Sangam Press Pvt. Ltd.

17 B, Kothrud,

Pune - 411 029

No. of Copies - 10,000

**For free distribution**

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## PREFACE

*After the Independence, there is, undoubtedly, a progressive trend in the scientific and industrial areas. The 21st century, in which we are to enter soon, will be dominated by computer science and electronics.*

There is, today, an upsurge in the national system of education in favour of effective universalization of elementary education, vocationalisation of education and production of the manpower, needed for technical progress.

It is observed that there is diversity in the course-content as well as in the language policy in the school education in the various states of the country. The N.P.E., therefore, gives unqualified priority to universalization of elementary education and envisages a common school-structure throughout the country with special reference to a national core-curriculum, and other requirements. The National curriculum-framework and the common core programme will provide guidelines for curricular changes, and for making it child-centred rather than subject-centred. Through the media of mass-communication such changes in the National System, and in the core programme will have to be ensured. In short, the N.P.E. is considered to be the need of the present times, so as to reform the system of education, and also to implement the course-content at all levels, effectively.

The Central Government accepted the "National Policy of Education in May, 1986, and advised the State Governments to implement it. The Government of Maharashtra decided to revise the syllabi of primary, secondary and higher secondary schools on the lines suggested in the N.P.E."

Earlier, the Maharashtra State Council of Educational Research and Training had appointed task-groups so as to revise syllabus at the primary level. The task-groups included representatives of the Text Book Bureau, Secondary & higher Secondary Board of Education. These task-groups took into consideration the recommendations of the N.P.E.

The Government of Maharashtra appointed a committee vide G.R. No. PTC/1086/139939 (7/86)-SE-5, dt. 3rd March, 1987, to advise them on the question of finalising the syllabi at the primary stage of education, and to work out other relevant details. This Committee examined the report of the task-groups on the basis of the recommendations contained in the N.P.E. 1986, and prepared a draft report on the subject which was circulated among different educational institutions, primary and secondary education Boards, D.Ed. and B.Ed. colleges for remarks. In the light of the information thus collected the final draft was prepared by the Government Committee on 10th and 11th December, 1987, and the same was adopted, finally, in the meeting of the said committee on 31-12-1987.

While reforming the syllabi at the primary level it became essential to consider the educational responsibilities as envisaged in the Constitution of India. The following are the constitutional responsibilities in this connection:

- 1) Free Primary education to all children in the age group of 6 to 14 years,
- 2) To attain the aim of universalization of primary education through various ways,
- 3) To provide more extensive and self-reliant primary education,
- 4) To provide educational facilities to Economically Backward classes, and
- 5) To develop Secularism and national Integrity through education.

In order to fulfil these responsibilities the following changes have been made in the reformed syllabi:

- 1) The syllabi have been made learner-centred rather than teacher-centred.
- 2) The syllabi are activity-oriented; and instead of teaching, it is oriented at giving inspiration to learning.
- 3) The syllabi at the primary level are based on minimum learning competencies.
- 4) The syllabi at the primary level are more extensive, well prepared, and they are meant for Sids. I to VIII instead for Sids. I to VII. We believe that a student completing these syllabi will be a responsible citizen even though he is unable to get further education.
- 5) The Three language Formula is retained as suggested in the "National Policy on Education".

The State Government formed the State Advisory committee for education vide G.R. No. MIS/1086 (77/86)/Mashi- 8 dated 29th December 1987. The first meeting of the committee was held on 13th of January 1989 at M.S.C.E.R.T. Pune 30. The curriculum as framed by the committee & recommendations made by it were placed before the honourable members of the committee. After intensive deliberations, important suggestions were made by the members with a view to making the implementation of the curriculum effective. The M.S.C.E.R.T. Pune is grateful to all the members concerned for that. Sanction has been accorded to the curriculum by the Government vide G.R. No. PTC/1087/(355/87) SE-5 dated 5th May 1989, and the implementation of the curriculum is to begin with effect from June 1989 in all the primary schools in the state for the std. I.

The Government of Maharashtra has approved the revised syllabi for Stds. I to VIII. However, as an immediate measure, we are publishing the revised syllabi only upto std. V. The remaining part of the syllabi (i.e. for stds. VI to VIII) will be published separately.

Accordingly, as for the various features of the revised syllabi the primary teachers will have to be careful while implementing them. They will have to understand that the new approach is learner-centred, activity-oriented and based on the minimum learning competencies. The Primary teachers will have to discard their traditional methods of teaching, and they will have to maintain progress-cards of pupils for recording changes taking place in their behaviour.

These syllabi have been prepared to face the challenges of the future according to the National policy of Education, 1986. I hope all primary teachers in the Maharashtra state will implement the syllabi taking into consideration the changes contained therein, and with due consideration to the objectives.

**V.R. NAGPURE**  
Director  
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# CURRICULUM FOR PRIMARY EDUCATION: 1988

## Background

India became free, i.e. Independent in 1947 and the country made tremendous progress during the last 40 years of Independence. There is no doubt that the country will stand out from the group of developing countries and will occupy an important position in the group of developed countries in the near future. But simultaneously the country will have to face the problems, like rapidly growing population, the tensions and factions existing on the basis of castes, languages and regions. The standard of living and the longevity have been raised with the development and progress of the nation. Along with all these changes, the needs and necessities of the society have increased. With the scientific and industrial development, various faculties of knowledge have also developed. But at the same time we could not fulfil the constitutional commitment of the universalization of primary education on account of tremendous growth of the population. For the strengthening of healthy democracy, the universalization of education is necessary and nobody can deny it.

When the country and the society are heading towards the progress and development, the educational needs of the society also change from time to time to cope up with the changes and progress; and, it is essential to change the educational pattern according to the needs of the dynamic society. There is no common curriculum, no common language policy in the various states of the country in the existing educational patterns. This is one of the major barriers in the way of national integration. We accepted the Report of the Kothari Commission in 1968, and since then the country has been implementing the same policy for the last 20 years. Nevertheless, the country has made considerable progress in the field of technology and science; and at the same time it has achieved financial growth during all these years. And, so, the educational pattern framed in 1968 (that is 20 years back) is not suitable for the changing situations as it can not meet the demands of the progressive society.

The 1968 pattern failed to produce well-equipped man power to use the new technology. The progress made in the field of electronics and the use of computer in the industry made it obligatory to include the modern technology in the educational system and process.

It is supposed that, educationally the Maharashtra State is ahead of others. Next to Kerala, the Maharashtra State ranks second in respect of literacy. The State has 47.2% literate population. Though the State has made sizable progress in enrolling the children to schools, with regard to their attendance there is so much to be done. Here, it will be proper to take a review of the progress, achieved by the State of Maharashtra in the field of education after its formation.

From 1st April, 1949, the Primary Education Act is being implemented. According to the Act, the responsibility of the primary education is entrusted to the district education boards and the recognised municipal education boards. Similarly, they have been made responsible for making the financial provisions for the expenditure incurred on the primary education. In the year 1960 the Maharashtra State came into existence under the state reorganization on the basis of linguistic formula. Since education is an important means of welfare and development of the society, the Zilla

Parishads and the Panchayat Samitis are entrusted with the total administration of the education. After the establishment of the Zilla Parishads on 1st May, 1962, uniformity in the primary education system was ensured in the real sense. Besides, Zilla Parishads, 127 local bodies like Panchayat Samitis and Municipalities look after the administration of primary education. The number of primary schools, students and teachers showed a sharp rise during 1960 to 1985-86; due to the efforts made on the part of the Zilla Parishads and that of the local governing bodies. There were 34,594 primary schools in 1960-61. In 1985-86 the number of schools reached to 54,171. In this expansion the lower primary schools were increased substantially. The total number of 20,713 lower primary schools have been included in this expansion statistics. During the period the number of primary teachers increased from 1,12,672 to 2,46,000; and, that of students from 41.78 lakhs to 93.32 lakhs.

All the children in the age group of 9 to 14 years are not able to join the schools. Hence, a separate arrangement is essential for those who are away from the main stream of education. In view of the need of these children who are unable to join regular schools, the system of non-formal education and part time schools were established to educate them under the VI Five Year Plan. The government has undertaken special programmes for proper development and progress of the primary school children and to raise their educational standard. Through the "Book-Bank" scheme, text books and the other instructional material are provided to students who are 'below poverty-line' in the rural and tribal areas. In order to expedite the universalization of the education the pre-primary classes have been opened in the one-teacher schools in the State. Under the 6th Plan special relaxations and concessions were given to the students belonging to the scheduled castes and tribes to minimize the percentage of drop-outs and failures. At present 57 students out of 100 reach the Standard VIII. In order to increase the percentage, the education process in the state must become dynamic.

The then Prime Minister of India, Shri Rajeev Gandhi had placed the drawbacks as found in the present educational system before the nation. Taking inspiration from this, the Parliament approved a common and comprehensive National Policy on Education in May, 1986, for the whole nation. Accordingly, the pattern, the structure and the guiding principles for the curriculum were decided. The Maharashtra State had decided to restructure the curriculum at the Primary, Secondary and Higher Secondary levels. The Maharashtra State Council of Educational Research & Training has prepared the curriculum and syllabi for Primary Education. The work of preparing the curriculum and syllabi for the Secondary and Higher Secondary Education has been entrusted to the State Board of Secondary and Higher Secondary Education.

### **Structure**

According to the National Policy on Education, the pattern of Primary, Secondary and Higher Secondary Education will be 8 + 2 + 2. Accordingly, the curriculum for the primary education has been prepared for the standards I to VIII. There will be two stages of primary education. The lower primary education covers the standards I to V.

At this stage, the medium of instruction is the mother-tongue. The upper primary stage is of three years, covering the standards I to VIII.

process of teaching-learning must be flexible . In this newly proposed curriculum special emphasis is given on the following points.

1. The learner centered teaching-learning process.
2. Integrated and all-round development is the principal objective of education.
3. In accordance with the local situations the curriculum will be creative and innovative.
4. Only to acquire knowledge is not the aim of education, but the child must acquire minimum competencies at the end of primary education.
5. The educational process should not be monotonous and boring but it should be such an interesting, lively and pleasant experience for the students that they will not detest the school education.

At the end of primary education the student will achieve the stage of self - sufficiency and he/she will be a responsible citizen of the country even though he/she may not pursue education.

### **Plan for Language Teaching/Studies**

According to the National Policy on Education any language other than mother-tongue will be introduced from the Vth standard. But considering the pretty need and demand from the Public for English the Maharashtra State has provided English and Hindi from the Vth Standard according to the prevailing plan. Three language formula is maintained in newly proposed curriculum. The pupils whose mother-tongue is Marathi will learn English and Hindi from Vth standard. But the students who do not have Marathi as their first language that is their mother-tongue is not Marathi, English they will complete the composite course of their mother-tongue, English, Hindi and Marathi as the regional language.

### **The Aims and objectives of Primary Education**

The main objective of Primary Education is that the student should get basic education. Therefore, it is essential to achieve an integrated and all round development of the child through the curriculum. The physical, intellectual, mental, emotional, development of the child is expected through the education.

The curriculum will cultivate various skills, knowledge, human values, good habits and hobbies and constructive out-look in the students and similarly it will provide a scope for their intelligence interests and creativity.

### **Aims and Objectives of Primary Education**

1. To develop the basic linguistic skills of listening, speaking, reading and writing in the students of Ist to IVth standard through the learning of their mother-tongue.
2. To develop the linguistics skill in the student from Vth to VIIIth standard of the subjects which they learned through their mother-tongue. Similarly the basic linguistic skills like listening, reading and writing should be developed in them regarding Hindi, English and Marathi as their



regional language.

3. To reinforce the basic mathematical skills which form the base of the further mathematics.
4. With the acquisition of knowledge the student must acquire learning skills.
5. To cultivate the human moral values and to inculcate non-violence, secularism national integration and Indian culture.
6. To make the students aware of the correlation between the environment and human life.
7. To create an awareness of social rights the duties and commitments to the society through tolerance and co-operation.
8. To encourage their reasoning power and cultivate self-confidence and qualities of leadership.
9. To make them familiar with the great ancient heritage and culture of India.
10. To get them, acquainted with the movement of struggle for Indian freedom.
11. To make them aware of geographical and cultural variety of India.
12. To cultivate fine arts and good hobbies and to develop their special qualities.
13. To pay special attention for an ideal physical development of the students and similarly to inculcate good hygienic habits in them through physical education.
14. To help them to know the burning problems of growing population of India.
15. To cultivate love and honour for labour and work.

### **The structure for Primary Education**

The primary education begins for the student at the completed age of six years and is completed at the age of fourteen years. Before, having the primary education he will be given pre-primary education. It will give an opportunity to the child to take interest in schooling and it will help to lessen the percentage of drop-outs. To achieve the goal of universalisation of education upto 1995, the boys outside the schools will be given non-formal education according to their convenience and at convenient time. Afterwards they will be absorbed in the main steam of formal education. Similarly, opportunities to have education according to the convenience of the students will be provided through the open schools.

Since the new curriculum is child-centered, i.e., learner centered it will be more and more innovative. There is no formal teaching of any subject at the pre-primary level.

The following subjects are included in the curriculum for the primary and upper primary education.

**Primary Level  
I to V**

1. One language (mother—tongue)
2. Environmental Study
3. Mathematics
4. Work-Experience
5. Art
6. Physical and Health Education
7. English, Marathi, Hindi  
(in Vth Std.)

**Upper Primary Level  
VI to VIII**

1. Language,
2. English, Marathi, Hindi, or Hindi-Marathi.  
Composite curriculum
3. Science
4. Maths.
5. Social Sciences
6. Work-Experience Education
7. Art
8. Physical and Health education

In the standards 1st and 2nd the subjects like History, Geography, Civics and Science are tackled through the local environmental study. For that purpose total 18 local environmental components (Units) are suggested. From the 3rd standard the above mentioned subjects are to be taught through the environmental study. What minimum competencies are to be acquired by the students at the completion of syllabus are mentioned in the following chapter. It is not our aim to teach or complete the text - book, but more attention is to be paid to enable the student to acquire minimum competencies through the various learning experiences and so learning should take place through innovative and creative activities.

**Subject-wise Distribution of Periods**

The number of subjects is less at the lower stage of Education Primary Level (Ist to V std.) But at the upper primary level the student has to learn three languages and History, Geography, Science separately through the environmental study. Therefore, the distribution is done at both the levels.

Primary Level		Upper Primary Level	
Subjects	Periods	Subjects	Periods
Mother-tongue (Std. I to IV)	13	Language	15
Environmental Study	07	Science	05
Maths.	06	Maths.	06
Work-Experience	09	Social Science	06
Art	04	Work-Experience	05
Physical Education and Health	05	Art	04
		Physical Education and Health	04

In the Std., V for English, Marathi, and Hindi 5 periods are given)

Total (Primary Level) 45

Total (Upper Primary Level) 45

**Stds. III to V  
Environmental Study**

**Distribution of period**

History	2
Geography	2
Science	3
Total	<u>7</u>

**Stds. VI to VIII  
Social Sciences**

**Distribution of periods**

History	2
Geography	2
Civics	2
Total	<u>6</u>

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**Std V : Languages**

Mother-tongue	8
English	3
Hindi	
Hindi/Marathi	2
Total	<u>13</u>

**Stdss.VI to VIII - Languages**

Mother- tongue	6
English	5
Hindi	
Hindi/Marathi	4
Total	<u>15</u>

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While preparing curriculum it is considered that each period will be 35 or 40 minutes. But if the situation demands a flexibility regarding the time duration of periods according to the local situation, is permissible. In such circumstances the teaching-learning process should take outside the class-room if possible. Even though more time is spent in it through these activities some concepts of language and mathematics can be explained to the students. The time allotted for physical education and art education can be utilised through such activities outside the class-room.

**The Areas of Curriculum**

OR

**The Scope of Curriculum**

The languages, environmental study, mathematics, work-experience, art and health and physical education are the learning areas of the primary level. Two new languages are introduced in the Vth standard. At the upper primary level besides mother-tongue the student has to learn Marathi Hindi or Marathi and English. Similarly he has to learn Science, History, Civics and Geography instead of environmental study. It means there will be ten subjects of learning at the upper primary level. The precise objectives and minimum competencies should be maintained in each areas in the syllabus of the respective subjects. The following are the general objectives of the different subjects in the syllabus.

## Primary level

### 1. Mother-tongue

- 1.1 To express thoughts and feelings in one's mother-tongue.
- 1.2 To enable the student to acquire linguistic skills like listening, speech, reading, writing.
- 1.3 To enable the students to use language in conversation.
- 1.4 To express his/her own experiences of the environmental study.

### 2. Mathematics

- 2.1 To acquire the proficiency in counting and writing the numbers.
- 2.2 To enable him/her to acquire the mathematical operation of sum, subtraction, multiplication and division.
- 2.3 To make him/her familiar with the different scales of measurements, weights, coins, and (denomination of the currency notes) value of currency notes and enable him/her to tell the time.
- 2.4 To recognise simple shapes like triangle, quadrilateral, circle, cube, cylinder and cones.
- 2.5 To recognise simple fractions.
- 2.6 To recognise the digital values upto thousand.

### 3. Environmental Study

- 3.1 To make the student familiar with home, school, family atmosphere, physical surroundings, clothing or dresses, local occupations, the means of transport and the sky through first hand experiences and the direct observations.
- 3.2 To teach him/her distinguish between the living and non-living things.
- 3.3 To provide (give) him/her knowledge about the geographical information of a native place, i.e. village, block and district.
- 3.4 To enable him/her to collect the environmental information, classify it and make him/her able to draw conclusions through analysis.
- 3.5 To make the student familiar about the biographies of the great saints and the leaders.
- 3.6 To cultivate the great cultural heritage of India, secularism and the national integration through the celebration of the national as well as local festivals.
- 3.7 To give the student knowledge about the local institutions doing the work of social welfare and working for the development of the society.
- 3.8 Being the part and parcel of the family, school and society he must know his rights and similarly the commitments to these institutions.

#### **4. Work-Experience**

- 4.1 To cultivate the good hygienic habits necessary for healthy life and inculcate a sense of beauty.
- 4.2 To create a liking, interest and taste for any job through observation, imitation and practice.
- 4.3 To provide information about the raw material, equipments and tools for the work-experience.
- 4.4 To develop the tendencies of co-operation and self-reliance.
- 4.5 To inculcate love and honour for labour and work.

#### **5. Art**

- 5.1 To develop in the student sense of beauty through the environmental study.
- 5.2 To cultivate and develop expressive power through songs, acting, dances, dramatisation and free-drawings.
- 5.3 To create in him/her an interest and taste for different aspects and areas of art.

#### **6. Physical Education and Health**

- 6.1 To cultivate the habits of cleanliness.
- 6.2 To make the student aware of good and nutritional diet, and to cultivate good food habits.
- 6.3 To cultivate punctuality.
- 6.4 To achieve a perfect physical development and maintain good physique through free movements, rhythmic movements, imitation, different games and mass drill.
- 6.5 To develop the sense of equality and integrity.

#### **Upper Primary Level**

##### **1) Mother-tongue**

- 1.1 To develop linguistic skills such as listening, speech, reading and writing
- 1.2 To encourage the habits of expressions through different forms of literature.
- 1.3 To develop the sense of appreciation and to enjoy the forms like prose and poetry.
- 1.4 To develop legible and beautiful handwriting and to cultivate the clarity of language.
- 1.5 To develop the skill of fluent conversation.

##### **2) Hindi (As second language) or Hindi/Marathi composite**

- 2.1 To enable the student to acquire the basic linguistic skills - listening, speech, reading and writing.

2.2 To follow the meaning of passages given in a 2nd language.

### 3) English

3.1 To help him/her to acquire the linguistic skills listening, reading and writing in English.

3.2 To follow the meaning and theme of the passage given in English.

3.3 To make the student know the importance of English as a library language.

3.4 To develop an art and skill of conversation in English.

### 4) Mathematics

4.1 To reinforce the primary mathematical operations.

4.2 To familiarise with the concepts and principles in Mathematics.

4.3 To make him/her acquainted with Geometry and Algebra through the applications of commerce, mathematical measurements and statistics.

4.4 To prepare models and to draw figures. To help a student to achieve the skill of drawing graphs.

### 5) Science

5.1 To reinforce the faculties of observation, classification and inference.

5.2 To make the student familiar with the basic principles of Physics, Chemistry and Biology.

5.3 To develop the skills of performing simple and easy experiments.

5.4 To develop the faculty of analysing the happenings in nature.

5.5 To help him/her to develop the scientific temper (Approach).

### 6) Social Sciences

6.1 To help and guide him/her to be familiar with the Indian and world culture.

6.2 To enable him/her to know the influence of social environment on the individual human being.

6.3 To create an awareness of the contemporary developments and the social problems.

6.4 To have information about the social and political institutions.

6.5 To gather information about the social, cultural and scientific developments in Indian history.

6.6 To make him/her aware of the commitments of the responsible citizen.

## 7) Work-Experience

- 7.1 To participate in productive work.
- 7.2 To develop the professional and occupational skills by providing the student the opportunities of observation, imitation and practice in the work through the work-experiences.
- 7.3 To help the student to produce the things of marketable standard.
- 7.4 To motivate him to go for the vocational education through work-experience.

## 8) Art

- 8.1 To develop the skills in drawing and painting. Clay earthenwork, to make dolls and puppets.
- 8.2 To play and handle simple musical instruments, suitable to the age group.
- 8.3 To know primary and basic concepts of various arts.
- 8.4 To help him/her to be familiar with the renowned personalities in the various fields of art.
- 8.5 To know national and cultural heritage.
- 8.6 To participate in chorus and group songs.
- 8.7 To help him/her to develop artistic qualities through the creative activities.

## 9) Physical Education and Health

- 9.1 To know different games and sports and to acquire mastery in a specific game sport of liking.
- 9.2 To participate in mass drill and march past and acquire proficiency in it.
- 9.3 To have experience of the scout and guide camps.
- 9.4 To know the art of wrestling.
- 9.5 To realise the importance of healthful living and optimum physical fitness.

## 10) National objectives to achieve integrated (all round) developments

In addition to achievement of the objectives of curriculum through different subjects, though we achieve aims and the following national objectives are to be achieved for the integrated development of the student.

- 10.1 To make him/her aware of the rich and varied cultural heritage of India and to inculcate love and respect for it.
- 10.2 To inculcate a sense of nationality and patriotism.
- 10.3 To cultivate national and social integrity.
- 10.4 To protect the nature and environment and to develop attitude to save energy.

- 10.5 To get acquainted with the scientific and the technological development of the country.
- 10.6 To develop respect and honour for the Indian constitution and make him/her aware of their rights and the constitutional commitments.
- 10.7 To create an awareness regarding the tremendous population growth and the problems created because of the social and economical disparity.

### **Learning-Teaching Method**

It is expected that all the activities at the primary level are to be child-centered. It means that learning should take place through various educational activities and not through the teaching only. It is observed that at present the teachers generally teach the textbooks only and do not encourage self-learning attitude in the students. The result is education has become monotonous, boring and meaningless, now a days. This is the general reaction. It is essential to remove these flaws.

The monotonous and meaningless teaching at primary level increases the percentage of drop-outs. For this purpose it would be advisable to make them to have learning experiences through different educational creative activities rather than teach them. All efforts should be made to see that the boy will feel that the schooling is an interesting and pleasant experience.

The learning and teaching of languages and mathematics is to be done in a sequence from easy to difficult, that is from simple to complex. After the completion of every unit, the test should be given to know that whether the unit is reinforced or not. Evaluation is to be done to remove the weaknesses, and it will enrich the learning process. At the primary level History, Geography, Civics and Science should be taught through the environment study. It pays better, and for that, purpose right and appropriate activities are to be selected for the learning experiences of the students.

Though separate syllabus is not given to achieve the national objectives, they should be achieved through the teaching of different subjects.

It is essential to provide the teacher's hand book to the teacher for the guidance in tackling the syllabus of different subjects at the primary level. The hand book should include subject-wise educational activities. The quality and standard of the education should be improved and raised through various activities, appropriate question papers, the maximum use of various instructional material and comprehensive continuous evaluation. Along with the expansion of education raising its standard and quality is one of the principal objectives of the National Policy on Education.

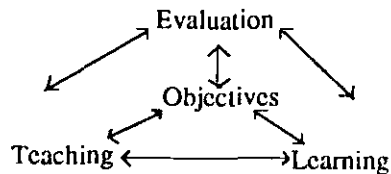
### **Evaluation**

Evaluation is an inseparable component of the planned education. To know the progress of the student at various stages through evaluation helps to provide him feed back to remove his weaknesses and the remedial programme can be given on the basis of diagnosis. The evaluation of the taste and aptitude must be done.



Though the external written (theory) examination is compulsory they should not be given undue importance. Similarly the external written examinations should not be considered as the norm to fail and pass the student at the primary level. On account of his failure to achieve minimum competencies in one or two subjects the student should not be declared failed, as this discourages him to participate in school education and it leads to leaving the school.

You can see how the objectives of the curriculum, learning, teaching and evaluation are inseparable from each other. The means by which they are co-related with each other is shown in the following diagram.



At the primary level at the end of the academic year the student should not be given marks but he should be given grade through the evaluation and he should not be detained and deprived of general primary education. This will lessen the percentage of drop-outs and it will help to achieve the goal of universalisation of education to a great extent. The first general certificate examination of primary level will be held at the completion of standard VIII.

#### **Remedial programmes and quality development**

The alertness and efficiency in learning differs from child to child. Taking into consideration this fact, a provision for remedial programme for poor children should be planned through activities to develop the quality. The students who shine and do well in a particular subject or area should be provided more and more opportunities to achieve the higher level of development and those who have shown poor performance in a particular subject or area are to be given opportunity to acquire at least minimum competencies in that particular subject.

For this purpose at every stage of curriculum evaluation is essential. The evaluation helps to provide remedial programme to the needy students and to provide opportunities to develop quality and competencies of the intellectual learners.

# FIRST LANGUAGE SYLLABUS OF MOTHER—TONGUE

## Introduction

Language has a unique place in the life of human being. The language is an important heritage that we have inherited from society. It is of prime importance in communication. Our routine work is done mainly through our mother-tongue and if we need, we also take the help of link different languages. To facilitate communication one needs mastery over the language. This mastery can be acquired slowly. Children get the lessons of the language from parents, relatives, friends and other families etc. It is necessary to acquire language skills such as listening speech, discussion, reading and writing. As the experiences get enriched, so the clarity in expression also increases. By reading literature and by taking an interest he becomes more conscious of the world around him.

The knowledge of language gives man great power. The allround development is done through language. He develops the power of thinking. He looks towards life critically. Language is a social institution. Just as society has a heritage, status and history. So also the language has history just as living society is changeable so also language is changeable. Language depends on the needs and the challenges of the society. The study of Language and Literature enriches the social consciousness.

It also enriches the love for all religions, national integration, national character and thoughts, love for nation and the love for values of life. Language is a source to acquire knowledge. Thus human beings can acquire the knowledge and retain it for generation. Language helps us in acquiring and retaining traditions of knowledge.

In order to gain and impart knowledge, language plays an important role. Through study of language, word formation, framing of sentences and meanings of words, one can master and understand the accurate meaning as well as the words, sentences and its use in the language competency.

While preparing the syllabus, separate syllabus of grammar of Kannad, Gujarathi, Urdu, Hindi, English, Sindhi has also been prepared and taken into consideration the speciality of that particular language. The assigned syllabus should be taught while taking regular syllabus through textbooks.

While preparing language syllabus one has to think of the general objective, expectations and different activities.

## Objectives of teaching of mother— tongue

### General Objectives

1. To listen attentively and after listening to understand it.
2. To express thoughts, feelings, imagination and desires in appropriate words.
3. Phonotics should be stressed upon (Modulating of voice).
4. To read with proper intonation, pronunciation and at normal speed.
5. To be read with expression.
6. Silent reading with comprehension.
7. Ability to write a good legible hand.
8. To develop the skill of writing one's own experiences, thoughts, feelings and imagination effectively.
9. To develop the skill of punctuation in writing.
10. To understand the language thoroughly.
11. To develop the interest in language through teaching aids.
12. To develop the language skill through the audience of drama, cinema, radio, T.V.magazines etc.
13. To develop the sense of application of local dialect.
14. To cultivate love for the Nation, national integration, love for all the religions, love for scientific thinking, social consciousness, human values, humanity, love for nature, thoughtfulness, justice, equality, brotherhood, fearlessness, self-independence and dignity of labour.
15. Love and respect for office languages and for others speaking different languages.

### TextBooks

Textbooks serve us as acids for the progress of a language. Through the textual lessons one can create interest. In the same way through language construction, word-formation, framing of sentences, much knowledge could be acquired.

Through the text, the children could be taught respect, obedience, love for one's nation, fearlessness, love for nature, dignity of labour, human values, justice, co-operation, patriotism, hard-work, love, brotherhood, national integration, scientific attitudes, discipline (good thoughts) thoughtfulness, equality, respect for all religions, patience, social awareness, sanctity, following the rules of the society, no difference between sex (man/woman) independence to be cultivated.

### How to select lessons from the Text :

1. Age of the student, mental ability to be taken into consideration.
2. Lesson should be interesting and should be of some value to the child.
3. Through the text, the children could be taught respect, obedience, love for one's nation, fearlessness, love for nature, dignity of labour, human values, justice, co-operation, patriotism, hand-work, love, brotherhood, national integration, scientific attitudes, discipline (good thoughts), thoughtfulness, equality, respect for all

religions, patience, social awareness, sanctity, following the rules of the society, no difference between sex (Man/woman) independence to be cultivated.

4. Lessons to be (concerned, connected) selected according to standard of living, pertaining to the environment.
5. Introduction of dictionary, vocabulary (collection of words) according to standard.
6. Words to be selected according to their practical life (day to day).
7. In the construction of sentences, use of difficult words should be increased gradually.
- 8: Introduction of teaching aids.
9. There should not be a separate grammar book,. but grammar lessons should be included at the end of the lesson in the textbook itself.

### Teaching Periods :

For the teaching of mother-tongue from Stds.I to IV, the teaching periods should be 13 in a week (duration of 30 minutes per period). Out of which 3 periods utilised for writing.

For Stds.V to VIII in a week it should be 6 periods (2 periods for written work).

### Structure of text book:

Std.I	No. of pages	48	Poem - lines	80
Std.II	No. of pages	56	Poem - lines	160
Std.III	No. of pages	64	Poem - lines	200
Std.IV	No. of pages	72	Poem - lines	240
Std.V	No. of pages	80	Poem - lines	280

( Separate pages for pictures, exercises and grammar)

### Primary stage : Standards I and II

#### Specific Objectives

1. To listen with understanding and develop listening habits.
2. To introduce ( sounds,( phonics) of records ).
3. To introduce alphabets, intonation (pronunciation) and writing script.
4. To develop skills of intociation (pronunciation) or rights.
5. To develop reading with understanding and to develop love for reading.
6. To develop vocabulary to express emotions.
7. To develop the skill to writing of familiar words and sentences.
8. To express feeling in the spoken language and to develop the competency to express the feelings in the textual language, too.
9. To develop consciousness of environment.
10. To develop the virtues of sanctity, co-operation, love, respectfulness, social values of labour, obedience, discipline and justice.

# MOTHER—TONGUE — MARATHI STDs. I AND II

## STD I: LISTENING ABILITY

Activity	Learning Outcome
1. Act as per listening	Listens attentively (No disturbances)
2. To give special words	Listens to the instructions carefully and obeys
3. To tell short stories of animals, beasts and children	Can understand inter-action of words.
4. To tell fables,mythological, historical stories	Can understand inter action in sentence.
5. To sing action songs in rhythm	Understand the meaning of the songs
6. To record a paragraph based on children's experience in 8 to 10 small dialogue, or discussion	Understand simple and small stories
7. To provide facilities to listen to another teachers, classmate or friend	Understand the events Answers the questions on the portion done
8. To provide cassettes of Bolaki Balbharati and other cassettes	Understand the feelings of the speaker from his Cassettes
9. To arrange drama for children or puppet show	Listen to songs, poems, stories etc.
10. To arrange to listen programmes of radio & T.V.	

## 2. Speech - Conversation

Activity	Learning Outcome
1. The teacher should pronounce the words and make the students repeat so they have enough practice.	Pronounces correctly and clearly. ex. श, ष, स, न, ण, त, च
2. To give an opportunity to pronounce the words.	Pronounces the words correctly. Ex. चमचा, चहा, जहाज, जेवण
3. To converse sing action songs.	Speaks fluently without interruption & in complete sentences.
4. To allow the students to speak and practice the from the words of experience of children.	Speaks correctly and clearly so that other can understand.
5. To give an opportunity to speak out on occasions or events such as Birthday, Balak Din, Festivals and other functions.	Speaks correctly without hesitation.
6. To do picture reading.	Pronounces correct. Pauses
7. To help the students to speak with the given group of words (Vocabulary).	Taking care to pronounce to vowels. Answers the questions.
8. To take practice of speaking with clear pronunciation interaction punctuation and expression.	Speaks for getting information and speaks for what he wants - self expression.
9. To arrange an activity in which the pupil should take an active part as if he is a participant in the play.	Tells stories in the class and to his family members and sings songs. Express his thoughts and desires in this conversation.
10. Special attention to be paid to childrens, pronunciation environmental based on their surroundings.	Takes part in conversation without hesitation, and takes part in dramatization, speaks with etiquettes.
11. To create teaching events in which the pupil can converse non-formally with his outside friends, relatives and family members.	Takes part in conversation without hesitation.
12. To sing songs with actions individually and in chorus.	Tells stories with action and takes part in dramatization.

### 3. Reading Ability—Reading Aloud

Activity	Learning Outcome
1. Reading of lessons from the textbook with comprehension.	Pronounces correctly ex. and with vowels
2. To take for receiving a conversational passage from the text book.	Reads with correct pronunciation and also fluently by not reading alphabets words separately.
3. To take reading from other text books and from literature meant for children. Ex. Childrens Songs, Story Books for children Excerpts from Newspaper meant for children.	Reads with comprehension reads passage with correct tone and accent.
4. Reading of bold letters from boards, charts and boards depicting the names of shops.	Reads the conversation as if he is in the storyof the character in the play.
5. Picture reading of material meant for children.	Reads books, keeping it at specific distance from him while standing or sitting.
6. To inculcate good reading habits there should be picture books and have a discussion on it.	Follows the reading of the teachers. Inculcates good reading habits.
7. Reading of pictures, flash cards, words, sentences and alphabet cards.	Understands meaning of the portion read.
8. Listening model lessons from 'Bolaki Balbharati'.	Reads bold letters of the writings of teachers, friends, and the members of the family. Reads the title of the newspaper. Behaves as per instructions given.
9. Reading of poems with meaning and reading of the poem with proper interaction and accenty.	

### 3a. - Supplementary Reading

Activity	Learning Outcome
1. To make available the reading material.	Shows inclination towards reading bold print.
2. To encourage the students to read.	To understand the reading part.
3. To listen to model lesson from the available cassetts.	Reads stories, poems and conversations outside the textbooks.
4. To arrange reading competitions.	
5. To get them to read proverbs.	
<b>4. Memorising</b>	
1. To tell short pleasant stories.	Tells short stories.
2. Give them practice of story telling.	Sings montessory songs.
3. Singing of poems in chorus.	
4. Give them practice of individual singing.	
<b>5. Writing ability</b>	
1. To practise the habit of writing by sitting and holding the pencil in hand.	Writes on slate or paper by sitting correctly with a pencil in hand.
2. To practice letters by covering the shape of the letter.	Writes well formed letters in parallel lines.
3. To practice letters in suitable form.	Writes with the necessary speed.
4. To encourage to write with the help of other familier words.	Transcribes 3 to 4 sentences, Writes words, with vowels from the textbook.
5. To get the transcription and the dictation one with specific speed.	
6. To prepare charts and books of meaningful selected sentences in the class-room for transcription.	



- |   |   |
|---|---|
| 7. To prepare a chart of the words which are frequently written incorrectly with correct words in the class-room and then asked the students to write them. | Write familiar words with the help of a given word.                         |
| 8. To encourage writing by using flash cards, sentence strips, pictures and other educational material.   | Keeps co-ordination with the hands, of the eyes, while writing.             |
| 9. To have writing competitions.  | Keeps writing material neat (slate, pencil and paper) and uses it properly. |
| 10. To construct sentences based on home, festival, ceremonies, toys, school, relatives, birds and beasts and other familiar subjects and experiences.      | Writes according to the rules of writing.                                   |
| 11. Practice of different types of picture, figures.  |   |

### Hand-writing

- |  |   |
|--|---|
| 1. To inculcate the habit of writing horizontally, vertically, straight lines, cross lines so that the hand to be moved, and small and big circles, points are formed. | Draws verticle, horizontal, cross, straight lines, circles, points etc. of the writing script.<br>Ex. \ / O o • C > ( ) |
| A) To draw the different parts of the alphabets on the slate and ask them to write<br>Ex. T F T C φ  | Draws different parts of alphabets.   |
| B) From simple to difficult approach, grouping of alphabets, be fixed for writing.   | Writes the alphabets, draws legible alphabets.  |
| C) To tell to draw the parts of the alphabets in order.<br>Ex. च = - च च च<br>च =   ट ढ ष  |   |
| D) To fix the chart of the order of alphabets.   |   |
| E) To tell the order from which the alphabets are to be drawn.<br>To arrange writing competition.  |   |

### Standard III, IV & V : General Objectives

1. To cultivate the habit listening, speech, conversation, reading, (loud and silent) and writing skills.
2. To develop understanding and comprehension skills.
3. To develop the skills of correct pronunciation.
4. To develop vocabulary.
5. To develop interest in extra reading and to create interest in reading for knowledge and entertainment.
6. To introduce different kinds of teaching material.
7. To enrich consciousness and awakening.
8. To develop necessary language skills for day-to-day life.
9. To cultivate competency for the task of the language creativity values, fancy and delight.
10. To create consciousness.
11. To cultivate virtues such as patriotism, love for all religions, obedience, cooperation, brotherhood, sanctity, love, to follow the values of society, hard work, justice, equality etc.

#### Standard III - 1. Listening Ability

<i>S.No.</i>	<i>Activity</i>	<i>Learning Outcome</i>
1.	To tell such stories such as adventure tales, detective stories, humorous stories, stories of Science, to develop the imagination power.	Listens to songs, poems, stories with delight. Listens to the speaking and reading carefully. Follows instructions once given.
2.	To give an opportunity to listen to others at school functions and other functions.	Listens to pronunciation with understanding.
3.	To read passages from supplementary reading and also passages from dramas, according to the age group.	Understands unfamiliar words with the help of phrases and sentences.
4.	To read poems and chorus songs with actions.	Understands the points some-what he listens.
5.	To give opportunity to listen to cassettes of "Bolaki Balbharati" and similar other cassettes.	Remembers events in order of the stories told. Understanding the gist of the conversation.
6.	To arrange to listen to programmes on the T.V. and Radio meant for children.	Listens to the programmes through the medium of Radio, T.V., Play, Cinema, etc.
7.	To give an opportunity to see puppet shows, childrens, show and childrens, drama.	

## 2. Speech and Conversation Ability.

- |    |  |   |
|----|--|---|
| 1. | To take the dramatization of places such as shops, markets, post offices, water sets, S.T. stands, hospitals, etc. | Speaks after understanding meaning.<br>Speaks in such a way that others can understand.   |
| 2. | To encourage the students to tell their experiences during and after excursion.                                    | Speaks according to the situation.<br>Narrates the events of excursions.  |
| 3. | To hold discussions on different programmes on Radio, T.V. Drama and Cinema.                                       | Tell stories.<br>While telling stories he speaks 8 to 10 sentences in sequence.   |
| 4. | To hold competitions in telling stories in a sequence.   | Speaks with correct tone and accent converse.   |
| 5. | To hold competitions in poetry, reading and telling present events.  | Converse with etiquettes confidence.  |
| 6. | To arrange programmes as to how to talk with etiquettes.   | Sees T.V. programmes and answers questions and asks questions, based on them.   |
| 7. | To arrange prose and poetry recitation competition.  | Speaks to others with respect.  |
| 8. | Competition in dramatization.  | Participates in school competitions such as drama etc.<br>Speaks fluently and confidently to the audience.<br>Narrates stories heard. |

## 3. Reading Ability : A) Loud Reading

- |    |  |   |
|----|--|---|
| 1. | To take practice in reading for comprehension.                               | Reads textbook with a normal speed.   |
| 2. | To practice reading with a suitable speed.                                   | Uses correct pauses after understanding the meaning of the sentences.   |
| 3. | To read the writing of other students from the note books.                   | Reads the written material of his classmates.   |
| 4. | To make them read the instructions written on the board.                     | Understands the meaning of read words in proper context.  |
| 5. | To give letters, chits, invitation cards and other written work for reading. | Reads the instructions written on the board.<br>To understand the meaning of punctuation marks and uses it in loud reading. |

- |     |   |   |
|-----|---|---|
| 6.  | To ask to read the titles in the newspaper.                 | Does supplementary reading.<br>Participates in the reading in the class.                    |
| 7.  | Books for supplementary reading should be given.            | Reads written work as per the order of alphabets.   |
| 8.  | Reading competition.  |   |
| 9.  | To arrange exhibition of books.                             |   |
| 10. | To arrange model lesson using the medium of T.V. and Radio. | Makes difference between facts and emotions and imagination and tells orally or in writing. |
| 11. | To ask questions on the passage after loud reading.         |   |

#### **B) Silent Reading**

- |    |  |  |
|----|--|--|
| 1. | To give passage of few sentences from the textbook.    | Reads silently and carefully without moving lips (Silent reading).                                   |
| 2. | To give practice in silent reading at suitable time.   | Tells the meaning contained in the passage given for silent reading and answers the questions asked. |
| 3. | To ask to narrate the story read.                      |  |
| 4. | To ask questions on passages given for silent reading. | Perform silent reading with normal speed.  |

#### **4. Recitation Ability - (Memory Work)**

- |    |  |   |
|----|--|---|
| 1. | To teach, to sing the poems individually or in chorus in a rhythm. | Recites small passages in both forms.   |
| 2. | To teach action and action songs.                                  | Recites 4 selected poems.   |
| 3. | To arrange competition of Recitation (Elocution competition).      | Sings poems from the textbook with action or sings poems in chorus with rhythm.                                     |
| 4. | To give an opportunity to hear school programmes on air.           | Takes part in discussion arising from the textbooks or other books.<br>Performs actions according to the character. |

## 5. Writing Ability

- |   |   |
|---|---|
| 1. Handwriting, copywriting should be taken.  | Writes correctly holding the pencil in his hand.  |
| 2. To take practice in dictation.   | Writes correctly and in well formed letters in a line.  |
| 3. To prepare a chart of selected sentences and ask the students to transcribe and also ask them to transcribe the sentences written on the blackboard. | Writes with a suitable speed.<br>Takes dictation.<br>Transcribes 4 to 5 sentences in order.                             |
| 4. To prepare charts of the common mistakes of the students and display them in the class room and asked the students to write them down.               | Writes answers according to the modes of writing.<br>Writes unfamiliar and difficult words correctly from the textbook. |
| 5. To ask the students to write the answers of the questions asked.   | Uses exclamatory marks, semicolon, the two newly taught items.  |
| 6. To take picture reading and write the description of picture.  | Writes descriptive paragraphs.<br>Writes description of a picture in 5 to 6 sentences.                                  |
| 7. To punctuate the passage.  |   |
| 8. To guide regarding the mistakes made in writing.   | Writes 5 to 6 sentences on the subjects observed.   |
| 9. To encourage the students to write independently.  | Writes synonyms and antonyms words.   |
| 10. To ask the students to write syocnynms and antonyms.  |   |
| 11. To write correctly in well formed letters in a straight lines.  | Transcribes in ink.   |
| 12. To take transcription and dictation of about 4 lines from the textbook.   |   |
| 13. To write difficult and unfamiliar words correctly from the textbook.  |   |
| 14. To write 16 pages in good legible handwriting with ink.   |   |

15. To arrange handwriting competition and arrange exhibition of the best performance.
16. To give an opportunity for observation and encourage to write 5 to 6 sentences.
17. To take 10 assignments.

### **Standard IV 1. Listening Ability**

- |    |  |  |
|----|--|--|
| 1. | To tell stories effectively.   | Listen to the stories.   |
| 2. | Arrange programmes in story telling.   | Careful with understanding.<br>Tells the order of the occurred incidents in the story heard. |
| 3. | To arrange speeches.   | Tells the order of the occurred incidents in the story heard.                                |
| 4. | Reade passages from the supplementary reading done.  | Listens to others with understanding and care.   |
| 5. | To arrange radio and T.V. programmes.  | Listens to poems and songs happily.  |
| 6. | To arrange programmes for children.  |  |
| 7. | To arrange for cassettes in the programme of children in recitation, action songs and Bolaki Balbharati. |  |

### **2. Speech and Conversation Ability**

- |    |   |  |
|----|---|--|
| 1. | To arrange speeches of the students at the school functions by taking practice.         | Speaks with etiquates.<br>Shows courage to speak in school functions (to overcome stage—fright). |
| 2. | To prepare the student for speech making by giving points.                              | Tells news he has heard.   |
| 3. | To give an opportunity to tell the news taken from the newspapers.                      | Gives the speech with points.<br>Tells stories to his friends.                                   |
| 4. | To encourage to speak with etiquates to friends and relatives and other elderly people. | Speaks with clear pronunciation.<br>Speaks about one's yocation.                                 |

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|----|--|------------------------------------|
| 5. | To arrange story telling.  | Speaks using phrases and proverbs. |
| 6. | To arrange school programmes among his classmates.   |                                    |
| 7. | To give an experience of speaking with artist, doctor, teacher and farmers.                              |                                    |
| 8. | Uses of phrases and proverbs and making a collection of them and their meanings to be explained to them. |                                    |

**3. Reading Ability : A) Loud Reading**

- |    |  |                                       |
|----|--|---------------------------------------|
| 1. | To arrange model reading.                              | Reads loudly with normal speed.       |
| 2. | To take correct reading of difficult words.            | Reads with proper pauses.             |
| 3. | To arrange to give practice for correct pronunciation. | Reads written passages.               |
| 4. | To prepare charts of difficult words.                  | Reads supplementary readings happily. |
| 5. | To provide books and magazines from school library.    | Participates in reading competitions. |
| 6. | To ask to read written passage.                        |                                       |
| 7. | To arrange reading competition.                        |                                       |

**B) Silent Reading**

- |    |  |   |
|----|--|---|
| 1. | To take practice of silent reading, to enable to read speedily.    | Narrates lessons with action.<br>Gives small speeches.  |
| 2. | To ask the students to tell the meaning of the passages read.      | Recites poems with rhythms from his textbook.<br>Sings songs from other books, also sings 4 chorus songs. |
| 3. | Ask questions on the passage.                                      |   |
| 4. | To take silent readings of the passages for supplementary reading. |   |
| 5. | To arrange book exhibition.  |   |

6. To take silent reading at fixed time.

#### 4. Recitation Ability

- |  |  |
|--|--|
| 1. To take practice of conversation, speeches and action songs.            | Performs conversational lessons with actions.      |
| 2. To arrange a recitation competition (Elocution Competition)             | Learns small speeches.                             |
| 3. To teach to sing songs with rhythms.                                    | Sings songs from the textbook in rhythm.           |
| 4. To encourage students to sing poems from the textbook in proper rhythm. | Sings a song from other books. (Outside the text). |
| 5. To encourage students to sing songs from outside the textbook.          | Sings four chorus songs.                           |
| 6. To write proverbs on the blackboard and ask them to memorise.           |  |

#### 5. Writing Ability

- |   |   |
|---|---|
| 1. To give phrases and parts of sentences for grouping them to make complete sentences. | Writes sentences with the help of phrases. Writes story with the help of outline given.   |
| 2. To guide them to tell stories by giving points.                                      | Writes friendly letters (writes his own address, salutation, body, conclusion of letters. |
| 3. To develop stories with the help of pictures.  | Uses words of respect.  |
| 4. To give practice in letter writing.  | Writes the gist of the stories read.  |
| 5. To tell them how to write essays.  | Writes essays independently with the help of familiar subjects.                           |
| 6. To collect story books for writing and reading.                                      |   |
| 7. To guide them in taking notes, dictation and transcription.                          | Transcribes the notebook. Takes dictation of five sentences. Transcribes 7 lines.         |
| 8. To take 10 exercises in writing.   | Writes alphabets in order.  |



## Standard - V 1. Listening Ability

1. To read meaningful poems, passages and small stories. Listens carefully.
2. To hear school programmes as arranged over the air and TV. Tells central ideas of the information he gets, from new prose, poetry.
3. To write notes on functions arranged in school. Forms his own opinion after listening to the conversation.
4. To read the news and to tell in brief.
5. To tell short stories of 5 minutes duration based on slogans and proverbs, or daily programmes selected. Hears dramatic stories, poems and songs on the T.V. & radio.
6. Use of cassettes at proper time.

## 2. Conversational Ability

1. To arrange competitions in speech giving and conversation. Talks clearly without any hesitation and gives a clear picture of his opinion in short.
2. Opportunities to be given to two students a month - to give short speeches on given topics - duration of two minutes.
  2. A) Speaks clearly, courageously and accurately with right pauses in public.
  - B) Gives the right expected answers to the point to the audience who questions him.
3. Arrange conversation between the Education Officers (who visit the school) and students and other visitors too. Speaks on a given subject spontaneously without hesitation.
4. Arrange story telling speeches on unknown topics, poems and singing of 'Powadas'. Recites and sings poems with expression and gives the central idea.
5. Arrange conversation with unknown people (people on different levels) when on picnics and excursions. Speaks with expression using small witty remarks.
6. Arrange for opportunities to speak to unknown people at bus-stops and other places. Answers the teachers correctly.

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|-----|---|--|
| 7.  | Arrange for good speakers to speak on the anniversaries of great men etc. and give the children an opportunity to listen. | Speaks using proper proverbs and phrases at meetings and programmes.                                   |
| 8.  | To guide them in dramatics.   | Speaks to his home people and school mates in the spoken language.                                     |
| 9.  | Encourage the children to take part in Radio and T.V. programmes meant for children.                                      | Participates in different educational programmes and gives proper answers to questions that are asked. |
| 10. | Demonstrates how to put forward witty remarks or fun provoking sentences.   |  |

### 3. Reading Ability - A) Loud Reading

- |    |   |   |
|----|---|---|
| 1. | Model Reading   | Memorises a paragraph of about 15 to 20 lines at a glance and says it without hesitation and expression.    |
| 2. | Provide cassettes with model reading, poems and speeches, get them to read paragraphs from the textbook, correlated to these subjects and guide them if needed. | Bearing in mind the feeling in the poem he recites the same and says it melodiously.                        |
| 3. | Arrange competitions in reading aloud.  | Reads with normal speed and proper intonation stories, dramas and conversation giving the gist of the same. |
| 4. | Arrange competitions in reading poems and reciting them.  | Reads news (from newspapers, etc.) at assembly time.  |
| 5. | Demonstrates a character in dramatisation.  |   |
| 6. | During the assembly period the children should speak on newspaper reports.  |   |

### B) Silent Reading

- |    |   |  |
|----|---|--|
| 1. | Poems and paragraphs from the textbook for silent readings. | Using his text and other supplementary books and going through it at a glance, he reads the maximum words. |
|----|---|--|

- |    |   |  |
|----|---|--|
| 2. | To increase the speed of silent reading. Child to be provided with interesting books. | To increase his speed in silent reading, he tries to increase his memory power (looking at words and memorising them). |
|----|---|--|

From the matter read, he tries to remember and understand the summary and central idea.

Tries to form a habit of concentration in reading.

Does silent reading for pleasure and acquires more knowledge.

#### 4. Memorising

- |    |   |  |
|----|---|--|
| 1. | Provide books on poems, children, plays and conversation.   | Takes part in dramatisation from plays given in the text and other books.  |
| 2. | Give them practice in taking part in conversations and children's plays.                            | Participates in childrens, plays.  |
| 3. | Taking help and guidance from experts, get the children prepared for dramatisation and memory work. | Recites 4 poems from his text. He sings patriotic and inspirational songs and also takes part in chorus singing. |
| 4. | Different competitions to be arranged.  |  |

#### 5. Writing

- |    |   |   |
|----|---|---|
| 1. | Practice to be given of dictation of 5 lines — the list daily.  | Story writing from the given outline. Autobiographies of the birds, beasts, things and people.      |
| 2. | Different types of essays to be read; e.g. descriptive, narrative, imaginative, biography, etc. and guidance to be given for the above to be written. | To write about birds and beasts from happenings and experiences had from his home and surroundings. |
| 3. | To prepare a passage for dramatisation from the text.   | Descriptive essays of 15 sentences to be written.   |
| 4. | Practice to be given on how the incidents or points to be arranged in essay writing and story writing.  | He does the introduction, the main body and the conclusion of the essay systematically.             |
| 5. | To be able to write about the important happenings or incidences in the school  | He writes family letters and letters of application for leave with the salutation, the body, the    |

- and to write about the reports read from the newspapers. conclusion and address correctly.
6. To be able to write the salutation, the body and the conclusion and the address in family letters, and letters of application. He writes about get-togethers and other programmes in the school.
  7. To give the paragraph and get the answers from them (Comprehension). He writes articles, essays, poems, stories and conversational articles for the school magazine.
  8. Get them to write a story from a given outline and from pictures. An unknown paragraph of 15 to 20 lines is read and he answers the questions based on it in writing.
  9. To prepare boards and charts of often repeated mistakes and guidance to be given. Summarises the news from the newspapers.
  10. Dictation and writing competitions to be arranged. The extracts he has heard, he writes according to rules observed in writing and writes a beautiful hand.
  11. Fifteen writing exercises and seven essay writing exercises. In writing he uses the correct punctuations where the need arises.  
  
He uses idioms and proverbs correctly.

प्रथम भाषा अभ्यासक्रम : व्याकरण

विषय : मराठी

इयत्ता चौथी :

- (१) मागील इयत्तेतील विराम चिन्हांची उजळणी.
- (२) उद्देश्य व विधेय ओळखणे.
- (३) नाम, सर्वनाम, विशेषण व क्रियापद या शब्दांच्या जातींची ओळख.
- (४) मुख्य तीन काळ, लिंग व वचन यांची ओळख.
- (५) समानार्थी व विरुद्धार्थी अर्थांच्या शब्दांचा उपयोग करणे.

इयत्ता पाचवी :

- (१) इयत्ता चौथीतील व्याकरणाची उजळणी.
  - (२) कर्ता, कर्म व क्रियापदाची ओळख.
  - (३) सकर्मक व अकर्मक या क्रियापदाच्या प्रकारांची ओळख.
  - (४) नामाचे प्रकार ओळखणे.
  - (५) सर्वनामाचे पुढील प्रकार ओळखणे.  
पुरुषवाचक सर्वनाम, संबंधी सर्वनाम, प्रश्नार्थक सर्वनाम.
  - (६) विशेषणाचे प्रकार.
  - (७) पूर्ण व अपूर्ण काळ ओळखणे.
  - (८) अव्ययाची ओळख.
  - (९) क्रियाविशेषणाची ओळख.
  - (१०) सर्व विराम चिन्हांची उजळणी.
  - (११) अनुस्वाराचे लेखनविषयक नियम.
-

प्रथम भाषा अभ्यासक्रम  
हिंदी व्याकरणाचा अभ्यासक्रम

इ. ४ थी :

- (१) विराम चिन्हांचा अभ्यास.
- (२) अवतरण चिन्हांची ओळख.
- (३) उद्देश्य व विधेय - वाक्याचे भाग.
- (४) नाम, सर्वनाम, विशेषण व क्रियापद यांची ओळख.
- (५) प्रमुख तीन काळ, लिंग व वचन यांची ओळख.
- (६) वाक्प्रचार व म्हणी यांचा उपयोग.

इ. ५ वी :

- (१) इयत्ता ४ थी तील व्याकरणाची उजळणी.
- (२) कर्ता, कर्म व क्रियापद ओळखणे.
- (३) क्रियापदाचे प्रकार - सकर्मक, अकर्मक ओळखणे.
- (४) नामाचे प्रकार ओळखणे.
- (५) सर्वनामाचे पुढील प्रकार - पुरुषवाचक सर्वनाम, संबंधी सर्वनाम, प्रशार्थक सर्वनाम.
- (६) विशेषणांचे प्रकार.
- (७) पूर्ण व अपूर्ण काळ ओळखणे.
- (८) अव्ययांची ओळख (स्थूल)
- (९) क्रियाविशेषणाची ओळख.
- (१०) सर्व विरामचिन्हांची उजळणी.
- (११) अनुस्वाराचे लेखनविषयक नियम.

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# Grammar Syllabi in Kannada Language

## Standards IV V

### I. Standard IV

1. Revision of punctuation mark i.e., full stop & comma.
2. Familiarisation with - interrogative, exclamatory, semi-colon, inverted comma, etc.
3. Recognition of Nouns, Pronouns, Adjectives and Verbs.
4. Recognition of three main tenses i.e., simple present, simple past and simple future.
5. Recognition of Gender and Number.
6. Recognition of indeclinables.
7. Idioms and phrases.

### II. Standard V

1. Revision of grammar portion covered in standard fourth.
2. Recognition of Subject, Object and Verbs.
3. Kinds of verbs.
4. (i) Recognition of kinds of Nouns.  
(ii) (a) Nouns ending with 'a' , of masculine and neutral gender.  
(b) Nouns ending with and of the three genders.
5. Introducing Pronouns.
6. Tenses : 1) Past Imperfect (Continuous) .  
2) Present Imperfect (Continuous)
7. Indeclinables in details (a) Relative (b) Place
- 7-a) Adjective - Kinds of Adjectives (in details)
8. Recognition of Adverbs.
9. Revision of all kinds of Punctuation Marks.
10. Use of Idioms and Phrases.

## Syllabus of Mother-tongue - Gujarati

### Standard. IV

- Revision of punctuation marks (Full stop, Comma, Question Mark).
- *Punctuation* - Exclamation Mark and Inverted Commas. - Introduction.
- *Noun* - Introduction, Gender and Number.
- *Pronoun* - Introduction.
- *Adjective* - Introduction.
- *Verb* - Introduction of Verb.  
Introduction of main three tenses.

Uses of Idioms and Proverbs used in the text.

### Standard. V

- Revision of Std. IV.
- *Noun* - Kinds of Nouns.
- *Pronoun* - Kinds of Pronouns (પુરુષવાચક, દર્શક, સ્વવાચક, પ્રશ્નાર્થક)
- *Adjectives* - Kinds of Adjectives
- *Verb* - Kinds of Verbs : (સકર્મક, અકર્મક)

*Tenses* : Simple and Continuous

- *Adverb* - Introduction
- *Indeclinable* - Introduction

Introduction of Subject, Object and Verbs.

- Uses of Idioms and Proverbs used in the text
- Rules of Orthography.



## Syllabus of Mother — tongue - English

### Standard. IV

#### Pronunciation and Writing

- \* Consonant sounds and their spellings.
- \* Vowel sounds and their spelling.

Note : The use of IPA symbols as in Hornby's.

*Advanced Learners Dictionary*. The attention to the commonest spellings is to be drawn -  
i) is rendered as ee, ea, ie, e ... e

- \* Rules of capitalization
- \* Use of quotation marks.

#### Word Building and Vocabulary

- \* Identification of the following word-classes: noun, pronoun, adjective, verb.
- \* Awareness of perfect and imperfect synonyms, antonyms  
(with suitable exercises).

#### Inflection and Phrase Formation

- \* Nouns : singular - plural : -s -es
- \* Verbs : Three main tenses.

#### Sentence Formation

1. \* Subject, predicate division of a sentence  
Idioms and Phrases.
2. \* Basic word order of a sentence  
(Subject - Verb - Object - Prepositional Object - Adverbial)

### Standard. V

#### Revision

#### Pronunciation and Writing

- \* Following the pronunciation hints in a dictionary.
- \* The placement of a stress symbol in a word in the dictionary.
- \* Spelling rules in adding endings (doubling of final consonant, dropping of silent e, etc.)
- \* Silent letters.

#### Word building and Vocabulary

- \* Recognition of all the word-classes and their functions in a sentence.

Pronoun, preposition, conjunction, interjection, noun, adjective, verb, adverb.

- \* Naming the kinds of nouns and pronouns.
- \* Appropriate prepositions (care of, angry with, etc.)

### Inflection and Phrase Formation

- \* Nouns : Frequent irregular plurals 's (limitations)
- \* Verbs : Tense and aspect :  
Past tense : Some frequent irregular verbs.
  
- \* Noun Phrases : Articles +N  
Possessive Pronoun + N

### Sentence Formation

- \* Statements and commands
  - \* Negative formation
  - \* Coordinated noun phrases, adjective phrases, etc.
  - \* Agreement between pronoun and antecedent; between verb and subject.
- Idioms and Phrases

## Urdu Grammar Syllabus

### Standard. IV

- a.
  - i) Sentences as the unit of thought.
  - ii) The main parts of the simple sentence, subject and predicate.
  - iii) Recognition of noun, pronoun, adjective, adverb, number and gender.
  - iv) Three main tenses.

b. Concept of Khatma, Sakta, Sawalia Nishan and Vawain

c. Consonantal cluster, e.g. Dost, Waqt, Mard;

Use of shoshas in words like Saaf, Sheesha, Haisiyat, Aaina, Kah, Kahena, Sahech.

### Standard. V

a. Revision of the portion done in the previous class.

i) Study of noun, common noun and proper noun.

ii) Concept of verbs, transitive and intransitive, study of verb in the following sentence patterns- S + V (subject + verb) ; S+C+V (subject + compliment + verb) S+O+V (S + object + V);  
S + OI + OD + V (S + indirect object + direct object + V)

iii) Pronoun and its kinds - Zamcer-e-Shakhsce,  
Zamcer-e-Izafi and Zamcer-e-Ishara.

iv) Kinds of adjectives : quality, quantity, nisbati.

v) Recognition of adverbs and its position in a sentence.

b. Punctuation marks : Fijaia, Istifhamia, colon & semi-colon.

c. Correct use of article 'Al', hai-c-Makhtafi, Alif-e-Maqsoora, Do-Chashmi hai and 'yai' in words like liye, kiye, aaiye.

**Grammar Syllabus in Sindhi Language.**  
**(Standards IV & V)**

**Standard IV**

1. Revision of punctuation marks learnt in Std. IV
2. Sentence as the unit of thought.
3. The main parts of sentence-subject & predicate.
4. Recognition of nouns, pronouns, adjectives & verbs.
5. Recognition of gender & number.
6. Three main tenses.
7. Recognition of inclinables.

**Standard V**

1. Revision of the portion done in IVth Std.
2. Kinds of nouns and pronouns.
3. Kinds of adjectives.
4. Kinds of gender, number & persons.
5. Adverb - introduction.
6. Tenses - kinds of tenses.
7. Introduction of subject, object & verb.
8. Rules of orthography.

## मराठी, द्वितीय भाषा अभ्यासक्रम इयत्ता पाचवी

मराठी ही आपल्या महाराष्ट्र राज्याची भाषा आहे. महाराष्ट्रात बहुतेक लोक मराठी बोलणारे आहेत. मराठी भाषिकांबरोबर काही उर्दू, हिंदी, गुजराती, सिंधी, कन्नड आदी अनेक भाषा बोलणारे लोक महाराष्ट्रात राहतात. या राज्यात अन्य भाषिकांसाठी त्यांच्या मातृभाषेतून शिक्षण घेण्याची सोय उपलब्ध आहे. परंतु दैनंदिन जीवनव्यवहार चालण्यासाठी राज्याची प्रादेशिक भाषा येणे आवश्यक असते, कारण शासनाचा व जनतेचा व्यवहार त्याच भाषेतून होत असतो. म्हणून मातृभाषा कोणतीही असो, महाराष्ट्र राज्यातील विद्यार्थ्यांना राज्याची प्रादेशिक भाषा मराठी शिकण्याची नितांत गरज आहे.

इयत्ता पाचवीपासून मराठी भाषा द्वितीय स्तरावर शिकवण्याची योजना या अभ्यासक्रमात केली आहे. मराठी भाषा बोललेली व लिहिलेली समजावी. भाषा बोलता यावी व गरजेपुरती लिहिता यावी असे या अभ्यासक्रमात अपेक्षित आहे. मराठी भाषेबद्दल प्रेम निर्माण व्हावे, मराठी भाषिकांबद्दल आत्मीयता वाटावी आणि महाराष्ट्रीय जीवन-संस्कृती यांच्याशी समरस होता यावे, हाही त्यातील एक प्रमुख हेतू आहे.

### उद्दिष्टे

१. मराठीतून व्यक्त केलेले विचार, भावना व कल्पना यांचे आकलन होणे.
२. सोप्या मराठीतून बोलता येणे.
३. मराठी भाषा वाचता येणे.
४. वाचलेल्या मजकुराचे आकलन होणे.
५. आपले विचार, भावना व कल्पना शुद्ध मराठीत लिहिता येणे.
६. लेखनात विरामचिन्हांचा योग्य वापर करता येणे.
७. मराठीचा संपर्कभाषा म्हणून वापर करता येणे.
८. मराठी भाषेबद्दल प्रेम निर्माण होणे.
९. महाराष्ट्रीय जीवन व संस्कृती यांच्याबद्दल आपुलकी व जिवाळा निर्माण होणे.
१०. भाषेद्वारा भावनात्मक ऐक्य साधून राष्ट्रीय एकात्मतेची भावना वृद्धिंगत होणे.

इयत्ता ५ वी  
क्षमता १ श्रवण

उपक्रम

- १) अतिशय सोप्या मराठीतून मुलांशी बोलणे.
- २) मराठीतून सुबोध छोट्या कथा सांगणे.
- ३) पाठ्यपुस्तकातील धड्यांचे लयबद्ध वाचन करणे.
- ४) कवितांचे भावपूर्ण गायन करणे.
- ५) सोप्या मराठीत सूचना देऊन मुलांना कृती करण्याचा सराव देणे.
- ६) च, छ, ज, झ, ल, ळ, श, व, ण, न, स अशा वर्णांच्या उच्चारातील भेद शब्दांच्या उदाहरणाने लक्षात आणून देणे.

अध्ययन निष्पत्ती

- १) सोप्या मराठीतून बोललेले ऐकतो.
- २) छोट्या कथेतील आशयाचे आकलन करतो.
- ३) पाठ्यपुस्तकातील धड्यांचे लयबद्ध वाचन करतो.
- ४) कवितांचे शिक्षकाबरोबर भावपूर्ण गायन करतो.
- ५) दिलेल्या सूचनांप्रमाणे कृती करतो.
- ६) मराठीतील उच्चार लक्षपूर्वक ऐकतो व त्यातील फरक व वैशिष्ट्ये समजून घेतो.

क्षमता - २  
भाषण - संभाषण

उपक्रम

- १) आपल्या वर्गातील मित्र, शिक्षक, नातेवाईक यांच्याशी सोप्या मराठी बोलता येईल असे संवाद प्रसंग निर्माण करणे.
- २) विद्यार्थ्यांच्या आकलनाला अनुरूप अशा भोवतालच्या परिचित वस्तूवर व विषयावर सोप्या मराठीतून प्रश्नोत्तरे घेणे.
- ३) सोप्या, जोडाक्षरविरहित मराठी भाषेत सुबोध कथा ऐकविणे.

अध्ययन निष्पत्ती

- १) आपल्या वर्गातील मित्र, शिक्षक नातेवाईक यांच्याशी सोप्या मराठीतून बोलण्याचा प्रयत्न करतो.
- २) विचारलेल्या प्रश्नांची उत्तरे मराठीतून बिनचूक देतो.
- ३) कथा प्रसंग लक्षपूर्वक ऐकतो व विचारलेल्या प्रश्नांची उत्तरे देतो व संभाषणात भाग घेतो.

क्षमता - ३  
वाचन

उपक्रम

- १) मातृभाषेतील शब्द वाक्य व समानार्थी मराठी भाषेतील शब्द व वाक्य यांच्याद्वारे वर्णमालेची ओळख करून देणे.
- २) शिक्षक सोपे मराठी शब्द व वाक्ये असलेल्या सचित्र शब्दपट्ट्या दाखवितात.
- ३) फळ्यावर सोप्या मराठीत (जोडाक्षरविरहित) शब्द व वाक्य लिहून विद्यार्थ्यांना वाचावयास सांगतात.
- ४) नेहमीच्या सरावातील जोडाक्षरयुक्त शब्दाचा वाचनाद्वारा सराव करून घेणे.

अध्ययन निष्पत्ती

- १) अक्षरे व शब्द वाचण्याचा प्रयत्न करतो.
- २) सचित्र शब्द पट्ट्या व वाक्य पट्ट्या वाचतो.
- ३) फळ्यावर लिहिलेली वाक्ये व शब्द विद्यार्थी वाचतो.
- ४) मराठी शब्द व वाक्य बिनचूक वाचण्याचा प्रयत्न करतो.

## क्षमता - ४

### पाठांतर

#### उपक्रम

#### अध्ययन निष्पत्ती

- १) पाठ्यपुस्तकातील कविता व अवांतर बडबडगीते शिक्षकांनी गाऊन दाखविणे. १) विद्यार्थी कविता व बडबडगीत म्हणतो.

## क्षमता - ५

### लेखन

#### उपक्रम

#### अध्ययन निष्पत्ती

- १) अनुलेखनाचा सराव देण्यासाठी फळ्यावर जोडाक्षर विरहित शब्द व सोपी वाक्ये लिहिणे. १) फळ्यावर लिहिलेले शब्द व वाक्ये वहीत बिनचूक लिहून घेतो.
- २) पूर्णविराम व प्रश्नचिन्हे ह्या विरामचिन्हांचा वापर करून छोटी वाक्ये फळ्यावर लिहिणे. २) फळ्यावर लिहिलेले वाक्य पूर्णविराम व प्रश्नचिन्ह वापरून वहीत लिहून घेतो.
- ३) पाठावरील प्रश्नांची उत्तरे मुलांना प्रश्न विचारून मराठीत लिहिण्याचा सराव देणे. ३) विचारलेल्या प्रश्नांची उत्तरे वहीत लिहून घेतो.
- ४) लेखन सरावासाठी मुलांच्या परिचयातील विषयाची निवड करून वर्णनात्मक लेखनाचा सराव करवून घेणे. (उदा. विषय - गाय, कुत्रा, मांजर, पोपट) ४) सोप्या, जोडाक्षर विरहित वाक्यांचा उपयोग करून लेखन करतो.
- ५) सोप्या, सुटसुटीत ८ ते १० वाक्यांचे १० लेखन पाठ करतो.

## इयत्ता ५ वी मराठी संयुक्त अभ्यासक्रम

मराठी (संयुक्त) अभ्यासक्रम शिकवताना लेखी कामापेक्षा तोंडी कामावर अधिक भर देण्यात यावा. त्या दृष्टीने मराठी शब्दोच्चार व मातृभाषेतील शब्दोच्चार यातील फरक मुलांना कळला पाहिजे. एका नव्या भाषेचे अध्यापन मुले करणार आहेत हा विचार करताना नव्या भाषेच्या अध्यापनात येणाऱ्या म्हणजेच शिक्षकांकडून दिल्या जाणाऱ्या अध्ययन प्रसंगात मुले रमतील. मराठी भाषेतून सोपी, सुटसुटीत वाक्ये ती बोलतील अशी संधी त्यांना उपलब्ध करून देण्यात यावी. बडबडगीते, शिशुगीते, बालकथा, तालकथा त्यांना ऐकवण्यात याव्या. मुले ते ऐकून ऐकून पाठ म्हणतील. त्यानंतर शब्दोच्चाराच्या चुका त्यांच्या मातृभाषेच्या सरावामुळे कोणत्या होतात याचा विचार संयुक्त अभ्यासक्रम शिकवणाऱ्या शिक्षकांनी अवश्य करावा.

इयत्ता ५ वी साठी ३२ पानांचे पुस्तक असावे. त्यात बडबडगीते व गद्य भागात बालकथा या केवळ श्रवणासाठी असाव्यात. त्यावर तोंडी प्रश्नोत्तरे द्यावीत.

### क्षमता - १ श्रवण

#### उपक्रम

#### अध्ययन - निष्पत्ती

१) सोपे शिशुगीत ऐकवावे.

१) शिशुगीत लक्षपूर्वक ऐकतो.

२) ताल कथा ऐकवाव्या.

२) तालकथा लक्षपूर्वक ऐकतो. तालकथेतील भावार्थ समजून घेतो.

३) मराठीतून आज्ञार्थ सूचना द्याव्यात.

३) सूचना लक्षपूर्वक ऐकतो व त्यानुसार कृती करतो.

४) लक्षपूर्वक ऐकून त्यावरील प्रश्नांची तोंडी उत्तरे देतो.

### क्षमता - २

#### भाषण - संभाषण

#### उपक्रम

#### अध्ययन निष्पत्ती

१) विद्यार्थ्यांच्या अनुरूप अशा परिचित विषयावर मराठीतून गप्पागोष्टी करणे. उदा. क्रिकेट, पाऊस, भाजीवाला, मित्र, जत्रा.

१) सोप्या सुटसुटीत वाक्यातून उत्तरे देतो.

२) सोप्या मराठीत कथांचे भावपूर्ण वाचन करणे व त्यावर विचारलेल्या प्रश्नांची उत्तरे देण्यास मुलांना तयार करणे. शब्दपट्ट्या, वाक्यपट्ट्या, चित्रपट्ट्या दाखवून मराठीतील च, छ, ज, झ इत्यादी सारख्या शब्दांच्या उच्चारातील फरक व मातृभाषेच्या उच्चारातील फरक समजावून देणे.

२) कथा लक्षपूर्वक ऐकतो व विचारलेल्या छोट्या छोट्या प्रश्नांची उत्तरे देतो.

३) उच्चारातील फरक समजून घेऊन स्पष्ट उच्चार करण्याचा प्रयत्न करतो.



## क्षमता - ३

### वाचन

#### उपक्रम

#### अध्ययन-निष्पत्ती

- १) फळ्यावर नेहमी उपयोगात येतात व माहित असलेले सोपे शब्द देऊन विद्यार्थ्यांस वाचण्यास सांगणे. १) विद्यार्थी शब्द ओळखतो व वाचतो.
- २) पाठ्यपुस्तकातील धडे वाचनाचा सराव देणे. २) पाठ्यपुस्तकातील धड्यांचे विद्यार्थी अनुवाचन करतो.

## क्षमता - ४

### पाठांतर

#### उपक्रम

#### अध्ययन-निष्पत्ती

- १) पाठ्यपुस्तकातील सरावासाठी दिलेल्या ३/४ कविता म्हणून दाखविणे. १) सरावासाठी दिलेल्या कविता पाठ म्हणतो.
- २) पाठ्यपुस्तकातील दोन कविता पाठ करण्यास सांगणे. २) पाठ्यपुस्तकातील दोन कविता पाठ म्हणतो.

## क्षमता - ५

### लेखन

#### उपक्रम

#### अध्ययन-निष्पत्ती

- १) अनुलेखनाच्या सरावासाठी सोपी व सुटसुटीत वाक्ये फळ्यावर लिहिणे. १) वहीत बिनचूक लिहून घेतो.
- २) पूर्णविराम, प्रश्नचिन्ह यांचा परिचय करून देण्यासाठी एकाच आशयाची वाक्ये देणे. २) विरामचिन्हांचा उपयोग करून वाक्ये बिनचूक लिहितो.
- ३) पाठावरील प्रश्नांची उत्तरे सोप्या सुटसुटीत भाषेत लिहिण्याचा सराव देणे. ३) पाठावरील प्रश्नांची उत्तरे बिनचूक लिहितो. वर्षभरात ५ लेखनपाठ करतो.

श, ष, स, न, ण, त, च.

(पुरुषवाचक; दर्शक, स्ववाचक, प्रश्नार्थक.)

चमचा, चहा, जहाज, जेवण.

(सकर्मक, अकर्मक)

च = - च च च

ष = । ष ष ष

## द्वितीय/तृतीय भाषा हिंदी (पूर्ण व संयुक्त) : अभ्यासक्रम

### १. प्रास्ताविक

हिंदी द्वितीय/तृतीय भाषेच्या स्तरावर हिंदी भाषेचा पाठ्यक्रम तयार करण्यासंबंधी मार्गदर्शक तत्त्वे:-

राष्ट्राच्या सामाजिक, आर्थिक, प्रशासनिक, राजकीय, व्यावसायिक आणि सर्वसामान्यपणे व्यावहारिक गरजा पूर्ण करण्याच्या दृष्टीने शिक्षण क्षेत्रातील शालेय शिक्षणाच्या एका विशिष्ट पातळीवर द्वितीय भाषा म्हणून हिंदीच्या शिक्षणाला आरंभ केला जातो. भाषेच्या ज्ञानार्जनाची ही यत्नसाध्य प्रक्रिया आहे.

हिंदी ही द्वितीय भाषा म्हणून शिकण्यास सुरुवात करण्यापूर्वी विद्यार्थ्याला त्याच्या स्वतःच्या मातृभाषेतील हजार एक शब्द, व्याकरणाच्या दृष्टीने वाक्यरचना करणे व विशिष्ट शब्द वगैरेचा वाक्यात बिनचूक उपयोग करणे इत्यादी गोष्टी आत्मसात झालेल्या असतात. आता या नव्यापातळीवर त्याला स्वतःच्या भाषिक जगातून दुसऱ्या भाषिक जगतात पदार्पण करावयाचे असते. या प्रक्रियेत त्याला दुसरी भाषा शिकताना, त्या भाषेतील विचार एकताना, बोलताना, लिहिताना आणि वाचताना अनेक प्रकारच्या अडचणींना तोंड द्यावे लागते.

भारतासारख्या बहुभाषी राष्ट्रात विभिन्न भाषा-भाषी लोकांना आपापसांत व्यवहार करण्याच्या दृष्टीने संपर्क भाषा म्हणून व्यापक स्वरूपात हिंदी भाषेच्या शिक्षणाचे व तिच्या प्रचार-प्रसाराचे महत्त्व फारच मोठे आहे, ही गोष्ट सर्व विचारवंतांनी आणि शिक्षण शास्त्रज्ञांनी वेळोवेळी मान्य केलेली आहे. अनेक शिक्षण आयोगांनी हिंदी भाषेच्या शिक्षणाच्या महत्त्वावर पुरेसा जोर दिला आहे. भारताच्या राज्यघटनेतील तरतुदीप्रमाणे राष्ट्रीय पातळीवर विचार-विनिमय, प्रशासन, शिक्षण, व्यापार, संचार व पर्यटन यांच्या दृष्टीने हिंदी भाषेचा प्रचार-प्रसार जितका लवकर होऊ शकेल, तितकाच तो राष्ट्राच्या दृष्टीने हितकारक ठरेल.

अहिंदी भाषी विद्यार्थ्यांनी हिंदीचे अध्ययन करणे आणि त्याचबरोबर हिंदी भाषी विद्यार्थ्यांनी कोणत्यातरी एका अन्य भारतीय भाषेचे अध्ययन करणे ही गोष्ट हिंदीसह सर्वच भारतीय भाषांच्या भाषिक आणि साहित्यिक समृद्धीच्या दृष्टीने आवश्यक आहे. संपूर्ण देशात राष्ट्रीय एकात्मतेची भावना विकसित व्हावी या दृष्टीने हिंदीच्या शिक्षणाचा हातभार अत्यंत मोलाचा ठरेल.

राष्ट्रीय शिक्षणविषयक थोरणानुसार शालेय पातळीवर प्रत्येक विद्यार्थ्याला द्वितीय भाषा म्हणून हिंदी भाषा प्राथमिक शाळेच्या कोणत्याही वर्गापासून शिकविली जाऊ शकते. तथापि महाराष्ट्रात हिंदीचे अध्ययन-अध्यापन पाचव्या इयत्तेपासून सुरू केले जावे, असे निश्चित करण्यात आले आहे.

“राष्ट्रीय शैक्षणिक अनुसंधान व प्रशिक्षण परिषद” या संस्थेने राष्ट्रीय शिक्षणक्रमाचा जो आराखडा तयार केला आहे, त्याप्रमाणे दोन भारतीय भाषा आणि इंग्रजी अशा एकूण तीन भाषांचे शिक्षण दहाव्या इयत्तेपर्यंत द्यावयास हवे. या व्यवस्थेनुसार हिंदीच्या द्वितीय/तृतीय स्तरावर अध्ययनासाठी सहा वर्षांपर्यंतचा कालावधी उपलब्ध होऊ शकेल.

अहिंदी भाषी भारतीय विद्यार्थ्यांना हिंदी ही काही अगदी नवीन भाषा आहे, असे मुळीच नाही. द्वितीय भाषा किंवा तृतीय भाषा म्हणून हिंदीच्या शिक्षणाच्या दृष्टीने ही गोष्ट लक्षात ठेवली पाहिजे. सिनेमा, दूरदर्शन, रेडिओ, तसेच इतर वेगवेगळ्या कारणांनी लोकांना करावा लागणारा प्रवास इत्यादीमुळे हिंदी आता एखाद्या परदेशी भाषेप्रमाणे परकीय भाषा अशी मुळीच वाटत नाही. त्याचप्रमाणे हिंदी व इतर भारतीय भाषा यांच्या शब्दसंपत्तीत तसेच वाक्यरचना इत्यादीत जे साम्य आहे, त्याचा हिंदी शिक्षणाच्या क्षेत्रात पूर्ण लाभ करून घेतला पाहिजे. सध्या अहिंदी भाषी राज्यांपैकी काही राज्यांत हिंदी द्वितीय भाषा म्हणून व काही राज्यांत तृतीय भाषा म्हणून शिकविली जात आहे. पण या सर्वच राज्यांत हिंदी शिक्षणाच्या दृष्टीने एकरूपता आणणे इष्ट ठरेल. या दृष्टीने (अपवाद सोडून) प्रत्येक राज्यात हिंदीच्या शिक्षणाला कमीत कमी ५-६ वर्षे मिळू शकतील. कोणत्याही भाषेच्या

व्यवहारात नैपुण्य प्राप्त होणे हे त्या भाषेच्या शिक्षणाला दिल्या जाणाऱ्या एकूण वेळावर अवलंबून असते. या दृष्टीने हिंदीच्या शिक्षणाला प्रत्येक आठवड्यात जितक्या अधिक तासिका दिल्या जातील तितके ते फायद्याचे ठरेल. सर्वसाधारणपणे प्रत्येक आठवड्यात कमीत कमी ४ आणि संपूर्ण वर्षात सुमारे १२० तासिका विद्यार्थ्यांना हिंदी शिकण्यासाठी दिल्या पाहिजेत. प्रत्येक वर्गासाठी आखण्यात येणारा क्रमबद्ध अभ्यासक्रम हा हिंदीच्या शिक्षणासाठी त्या-त्या वर्गाला दिल्या जाणाऱ्या तासिकांच्या संख्येशी सुसंगत असा असावयास हवा.

प्राथमिक, उच्च प्राथमिक आणि माध्यमिक शाळांतील वर्गांना हिंदी भाषा ज्या सर्वसामान्य उद्देशांनी शिकवावयाची सोय आहे, ते उद्देश प्रथम सुस्पष्ट करून घ्यावयास हवेत आणि प्रत्येक पातळीवर हिंदी भाषेची भाषिक कौशल्ये आत्मसात करण्यासाठी या मुख्य प्रक्रियांमध्ये हिंदी भाषेच्या शिक्षणाचे धोरण व्यावहारिक पातळीवर क्रमाक्रमाने राबविले पाहिजे.

## २. द्वितीय/तृतीय भाषा हिंदी शिक्षणाची उद्दिष्टे

### २.१ सर्वसामान्य उद्दिष्टे:-

विद्यार्थ्यांची पुढील बाबतीत क्षमता वाढविणे

- (१) हिंदीचे शुद्ध उच्चार;
- (२) हिंदीत सोप्या विषयावर संभाषण;
- (३) प्रामुख्याने सोप्या हिंदीतील गद्य उतारे, गोष्टी, संवाद, तसेच सोप्या कविता अर्थबोधासह वाचणे;
- (४) हिंदीत पत्र लिहिणे;
- (५) व्यावहारिक हिंदी व्याकरणाची तोंडओळख;
- (६) हिंदीतून मातृभाषेत सोप्या मजकुराचा अनुवाद करणे;
- (७) अभ्यासलेल्या हिंदी शब्दसंग्रहांच्या अनुषंगाने बालसाहित्य वाचणे;
- (८) चित्रपट, रेडिओ आणि दूरदर्शनचे कार्यक्रम ऐकून व पाहून मनोरंजन व ज्ञानार्जन करण्याची क्षमता वाढविणे;
- (९) भारताच्या सर्वसमावेशक व विविधतेने नटलेल्या समन्वयात्मक संस्कृतीचा स्थूलमानाने परिचय करून देणे व त्यांच्यात राष्ट्रीय भावना जागृत करणे;
- (१०) भारताच्या राष्ट्रीय जीवनातील हिंदीचे महत्त्व समजावून देणे.

### २.२ भाषिक शिक्षणाची उद्दिष्टे:-

भाषिक कौशल्यांच्या पूर्ततेसाठी-

(क) ऐकणे व बोलणे याबाबत अपेक्षित क्षमता

- (१) हिंदीतील ध्वनि-उच्चार ऐकून मातृभाषेतील जवळ-जवळ सारख्या असलेल्या ध्वनि-उच्चारांशी तुलना करता येणे-  
उदा. इ-ई, उ-ऊ, ए-ऐ, ओ-औ  
अल्पप्राण, महाप्राण, घोष, अघोष  
अनुस्वार व चंद्रबिंदू यांतील फरक स्पष्ट करणे-  
उदा. हंस-हंस  
खालील वर्णांच्या उच्चारातील भेद स्पष्ट करणे-  
ष-ख क्ष-ख छ-क्ष  
ड-ढ ड-ड़, ढ-ढ़  
ब-व य-ज, स- श-ष

(२) हिंदीतील सर्व प्रकारच्या ध्वनींचा स्वतंत्रपणे व स्पष्ट मानक शब्दात उच्चार करता येणे;

(३) संयुक्ताक्षरयुक्त शब्दांचा शुद्ध उच्चार करता येणे.

(४) बोलताना लय, ताल, बलाघात इत्यादींचा सुयोग्य उपयोग करता येणे;

- (५) व्याकरणशुद्ध वाक्य बोलता येणे;
- (६) हिंदीत दिल्या गेलेल्या सामान्य सूचनांचा अर्थ समजणे;
- (७) सोप्या विषयावरील सर्वसामान्य संभाषणात भाग घेता येणे;
- (८) हिंदीत सोप्या कविता म्हणणे आणि गोष्टी सांगता येणे;
- (९) ओळखीच्या किंवा अनोळखी व्यक्तींना आपले म्हणणे हिंदीतून समजावून सांगणे;
- (१०) हिंदीतील सोप्या संवाद कार्यक्रमात साभिनय भाग घेणे;
- (११) चित्रपट, दूरदर्शन व रेडिओचे हिंदी कार्यक्रम मनोरंजन व ज्ञानार्जन करण्यासाठी ऐकणे.

(ख) वाचणे व समजणे याबाबत अपेक्षित क्षमता

- (१) हिंदीतील सर्व लिपिसंकेत समजणे;
- (२) हिंदीतील शब्द आणि वाक्ये शुद्ध उच्चारानसह वाचता येणे;
- (३) सुवाच्य लेखन असलेली पत्रे इ. मजकूर वाचता येणे;
- (४) सोपे संवाद असलेले पाठ, गोष्टी, रोचक निबंध, प्राण्यांची वर्णने इत्यादी अर्थबोधानसह समजून वाचता येणे;
- (५) पाठ्यवस्तूत अंतर्भूत असलेल्या मध्यवर्ती कल्पना आणि विशेष सूचना किंवा विचारासंबंधी अंश शोभून काढता येणे;
- (६) वाचलेल्या मजकुरावर आधारित प्रश्नांची उत्तरे देता येणे.

(ग) अपेक्षित लेखन क्षमता—

- (१) हिंदीतील सर्व ध्वनि-चिन्हे आणि त्यायोगे बनलेल्या शब्दांचे सुवाच्य लेखन करता येणे;
- (२) परिचित शब्द मान्य लेखन पद्धतीच्या वर्तनीनुसार शुद्ध लिहिता येणे;
- (३) सोप्या विषयांवर काही वाक्ये किंवा एक दोन परिच्छेद लिहिता येणे;
- (४) हिंदीत पत्र लिहिता येणे;
- (५) चित्रांच्या आधारे किंवा मुद्द्यांवरून गोष्ट लिहिता येणे;
- (६) व्याकरणदृष्ट्या शुद्ध भाषेचा उपयोग करता येणे;
- (७) हिंदीतून मातृभाषेत भाषांतर करता येणे.

२..३ उद्दिष्टांच्या पूर्ततेच्या दृष्टीने काही सूचना

- (१) भाषा-व्यवहार म्हणजे मुख्यत्वेकरून श्रवण आणि भाषण या क्रियांचे क्षेत्र होय. यापुढील क्षेत्र म्हणजे वाचन आणि लेखन, परंतु भाषा शिक्षणाच्या व्यवहारात मात्र याच्या उलट स्थिती असलेली दिसते. भाषा-शिक्षण क्षेत्रात श्रवण आणि भाषण या अवस्था वाचन लेखनानंतर येतात, असे आजचे चित्र आढळते. भाषेच्या परीक्षेमध्ये मुख्यतः वाचन आणि लेखन यांचीच परीक्षा घेतली जाते. आपल्या परीक्षा पद्धतीत श्रवण आणि भाषण यामध्ये विद्यार्थ्यांनी किती नैपुण्य प्राप्त केले आहे, याचे मूल्यमापन करावयास आज फारसा वाव नाही.
- (२) भाषिक व्यवहाराच्या सरावानेच भाषा आत्मसात केली जाते. म्हणून या बाबतीत विद्यार्थ्यांना अधिकाधिक क्रियाशील ठेवावयास हवे. भाषा शिक्षणाच्या प्राथमिक अवस्थेत विद्यार्थ्यांना शिक्षकांचे मौखिक अनुकरण करावयास हवे. परिणामतः ते हळूहळू स्वतःच शब्द आणि वाक्य बोलू लागतील. विद्यार्थ्यांना हिंदी बोलण्याची संधी जितकी अधिक मिळेल, तितकीच अधिक योग्यता ते हिंदी भाषेचा वापर करण्यात संपादन करू शकतील.
- (३) सुरुवातीपासूनच विद्यार्थ्यांच्या शुद्ध उच्चारकडे लक्ष द्यावयास हवे. त्यांच्या मातृभाषेच्या उच्चार पद्धतीचा परिणाम सुरुवातीला त्यांच्या हिंदीच्या उच्चारांवर होत असलेला दिसेल. तरीपण त्यांना योग्य मार्गदर्शन करून त्यांच्या उच्चारातील दोष यत्नपूर्वक हळूहळू दूर केले जाऊ शकतील.

- (४) सुखातील काही दिवस फक्त मौखिक शिक्षण द्यावे. त्यानंतर जेथे विद्यार्थ्यांना देवनागरी लिपीची ओळख नाही अशा काही शाळांमध्ये या लिपीची ओळख करून द्यावी. तसेच या लिपी चिन्हांपासून बनणारे शब्द आणि वाक्ये यांचा सराव करून घ्यावा. वाचनाचा काही दिवस सराव करून झाल्यावर विद्यार्थ्यांना लिहिण्याचाही सराव होईल.
- (५) भाषा शिक्षणात पाठ्यपुस्तके, अभ्यासपुस्तिका व इतर सहाय्यक शैक्षणिक साधने यांचा भरपूर उपयोग करून घेतला पाहिजे. वर्गातील शैक्षणिक कार्यक्रमांखेरीज, वर्गाबाहेर प्रार्थना, सभा, क्रीडांगण व इतर अनौपचारिक प्रसंग यात विद्यार्थ्यांना हिंदीत बोलण्याच्या दृष्टीने संधी देऊन त्यांना या बाबतीत अधिकाधिक उत्तेजन द्यावयास हवे. रेडिओ, दूरदर्शन इत्यादी माध्यमांतून प्रसारित होणारे कार्यक्रम ऐकविले व दाखविले पाहिजेत.

तसेच हिंदीत प्रकाशित होणाऱ्या बालसाहित्य पत्रिकात आलेल्या सरळ व सोप्या हिंदीत लिहिलेल्या गोष्टी व कविता संकलित कराव्यात आणि त्या शाळेच्या भित्ति-फलकावर किंवा फ्लॅनेल बोर्डावर प्रदर्शित कराव्यात.

तात्पर्य असे की, हिंदी भाषा शिकण्याच्या आणि शिकविण्याच्या दृष्टीने जितकी संधी मिळेल तितकी घेऊन तिचा अधिकाधिक फायदा करून घेतला पाहिजे.

हिंदीच्या अध्यापन-प्रणालीचे अंतिम स्वरूप हिंदी भाषा शिकविणारे शिक्षकच आपापल्या प्रादेशिक गरजा लक्षात घेऊनच निश्चित करू शकतील.

पाठ्यपुस्तके, अभ्यासपुस्तिका, लेखनपुस्तिका, ध्वनिफिती, सचित्राक्षर पत्ते इत्यादी शैक्षणिक साधनसामुग्री शिक्षकांना आपले कार्य करीत असताना फक्त सहाय्यक म्हणूनच सिद्ध होणारी आहे. ती भाषा शिक्षकांचे व्यक्तिमत्त्व आणि अध्यापन कार्यासंबंधी सारासार विवेक यांचे स्थान घेऊ शकणार नाही. भाषेच्या परिणामकारक अध्यापनाच्या दृष्टीने शिक्षकाला आपल्यासाठी अध्यापनसामुग्री स्वतःच वाढवावी लागेल. वर्गातील वातावरण जर प्रतिसादात्मक असेल व विद्यार्थ्यांना निरनिराळ्या प्रसंगी हिंदीत बोलण्याला अधिकाधिक संधी उपलब्ध करून दिली जाऊ शकेल; तर विद्यार्थ्यांचे भाषाव्यवहारातील कौशल्य विकसित होण्यात कोणतीच अडचण येणार नाही. यासाठी वर्गात विद्यार्थ्यांना हिंदीत अधिकाधिक संभाषण करण्याची संधी मिळेल, या दृष्टीने प्रयत्न करावयास हवा. यासाठी शिक्षक व विद्यार्थी यांच्यात आणि विद्यार्थ्यांमध्ये आपापसात हिंदीत प्रश्नोत्तरे होतील अशी संधी उपलब्ध करून द्यावयास हवी.

बऱ्याचशा भारतीय भाषांच्या शब्दसंपत्तीत बरेच शब्द समान आहेत, म्हणून विद्यार्थ्यांची हिंदी शब्दसंपत्ती जलद गतीने विकसित होऊ शकेल. परंतु या भाषांत कित्येक शब्द असेही आहेत की ते अक्षरांच्या दृष्टीने समान असूनही अर्थाच्या दृष्टीने त्यात वेगळेपणा आढळतो. अशा समरूपी पण भिन्नार्थी शब्दांकडे विद्यार्थ्यांचे लक्ष वेधून घ्यावयास हवे. शेवटी आणखी एक मुद्दा सांगावयाचा म्हणजे द्वितीय/तृतीय भाषा म्हणून हिंदी शिकविली जात असताना हिंदी भाषेच्या अध्ययन आणि अध्यापनाची वाटचाल मातृभाषेच्या अध्यापनाच्या तुलनेत काही अंशी मंदावण्याची शक्यता आहे. ही गती हळूहळू वाढवावी या दृष्टीने हिंदीच्या शिक्षकांनी आपापल्या अध्यापन कार्याचे नियोजन काळजीपूर्वक आणि यत्नपूर्वक करणे आवश्यक आहे. कोणत्याही भाषेवर प्रभुत्व प्राप्त करण्याचा एकमेव उपाय जर कोणता असेल तर तो हा की त्या भाषेचा सतत अभ्यास करीत राहणे. हा सराव जितका अधिक रोचक आणि प्रसंगानुरूप असेल तितक्याच शीघ्र गतीने विद्यार्थ्यांना भाषिक ज्ञानार्जन करून घेता येईल.

### ३. मूल्यांचे शिक्षण

(१) स्वतंत्र प्रजासत्ताक राष्ट्रातील समाजात नागरिक म्हणून वावरताना प्रत्येक नागरिक म्हणून जीवनात पदार्पण करण्यापूर्वीच्या काळातील विद्यार्थ्यांमध्ये जबाबदारी साहजिकच शाळेवर येऊन पडते.

त्यांचे संस्कार होणे आवश्यक आहे. तिक मूल्यांचा संस्कार करण्याची

(२) शालेय जीवनात विद्यार्थ्यांवर विद्यार्थी एक व्यक्ती म्हणून, कुटुंबाचा एक घट

राचा एक घटक म्हणून व समाजात

एक घटक म्हणून नैतिक मूल्यांचा संस्कार होणे आवश्यक ठरते. हे संस्कार अभ्यासक्रमातील विविध विषयांतून होणे अपेक्षित आहे.

- (३) शालेय अभ्यासक्रम - विशेषतः इ. १ ते ८ चा तयार करताना, नैतिक शिक्षणाची उद्दिष्टे विचारात घेतल्यास त्याप्रमाणे शाळेतील अध्ययन-अध्यापन व एकूण कार्यक्रमाची आखणी व कार्यवाही करण्यात निश्चित दिशा प्राप्त होईल.
- (४) नैतिक शिक्षणाच्या प्रकल्पासाठी १३ निर्धारित केलेल्या प्रातिनिधिक मूल्यांवर आधारित व उद्दिष्टांच्या संदर्भात अभ्यासक्रम तयार केला तर ते फलदायी होईल.
- (५) नैतिक शिक्षणाची १३ मूल्ये खालीलप्रमाणे आहेत-
- १) स्वच्छता, २) स्वावलंबन, ३) कर्तव्यदक्षता - नियमितपणा, ४) श्रमनिष्ठा, ५) विज्ञाननिष्ठा, ६) शुचिता, ७) समता, ८) बंधुता, ९) सर्वधर्मसमभाव आणि आदरभाव, १०) भूतदया, ११) निसर्गप्रेम, १२) निर्भयता १३) खिलाडूवृत्ती.
- (६) वरील नैतिक मूल्ये अभ्यासक्रमाच्या माध्यमातून विद्यार्थ्यांच्या मनात रुजविल्यास नैतिक शिक्षणाची पुढील उद्दिष्टे साध्य व्हावीत.
- (i) व्यक्ती म्हणून निरोगी व निरामय स्वरूपाचे अंतर्बाह्य जीवन जगता येणे;
  - (ii) कुटुंबातील घटक म्हणून कुटुंबातील व्यक्तींशी आदरयुक्त व जिवाढ्याचे संबंध प्रस्थापित होणे;
  - (iii) ज्या परिसरात आपण वाढतो, त्या परिसरातील कलाकृती, निसर्ग, प्राणी यांचे संरक्षण, जोपासना व त्याबद्दल प्रेम वाढीस लावणे;
  - (iv) समाजाचा एक घटक म्हणून सामाजिक बांधिलकी व धर्मनिरपेक्ष सामाजिक एकसंधता यास आवश्यक असणाऱ्या सामाजिक मूल्यांचा संस्कार करणे;
  - (v) स्वतंत्र राष्ट्राचा नागरिक म्हणून राष्ट्रीय एकात्मता व राष्ट्रीय विकास यास पोषक मूल्यांचा संस्कार करणे.
- (७) वर दिलेल्या मूल्यांच्या संदर्भात कार्यात्मक व्याख्या पुढे दिल्या आहेत.
- (i) स्वच्छता - स्वतःचे शरीर व स्वतःच्या नेहमीच्या वापरात येणाऱ्या वस्तू आणि सभोवतालचा परिसर स्वच्छ ठेवण्याची तत्परता आणि कृतिशीलता दैनंदिन वर्तनात सातत्याने दाखविणे म्हणजे स्वच्छता.
  - (ii) स्वावलंबन - दैनंदिन व्यवहारातील स्वतःची जी कामे स्वतः करण्यासारखी आहेत ती कामे स्वतः सातत्याने करणे म्हणजे स्वावलंबन.
  - (iii) कर्तव्यदक्षता - परिसरातील सार्वजनिक मालमत्ता, वस्तू, प्राणिमात्र व इतर व्यक्ती यांच्याशी असलेले आपले नाते हितकर व्हावे यासाठी तत्परतेने कृती करणे म्हणजे कर्तव्यदक्षता.
  - (iv) श्रमनिष्ठा - कोणतेही शारीरिक श्रम किंवा कष्टाचे काम हे कमी दर्जाचे न मानता स्वेच्छेने आणि उत्स्फूर्तपणे करण्याची तयारी असणे म्हणजे श्रमनिष्ठा.
  - (v) विज्ञाननिष्ठा - त्याज्य रूढी, अनिष्ट परंपरा आणि अंधविश्वास यांचे दडपण न स्वीकारता विचारात व आचारात वैज्ञानिक दृष्टिकोन स्वीकारणे म्हणजे विज्ञाननिष्ठा.
  - (vi) शुचिता - आपल्या मनातील वाईट विचार काढून टाकून मन शुद्ध करणे म्हणजे शुचिता.
  - (vii) समता - कोणत्याही स्वरूपाच्या संकुचित भूमिकेतून माणसा-माणसात भेद न करता सर्वांना सारखे समजून आचरण करणे म्हणजे समता.
  - (viii) बंधुता - आपल्या भावा बहिणींसंबंधी वाटणारी आत्मीयता इतर जनांसंबंधी बाळगणे व प्रकट करणे म्हणजे बंधुता.
  - (ix) सर्वधर्मसमभाव व आदरभाव - सर्व धर्मातील व सर्व मानवी समूहातील श्रेष्ठ ज्ञानी व्यक्ती, कलाकार, शास्त्रज्ञ इत्यादींचे मोठेपण मान्य करणे आणि ते वाणी, विचार व आचार यातून प्रकट करणे म्हणजे आदरभाव.
  - (x) भूतदया - सृष्टीतील मानवेतर प्राणिमात्रांनाही प्रतिष्ठा आहे, या जाणिवेने त्यांच्याशी ममतेने वागणे म्हणजे भूतदया.

- (xi) निसर्गप्रिय - निसर्गाचे स्वयंमूल्य व सौंदर्य यांच्या जाणिवेतून निसर्गाविषयी निरपेक्ष स्वरूपाची आत्मीयता बाळगणे व प्रकट करणे म्हणजे निसर्गप्रिय.
- (xii) निर्भयता - विवेकाला पटलेल्या गोष्टी, परिणामाची किंवा टीकेची पर्वा न करता स्पष्टपणे मांडणे वा प्रत्यक्ष आचरणात आणणे म्हणजे निर्भयता.
- (xiii) खिलाडूवृत्ती - क्रीडा, विनोद, स्पर्धा, चर्चा इत्यादींमध्ये होणारा जय, पराजय, मतभेद, टीका यांचा हसतमुखाने निर्मळ मनाने स्वीकार करणे आणि प्रतिपक्षाविषयी गुणग्राहकता दाखविणे म्हणजे खिलाडूवृत्ती.
- (८) नैतिक शिक्षणाची मूल्ये अभ्यासक्रमातील घटक व पाठ्यक्रम विद्यार्थ्यांवर बिंबविता यावीत यासाठी अभ्यासपूर्वक अभ्यासानुवर्ती नित्य, नैमित्तिक, भाषिक, कार्यात्मक उपक्रमात भरपूर वाव मिळेल याचा विचार व्हावा.
- (९) अभ्यासक्रम या माध्यमाशिवाय वरील मूल्ये रुजविण्यासाठी सांस्कृतिक कार्यक्रम, परिसर व स्वयंप्रेरणात्मक उपक्रम या माध्यमांचाही विचार होणे आवश्यक वाटते.

### ३.१ मूल्याधिष्ठित उपक्रमानुसार भाषिक क्षमतादर्शक तक्ता

उपक्रम. विषय	उपक्रम	मूल्ये	भाषिक क्षमता
(१) स्वातंत्र्य चळवळीचा इतिहास	(i) स्वातंत्र्य सैनिकांची चित्रे जमा करणे; (ii) स्वातंत्र्यवीरांची गोष्टीरूप चित्रे वाचणे; (iii) वयोगटाप्रमाणे ३ ते ५ देशभक्तीपर गाणी चालीवर म्हणणे व पाठ करणे.	बंधुता	वाचन, आकलन वाचन, पाठांतर
(२) भारतीय संस्कृतीचा वारसा	(i) गोष्टीरूप रामायण वाचण्यास उपलब्ध करून देणे; (ii) महाभारतातील कथा गोष्टीरूपाने वर्गीत सांगणे. (iii) भारतीय संस्कृतीच्या प्रतीक चिहनांची ओळख. (कमळ, कलश) (iv) महाभारतातील कथांच्या कथाकथन स्पर्धा घेणे.	भूतदया, बंधुता, शुचिता	वाचन कथाकथन
(३) लोकशाही	(i) प्रसंगाद्वारे लोकशाहीची संकल्पना स्पष्ट करणे. (ii) समता-सर्व भाषांविषयी समानतेची भावना जागृत करणे. (iii) शिक्षकांनी आपल्या अध्यापन कार्यात लोकशाही तत्वांचा अवलंब करणे.	समता	श्रवण साभिनय
(४) सर्वधर्मसमभाव	(i) धर्म संस्थापकांच्या छायाचित्रांचा संग्रह करणे. (ii) धर्मोपदेशकांच्या जीवनातील विशेष प्रसंगांचे नाट्यीकरण करणे.	सर्वधर्म- समभाव आदरभाव	नाट्यवाचन (साभिनय वाचन)

उपक्रम विषय	उपक्रम	मूल्ये	भाषिक क्षमता
(५) स्त्री-पुरुष समानता	(iii) सर्व धर्माच्या मूलतत्वांची ओळख करून देणे. (i) वर्गामध्ये शैक्षणिक अनुभवांच्या बाबतीत समानता राखणे. (ii) ऐतिहासिक पराक्रमी स्त्री-पुरुषांच्या कथा ऐकविणे. (iii) समाज सुधाकरांची चरित्रे वाचणे; (iv) स्वातंत्र्य लढ्यातील प्रामुख्याने स्त्रियांच्या कर्तबगारीवर आधारित नाट्यप्रसंग सादर करणे.	समता	कथाकथन वाचन, नाट्यवाचन
(६) पर्यावरणाचा समतोल राखणे	(i) निसर्ग आणि बालक या मधील सहसंबंध स्पष्ट करणे. (ii) विविध वेली-वनस्पतींची माहिती करून देणे; (iii) विविध फुलांची उपयुक्तता व सौंदर्य पारखण्याची दृष्टी देणे; (iv) वनस्पतींचा औषधी उपयोग कथन करणे.	निसर्गप्रिय	श्रवण
(७) सामाजिक कुंपणे तोडणे	(i) शाळेत सामाजिक समतेची जाणीव रुजविणे. (ii) पसायदानासारख्या विचारांचे राष्ट्रभाषेत भाषांतर करणे. (iii) पसायदान यासारख्या पद्य वेच्यांचे पाठांतर करणे.	समता निर्भयता	आकलन, भाषांतर, पाठांतर
(८) वैज्ञानिक प्रगती व तंत्रज्ञानाचा विकास यांची जाणीव निर्माण करणे.	(i) शास्त्रज्ञांची चरित्रे वाचणे; (ii) विज्ञान कथांचे कथन करणे;	विज्ञाननिष्ठा	वाचन, कथाकथन
(९) आंतरराष्ट्रीय सामंजस्य व शांती	(i) पंचशील ही कल्पना समजावून देणे; (ii) आंतरराष्ट्रीय सामंजस्याची कल्पना व ती कशी साध्य होईल ते सांगणे. (iii) संयुक्त राष्ट्रसंघाच्या कार्याचा परिचय करून देणे; (iv) शांततेचे महत्त्व सांगणे. (v) आंतरराष्ट्रीय संस्थांचा परिचय देणे.	बंधुता, समता	लेखन कौशल्य, हस्ताक्षर, शुद्धलेखन
(१०) सामाजिक व आर्थिक विषमता व त्यावरील उपायांची ओळख	(i) सामाजिक विषमतेची कल्पना देणे; (ii) आर्थिक विषमतेची कल्पना देणे; (iii) सामाजिक व आर्थिक विषमतेची दरी दूर करण्यासाठी शालेय जीवनापासून प्रारंभ करणे;	समता, स्वावलंबन, श्रमनिष्ठा	श्रवण, आकलन,



उपक्रम विषय	उपक्रम	मूल्ये	भाषिक क्षमता
(११) भारतीय घटनेबद्दल आदर	(iv) आर्थिक विषमतेचे तोटे कथन करणे. (i) घटनेच्या शिल्पकारांच्या चरित्रांचे वाचन, (ii) भारतीय घटनेची तोंड-ओळख करून देणे; (iii) नागरिकांचे अधिकार व कर्तव्ये यांची जाणीव करून देणे.	समता, बंधुता सर्वधर्म- समभाव	श्रवण
(१२) छोट्या परिवाराच्या आदर्शांचे पालन करणे	(i) "कुटुंब लहान तर सुख महान" ही संकल्पना रुजविणे; (ii) छोट्या परिवाराच्या संकल्पनेच्या संदर्भातील विविध वचनांचा संग्रह करणे.	कुटुंब कल्याण लोकसंख्या शिक्षण	सुलेखन, कथाकथन, सुलेखन
(१३) वैज्ञानिक दृष्टिकोन विकसित करणे.	(i) वैज्ञानिक दृष्टिकोनाचा अर्थ स्पष्ट करणे. (ii) या विषयावरील कथाकथन		श्रवण
(१४) ग्रामीण जीवन व शहरी जीवन यांतील विषमता दूर करणे.	(i) ग्रामीण व शहरी जीवनाचा अभ्यास करणे. (ii) ग्रामीण व शहरी जीवनावर आधारित अनुभव कथन करणे.	विज्ञाननिष्ठा समता	कथाकथन कथन, श्रवण
(१५) राष्ट्रीय व सामाजिक एकात्मतेची जोपासना	(i) राष्ट्रगीत नीट म्हणता येणे; (ii) राष्ट्रगीताचा व प्रतिज्ञेचा अर्थ स्पष्ट करणे. (iii) राष्ट्रीय नेत्यांची ओळख करून देणे.	राष्ट्रनिष्ठा समता, बंधुता	पाठांतर, आकलन
(१६) ऊर्जेची जपणूक	(i) ऊर्जेचे स्रोत संपणारे आहेत याची जाणीव करून देणे. (ii) ऊर्जेचे अनाटायी वापरावर प्रतिबंध लावणे; (iii) पर्यायी ऊर्जा साधनांचा वापर कसा आवश्यक याचे स्पष्टीकरण करणे. (iv) पर्यायी ऊर्जा साधनांची ओळख व प्रात्यक्षिके.	काटकसर विज्ञाननिष्ठा	श्रवण आकलन
(१७) नागरिकांचे हक्क व कर्तव्ये याबद्दल जाणीव निर्मिती	(i) स्वतंत्र भारताचा नागरिक ही संकल्पना समजून घेणे; (ii) नागरिकत्वाची कर्तव्ये व अधिकार लिहिणे.	बंधुता, समभाव	वाचन लेखन

## ४. द्वितीय/तृतीय भाषास्तरावर हिंदीचा पूर्ण व संयुक्त पाठ्यक्रम (इयत्ता ५ वी)

आपल्या मातृभाषेबरोबरच विद्यार्थ्यांनी द्वितीय/तृतीय भाषांचा अभ्यास करावा अशी अपेक्षा आहे. भारत हा बहुभाषिक देश असल्यामुळे प्रत्येक राज्यात वेगवेगळ्या भाषा बोलल्या जातात. स्वाभाविकच हिंदी भाषेला संपर्क भाषा म्हणून काम करावे लागणार आहे. या भाषेच्या परिचयामुळे विद्यार्थ्यांत भावनात्मक ऐक्य वाढीस लागेल. हिंदीतून बोललेले त्यांना सहज समजेल व ते हिंदीतून बोलू शकतील. हिंदी भाषिक किंवा इतर भाषिक प्रदेशात गेल्यानंतर तेथील व्यक्तींशी त्यांना संभाषण करता येईल. त्यांच्याशी जवळीक साधता येईल.

ज्या विद्यार्थ्यांची मातृभाषा मराठी किंवा इंग्रजी आहे त्यांना इ. ५ वी पासून हिंदीचा अभ्यास करावा लागेल. कोणतीही भाषा आत्मसात करावयाची म्हणजे ती चांगली ऐकता, वाचता आणि लिहिता यायला हवी. दैनंदिन व्यवहाराची भाषा ही सामान्य भाषा असते. त्यात मर्यादित शब्दांचा वापर केला जातो. ५ वी ते ८ वी या इयत्तांमध्ये शिकणाऱ्या विद्यार्थ्यांना प्रामुख्याने ही व्यवहारातील हिंदी भाषा चांगली अवगत झाली पाहिजे. त्यांच्या हिंदीच्या शब्दभांडारात सुमारे २००० शब्दांचा भरणा असावयास हवा. इ. ५ वी पासून टप्प्याटप्प्याने हे शब्दभांडार समृद्ध होत गेले पाहिजे.

### ४.१ उद्दिष्टे :-

हिंदी द्वितीय भाषा म्हणून शिकविताना पुढील उद्दिष्टे डोळ्यासमोर ठेवावीत.

- (१) हिंदीचा संपर्क भाषा म्हणून उपयोग करण्यास मुलांनी समर्थ व्हावे;
- (२) मुलांमध्ये आपली राष्ट्रभाषा म्हणून हिंदीबद्दल प्रेम निर्माण व्हावे;
- (३) मुलांमध्ये हिंदी भाषेतून भावनात्मक ऐक्य निर्माण व्हावे;
- (४) हिंदी भाषेत व्यक्त केलेले विचार ऐकून व वाचून त्यांचे सहजपणे आकलन करता यावे;
- (५) सोप्या हिंदीत संभाषण करता यावे;
- (६) आपले विचार सोप्या व शुद्ध हिंदीत लिहिता यावेत.

### ४.२ उपक्रम

भा सर्व क्षमता विकसित करण्यासाठी काही अतिरिक्त उपक्रम आयोजित करावे लागतील. इ. ५ वी ते इ. ८ वी च्या विद्यार्थ्यांसाठी पुढील उपक्रम घ्यावेत.

- (१) हिंदी दिवस, जयंती, पुण्यतिथी...या सारखे दिन-विशेष साजरे करणे.
- (२) हिंदी संवाद बसवून घेणे.
- (३) आकाशवाणीवरील हिंदी कार्यक्रम ऐकविणे.
- (४) हिंदी कथाकथन स्पर्धा घेणे.
- (५) हिंदी कविता गायनाची/भावपूर्ण वाचनाची स्पर्धा घेणे.
- (६) हिंदीतील गोष्टींची सोपी पुस्तके वाचण्यास देणे.
- (७) समानार्थी व विरुद्धार्थी शब्दांचा संग्रह करण्यास सांगणे.
- (८) शब्दसमूहासाठी एक शब्द शोधून त्यांचा संग्रह करण्यास सांगणे.
- (९) हिंदी कथांचे नाट्यीकरण, एकांकिकांचे मंचीकरण करून घेणे.
- (१०) दैनंदिन व्यवहारात येणाऱ्या हिंदी शब्दांचा संग्रह करण्यास सांगणे.
- (११) इयत्ता ८ वी तील विद्यार्थ्यांना शब्दार्थासाठी हिंदीचा शब्दकोश पाहण्याचा सराव देणे.

### ४.३ अध्ययन निष्पत्ती :-

वर नमूद केलेली उद्दिष्टे साध्य केल्यानंतर विद्यार्थ्यांमध्ये पुढील क्षमता विकसित होणे आवश्यक आहे.

- (१) हिंदीमध्ये दिलेल्या सामान्य सूचनांचे आकलन होणे.
- (२) हिंदीमध्ये व्यक्त केलेले दुसऱ्याचे विचार समजणे.
- (३) आपले विचार सोप्या व शुद्ध हिंदीत व्यक्त करता येणे.
- (४) मित्र किंवा एखादी अपरिचित व्यक्ती यांच्याशी सोप्या हिंदीतून बोलता येणे.
- (५) हिंदी भाषेतील उच्चारांची वैशिष्ट्ये लक्षात घेऊन शुद्ध व स्पष्ट शब्दोच्चार करता येणे.
- (६) शुद्ध उच्चार, योग्य स्वरूपात, आवाजातील चढउतार यांचा योग्य मेळ साधून हिंदीतील पाठांचे वाचन करता येणे.
- (७) हिंदीत पारिवारिक पत्रलेखन करता येणे.
- (८) परिचित विषयांवर हिंदीत काही वाक्ये किंवा छोटासा परिच्छेद लिहिता येणे.
- (९) हिंदी-संवाद, एकांकिका यात भाग घेणे.
- (१०) हिंदीच्या पाठ्यपुस्तकातील उतान्याचा मातृभाषेत अनुवाद करता येणे.

### ५. इयत्तावार पाठ्यक्रम

#### ५.१ इयत्ता पाचवी

स्वातंत्र्यपूर्व काळात आणि त्यानंतर स्वातंत्र्योत्तर काळातही महाराष्ट्रात राष्ट्रभाषेचा अभ्यास व्हावा, या हेतूने पाचव्या इयत्तेच्या अभ्यासक्रमात हिंदी या विषयाचा समावेश करण्यात आला. वेळोवेळी अभ्यासक्रमात थोडेफार बदल करण्यात आले तरीही द्वितीय भाषा हिंदी शिक्षणाचा आरंभ पाचव्या इयत्तेतच होत आला आहे.

इयत्ता सहावीच्या अगोदर इयत्ता पाचवीमध्ये द्वितीय भाषा हिंदीचा अभ्यास होण्याच्या दृष्टीने खालील तपशील देण्यात येत आहे.

#### (अ) क्षमता

- (१) इयत्ता पाचवीमध्ये मौखिक कार्यावर भर देण्यात यावा. तृतीय भाषा म्हणून हिंदीचे अध्यापन ज्या ठिकाणी होईल त्या ठिकाणी अक्षरे, संयुक्ताक्षरे शब्द इत्यादींच्या उच्चाराचा सराव करविणे.
- (२) प्रथम वर्षाच्या या पाठ्यक्रमातील निर्धारित भाषिक पाठ्यबिंदूच्या आधारे मातृभाषेतील परिचित शब्दांशी मिळत्या जुळत्या हिंदीतील केंद्रभूत शब्दांचा कुशलतेने वापर करून शिक्षकांनी संभाषण-प्रश्नोत्तर पद्धतीने या विद्यार्थ्यांना संबंधित भाषिक पाठ्यबिंदूची तोंडओळख करून देणे आवश्यक आहे. या इयत्तेतील विद्यार्थ्यांकडून मौखिक अभिव्यक्ती अपेक्षित आहे.
- (३) यातूनच विद्यार्थ्यांच्या मातृभाषेतील अक्षरे, शब्द इत्यादींच्या उच्चाराचा हिंदीतील त्यांच्या उच्चारातील वेगळेपणा लक्षात आणून देणे व त्याप्रमाणे हिंदीच्या पद्धतीने उच्चारांचा सराव करून घेणे.
- (४) अक्षरे, शब्द, वाक्ये इत्यादींच्या अनुलेखनाचा सराव करून घेणे. प्रामुख्याने निर्धारित भाषिक पाठ्यबिंदूंचे आकलन ज्ञानत्याची खात्री करून घेण्याच्या दृष्टीने हेतुलक्षी स्वाध्यायांचा सराव करून घेणे.
- (५) सुमारे आठ गेय कविता पाठ म्हणता येणे.
- (६) सामान्य वर्तमानकाळ, सामान्य भूतकाळ, सामान्य भविष्यकाळ, आज्ञार्थक, प्रश्नार्थक वाक्ये यांच्या वाक्यरचनेचा सराव करून घेणे.
- (७) नामांचे वचन आणि लिंग ओळखणे.
- (८) अंक - १ ते ५० अंक म्हणता येणे.

(ब) उपक्रम:-

(१) हिंदीमध्ये 'ज्ञ' चा उच्चार 'ग्य' प्रमाणे केला जातो.

उदा. 'ज्ञान' चा उच्चार 'ग्यान' या सारख्या शब्दांचा सराव देणे.

(२) हिंदीत 'ड' व 'ढ' यांचे दोन उच्चार आहेत. ज्यावेळी या दोन्ही अक्षरांच्या खाली टिंब (म्हणजेच नुक्ता) दिला असेल तेव्हा वेगळा व नसेल तेव्हा वेगळा उच्चार करावयाचा असतो, याचा सराव देणे. उदा. डरना, डाक, बड़ा, पड़ाव, ढक्कन, ढोल, पढ़ना, बढ़ई इत्यादी.

(३) खालील उच्चारांचा विशेष सराव देणे-

श - ब - स - सरिता, सुषमा, सुशील, बिभीषण, विशेषण, सर, शंकर, संकर

छ - क्ष - कुछ, कक्षा

ड़ - ढ - कढ़ाई, कड़ी, कढ़ी

ज - ज़रा (थोडा), जरा (वृद्धत्व)

(४) सोप्या हिंदीतून मुलांशी संभाषण करणे.

(५) पाठ्यपुस्तकातील हिंदी कवितेचे भावपूर्ण व लयबद्ध गायन/वाचन करणे.

(क) पाठ्यक्रमाचा आराखडा: पाचवी हिंदी (एकस्तर)

(१) गद्य - पाठ्यपुस्तकाचा आकार पृष्ठ संख्या ३० (तीस) (केवळ संहिता)

(२) पद्य - गेय व अभिनेय कविता आणि बालगीते (८ ते १०)

(३) व्याकरण - (ओळी ५० ते ६०)

फक्त स्थूल परिचय

नाम व त्याचे लिंग, वचन

सर्वनाम - पुरुषवाचक व प्रश्नवाचक

विशेषण - गुणवाचक व संख्यावाचक

काळ - सामान्य, अपूर्ण वर्तमानकाळ, सामान्य भूतकाल, सामान्य भविष्यकाळ

आज्ञार्थक वाक्य

उच्चारण - उपक्रम क्र. १, २, ३ मध्ये दर्शविलेला भाग,

(४) रचना - (तोंडी)

मेरा परिचय, मेरा दिनक्रम, मेरी माँ, मेरा घर, मेरी पाठशाला, मेरा मित्र, मेरी सहेली...

(विशेष सूचना - 'क्रमनिर्धारित भाषिक वाक्य संरचना संबंधी सारिणी परिशिष्ट १ मध्ये दिलेली आहे.)

**द्वितीय / तृतीय भाषा हिंदी (पूर्ण व संयुक्त)**  
**क्रमनिर्धारित भाषिक वाक्य संरचनासंबंधी सारिणी**  
**प्रथम / द्वितीय वर्ष (पाँचवी - छठी कक्षाएँ)**

१ क्रम	२ भाषिक अध्यापन बिंदु	३ भाषिक अध्यापन इकाई (उदाहरण)	४ प्रयोगार्थ आधार संकेत	५ अध्यापन संबंधी सूचनाएँ	६		
					पाँचवीं के लिए (एक स्तर)	भाषिक उद्देश्य छठी (पूर्ण)	छठी (संयुक्त)
१) २) ३) ४)	यह ये वह वे	सह लड़का है। ये लड़के हैं। सह लड़की है। वे लड़ाकियाँ हैं।	व्यक्ति / वस्तु	पुरुषवाचक और प्रश्नवाचन सर्वनाम, सर्वनाम के एकवचन, बहुवचनों की पहचान अपेक्षित	मात्र आकलन अपेक्षित, उच्चारण मौखिक कथन क्षमता	मौखिक एवं लेखनस्तरीय क्षमता अपेक्षित	मौखिक एवं लेखनस्तरीय क्षमता अपेक्षित
५)	क्या	यह क्या है ? वह क्या है ? ये / वे क्या है?	कक्षांतर्गत चीजें मेज, कुर्सी, डेस्क, झाड़नी, कलेंडर, पंखा, नक्शा, तस्वीर, दीवार, खिड़की, दरवाजा ...		हिंदी की प्रकृति की दृष्टि से बातचीत में 'तू' का प्रयोग यहाँ अपेक्षित नहीं है।		" "
६) ७) ८) ९) १०)	तुम मैं हम आप कौन	तुम लड़के हो। मैं विद्यार्थी हूँ। हम लड़के हैं। आप गुरुजी हैं। यह कौन है ? ये कौन है ? वे कौन हैं ?	परिचित शब्दावली लड़का, लड़की, आदमी, औरत, विद्यार्थी, गुरुजी, कुत्ता, बिल्ली, चूहा, गाय, बैल, कौआ, घोड़ा, फल, फूल ...	सर्वनाम के माध्यम से व्यक्ति या वस्तु का परिचय	--	"	"
११) १२)	तुम + आज्ञार्थ (क्रियारूप) आप + आज्ञार्थ	तुम जाओ। आप जाइए।	अन्य परिचित क्रियाएँ ...	'तुम और आप, के साथ आज्ञार्थ के क्रिया रूप	आज्ञार्थ रूपों का स्थूल परिचय	आज्ञार्थ रूपों का लेखन में प्रयोग अपेक्षित	आज्ञार्थ रूपों का लेखन में प्रयोग अपेक्षित

क्रम	२	३	४	५	६							
					भाषिक उद्देश्य							
	भाषिक अध्यापन बिंदु	भाषिक अध्यापन इकाई (उदाहरण)	प्रयोगार्थ आधार संकेत	अध्यापन संबंधी सूचनाएँ	पाँचवीं के लिए (एक स्तर)	छठी (पूर्ण)	छठी (संयुक्त)					
आवृत्ति : ( आगे के उदाहरण केवल 'वह' के साथ दिए गए हैं । वाक्य-संरचनाओं का अभ्यास सभी पुरुषों, वचनों और लिंगों में होगा । )												
१३)	अपूर्ण वर्तमान काल : कर्ता + क्रि + रहा है	वह पढ़ रहा है ।	परिचित क्रियाएँ (पढ़ना, लिखना, बोलना, चलना, खाना, पीना जैसी)	अपूर्ण वर्तमान के सभी रूपों का परिचय ।	स्थूल परिचय रूप पहचान अपेक्षित, लेखन अपेक्षित नहीं है ।	इनका रूप परिवर्तन एवं लेखन में प्रयोग अपेक्षित	लेखन में प्रयोग अपेक्षित, रूप पहचान अपेक्षित ।					
१४)	कर्ता + क्रि + रहे हैं	वे पढ़ रहे हैं ।										
१५)	कर्ता + क्रि + रही हैं	वह पढ़ रही है ।										
१६)	कर्ता + क्रि + रही है	वे पढ़ रही हैं ।										
१७)	मैं + क्रि + रहा हूँ ।	मैं पढ़ रहा हूँ ।										
१८)	मैं + क्रि + रही हूँ ।	मैं पढ़ रही हूँ ।										
१९)	तुम + क्रि + रहे हो ।	तुम पढ़ रहे हो ।										
२०)	तुम + क्रि + रही हो ।	तुम पढ़ रही हो ।										
२१)	सामान्य वर्तमानकाल : कर्ता एकवचन (पु.) + क्रि + ता + है ।	वह (लड़का) जाता है ।						परिचित क्रियाएँ चलना, बोलना, खाना... आदि परिचित, कर्ता - विद्यार्थी, गुरुजी, नौकर, नौकरानी, आदि ।	सामान्य वर्तमानकाल का स्थूल परिचय ।	रूप पहचान अपेक्षित लेखन अपेक्षित नहीं ।	लेखन क्षमता अपेक्षित	लेखन क्षमता अपेक्षित ।
२२)	कर्ता बहुवचन (पु.) + क्रि + ते + है ।	वे (लड़के) जाते हैं ।										
२३)	कर्ता ए.व/ब.व. (स्त्री) + क्रि + ती + है / हैं ।	वह (लड़की) जाती है । वे (लड़कियाँ) जाती हैं ।										
२४)	कर्ता मैं हम + क्रि - होना (हूँ / हैं)	मैं - हूँ । हम - हैं ।										
२५)	कर्ता तू, तुम, आप + क्रि-होना (है, हो, हैं)	तू - हैं । तुम - हो । आप - हैं ।										
२६)	कर्ता वह वे + क्रि - होना (है, हैं)	वह - है । वे - हैं ।	-	-	होना क्रिया के सामान्य वर्तमान काल के रूप	(१) मात्र मौखिक स्तर पर स्थूल मात्रा में कथन क्षमता अपेक्षित (२) शुद्ध उच्चारण अपेक्षित	कथन क्षमता, लेखन क्षमता, (तीनों पुरुषों में)	कथन क्षमता, लेखन क्षमता, (तीनों पुरुषों में)				

१	२	३	४	५	६		
					भाषिक उद्देश्य		
क्रम	भाषिक अध्यापन बिंदु	भाषिक अध्यापन इकाई (उदाहरण)	प्रयोगार्थ आधार संकेत	अध्यापन संबंधी सूचनाएँ	पाँचवीं के लिए (एक स्तर)	छठी (पूर्ण)	छठी (संयुक्त)
२७)	कर्ता + कर्म + क्रिया रूप	वह हिंदी सीखता है। वह किताब पढ़ता है।	हाथ-मुँह धोना, दूध पीना, पढ़ाई करना... इत्यादि	सुबह से रात तक के अपने कार्यक्रम का परिचय क्रम के अनुसार दे सकें	अपने रोज के कार्यक्रम का वर्णन, 'मौखिक' कथन शुद्ध उच्चारण	लेखन क्षमता, (तीनों पुरुषों में क्रिया के रूप) एक-दूसरे का परिचय।	लेखन क्षमता (तीनों पुरुषों में क्रिया के रूप) एक दूसरे का परिचय।
२८)	कर्ता + पूरक + होना के रूप	वह राजा है।			मात्र,		
२९)	कौन - (व्यक्ति)	वह कौन है ?	परिचित व्यक्ति	प्रश्नार्थक सर्वनाम	मौखिक स्तर पर स्थूल क्षमता अपेक्षित	मौखिक और लेखन क्षमता (सूक्ष्म स्तर पर)	मौखिक और
३०)	क्या - (वस्तु)	यह क्या है ?	कौन- क्या का परिचय वस्तु	मात्रा में प्रयोग करने की एवं दोनों में फर्क जानने की क्षमता निर्माण करना।	क्षमता अपेक्षित		अपेक्षित (स्थूल स्तर पर)
३१)	कर्ता + क्या + क्रि + रूप	वह क्या करता है?	परिस्थित क्रियाएँ - पढ़ना लिखना इत्यादि	यह क्या है? तुम क्या करते हो ?	आकलन क्षमता		
३२)	क्या + वाक्य	क्या तुम घर जाते हो?		'क्या' के कुछ प्रयोगों का परिचय	आकलन क्षमता		
३३)	कहाँ ...	पेन्सिल कहाँ है? तुम कहाँ हो?	परिचित शब्दावली के आधार पर 'कहाँ' के प्रयोग के कुछ वाक्य	स्थान वाचक क्रिया- विशेषण अव्यय	आकलन क्षमता	आकलन लेखन क्षमता	आकलन
३४)	नहीं	वह घर नहीं जाता।	परिचित शब्दावली के आधार पर 'नहीं' 'मत' के प्रयोग के कुछ वाक्य				
३५)	मत	तुम वहाँ मत जाओ।					
३६)	सामान्य भूतकाल : कर्ता + क्रिया (पु. ए. व.)	वह चला।	परिचित क्रियाएँ उठना, लौटना, दौड़ना	सोना, खाना इत्यादि क्रियाओं के सामान्य भूतकाल के रूपों का स्थूल परिचय	मैंने कल क्या किया? मौखिक कथन क्षमता	आकलन, लेखन क्षमता, क्रिया रूप पहचान, परिवर्तन	आकलन, लेखन एवं रूप पहचान
३७)	कर्ता + क्रिया (पु; ब. व.)						

क्रम	भाषिक अध्यापन बिंदु	भाषिक अध्यापन इकाई (उदाहरण)	प्रयोगार्थ आधार संकेत	अध्यापन संबंधी सूचनाएँ	भाषिक उद्देश्य		
					पाँचवीं के लिए (एक स्तर)	छठी (पूर्ण)	छठी (संयुक्त)
३८)	कर्ता + क्रिया (स्त्री; ए. व.)	वह चली।	परिचित क्रियाएँ	परिचित क्रियाओं के सा. भूतकालीन रूपों का स्थूल परिचय।	आकलन क्षमता	आकलन - लेखन क्षमता	आकलन - लेखन क्षमता
३९)	कर्ता + क्रिया (स्त्री; ब. व.)	वे चलीं।					
४०)	सामान्य भविष्यकाल में / हम + क्रि (ऊँगा / एँगे)	पुल्लिग में पढ़ूँगा/ हम पढ़ेंगे।	परिचित क्रियाएँ उठना, धोना, करना ... इत्यादि।	कल तुम क्या करोगे? छुट्टी के दिन तुम क्या करोगे ? ... जैसे प्रश्न।	सिर्फ पहचान	लेखन - पठन क्षमता अपेक्षित, क्रिया रूप बनाना, कर्ता के अनुसार परिवर्तन अपेक्षित	लेखन - पठन क्षमता अपेक्षित
४१)	तू/तुम/आप + क्रिया (एगा / ओगे / एँगे)	तू पढ़ेगा / तुम पढ़ोगे। आप पढ़ेंगे।					
४२)	वह / वे क्रिया (एगा / एँगे)	वह पढ़ेगा। वे पढ़ेंगे। (स्त्री लिंग)					
४३)	मैं, हम, तू, तुम, आप, वह, वे + क्रिया	मैं पढ़ूँगी। हम पढ़ेंगी। तू पढ़ोगी। तुम पढ़ोगी। आप पढ़ेंगी। वह पढ़ेगी। वे पढ़ेंगी।					
४४)	संज्ञा बहुवचन पुल्लिग आकारान्त आ - ए (छाता-छाते)	यह छाता है। ये छाते हैं।	घोड़ा, गधा, लड़का	हिंदी में सामान्यतः आकारान्त पुल्लिगी शब्दों के अतिरिक्त बाकी सभी शब्द बहुवचन में वैसे ही रहते हैं। - का बोध मात्र अपेक्षित	शब्दों में एकवचन, बहुवचन के अनुसार परिवर्तन अपेक्षित (मौखिक)	वचन परिवर्तन, एवं लेखन क्षमता (सूक्ष्म)	वचन परिवर्तन एवं लेखन क्षमता (स्थूल)
४५)	इ, ई, उ, ऊ, ए - एकारान्त पुल्लिग एकवचन, बहुवचन में अपरिवर्तित	यह बालक है। ये बालक हैं।	बालक, कवि, हाथी, साधु, बिच्छू... चौबे				



(५)

१	२	३	४	५	६		
					भाषिक उद्देश्य		
क्रम	भाषिक अध्यापन बिंदु	भाषिक अध्यापन इकाई (उदाहरण)	प्रयोगार्थ आधार संकेत	अध्यापन संबंधी सूचनाएँ	पाँचवीं के लिए (एक स्तर)	छठी (पूर्ण)	छठी (संयुक्त)
४६)	बहुवचन-स्त्री लिं. शब्द अ - संज्ञाएँ	यह पुस्तक है। ये पुस्तकें हैं।	संबंधित परिचित शब्दावली : रात, माता, प्रति, कली, ऋतु, वधू	स्त्रीलिंग शब्दों का एकवचन - बहुवचन	सिर्फ पहचान	सभी नियमों का सूक्ष्म ज्ञान, वचन परिवर्तन, क्षमता अपेक्षित।	सभी नियमों का परिचय एवं वचन परिवर्तन क्षमता अपेक्षित।
४७)	आ - एँ	माला - मालाएँ					
४८)	इ - यों / ई - इयों	कृति - कृतियाँ / नदी - नदियाँ					
४९)	उ - एँ / ऊ - उएँ	धेनु - धेनुएँ / बहू - बहुएँ					
५०)	विशेषण :- यह / वह / ये / वे	यह लड़का। वह लड़का। ये लड़के। वे लड़के।	-	सर्वनामों के विकृत रूपों का ज्ञान;	सिर्फ पहचान	विशेषण के सामान्य रूपों का परिचय अपेक्षित।	विशेषण के सामान्य रूपों का परिचय अपेक्षित।
५१)	इस/ उस/ इन/ उन	इस लड़के ने। उस लड़के ने। इन लड़कों ने। उन लड़कों ने।	-	सर्वनाम का सार्वनामिक विशेषण के रूप में प्रयोग	सिर्फ पहचान (स्थूल)		
५२)	लाल फूल, बड़ा लड़का, छोटी बच्ची, हरे पत्ते	बड़ा लड़का-बड़े लड़के ने, बड़े लड़के - बड़े लड़कों ने	-	विशेषण के अनुसार आकारान्त विशेषण का रूप बदलता है			
५३)	१ से १०० तक गिनती सौ, हजार, लाख, दस लाख, संख्यावाचक विशेषण	एक आदमी, पचास पुस्तकें, दस हजार आदमी	-	- इसका ज्ञान अपेक्षित।	गिनती कंठगत (मात्र १ से ५० तक) बाकी संख्यावाचक स्थूल परिचय	गिनती कंठगत (१ से १०० तक) बाकी संख्यावाचक सूक्ष्म परिचय अपेक्षित	गिनती कंठगत (१ से १००) बाकी संख्यावाचक स्थूल परिचय अपेक्षित
५४)	अव्यय शब्द : क्रिया विशेषण अव्यय: संबंध सूचक अव्यय, समुच्चय बोधक अव्यय, विस्मयादिबोधक अव्यय	आज रविवार है। घर के सामने पेड़ है। राम और लक्ष्मण भाई हैं। वाह, क्या कहना!	१) आज, कल, अब, कब, यहाँ, वहाँ अंदर बाहर, ऊपर, नीचे, इधर, उधर, पास, सामने, न, ही, भी २)(के) आगे (के) पास (की) ओर ३) और, या अथवा, लेकिन, अगर. ४) वाह, शाबास, छी।	अव्यय शब्दयुक्त वाक्यों का स्थूल परिचय करना है।	स्थूल परिचय अपेक्षित	स्थूल परिचय, आकलन, (कब कहाँ किस के, आगे, जैसे प्रश्नों के उत्तर) अव्यय शब्द-विरामचिह्न का सही प्रयोग(वि.बो. अव्यय)	स्थूल परिचय, आकलन

# ENGLISH (THIRD LANGUAGE)

## PART I Preamble

### 1. INTRODUCTION

For the first time after Independence a National Policy on Education has been formulated prescribing a uniform course of studies in all the states in the country. Teaching of English at different levels of education has an important role to play. English like other languages, fulfils the functional (communicative), literary (aesthetic) and cultural (integrative) needs of the learner.

English is a window on the world. It is a language in which the latest scientific and technological knowledge and information are readily available. It primarily serves us as a 'Library Language'. As an Associate Official language of the country and as an International Link Language, it has important functions to perform in our education system. In the state of Maharashtra English is introduced in the fifth standard as a third language. By the time the student completes secondary education he would have studied it at least for 6 years.

### 2. OBJECTIVES

The objectives of teaching English are geared to the needs of learners and the position of English in the socio-economic and the cultural life of the nation. The objectives spelt out in terms of language abilities of Listening, Speaking, Reading, and Writing in the Upper Primary and Secondary levels are the same. The abilities, however, vary from course to course and from stage to stage in the degree of attainments.

The terminal outcomes of learning English in the primary and upper primary stages are that the learner develops—

#### THE ABILITY TO UNDERSTAND ENGLISH WHEN IT IS SPOKEN

(The Skill of Listening)

The learner

- understands simple statements, questions, commands
- follows directions given orally
- follows simple narrations or descriptions
- maintains his/her listening attention for a reasonable length of time
- listens to English programmes on radio and watches programmes on television.

#### THE ABILITY TO SPEAK INTELLIGIBLY

(The Skill of Speaking)

- speaks intelligibly while making statements, asking questions, giving instructions, reporting events
- narrates simple experiences and series of events within the range of his/her linguistic ability

- converses in familiar social situations
- uses polite expressions in appropriate contexts.

### THE ABILITY TO READ ENGLISH INTELLIGENTLY AND IMAGINATIVELY (The Skill of Reading - aloud and silent)

- develops correct reading habits
- grasps meaning of words and sentences from the context
- understands notices and written instructions
- follows sequence of ideas and facts
- forms the habit of reading for pleasure and information.

### THE ABILITY TO WRITE CORRECTLY (The Skill of Writing)

- writes neatly and legibly with correct spelling and reasonable speed
- uses appropriate vocabulary and constructs sentences correctly
- writes paragraphs, letters, simple narrative pieces
- writes accurate descriptions of people, places and things.

To attain these objectives the guide-lines have been laid down for the effective implementation of the syllabus in English.

## 3. APPROACHES, METHODS AND TECHNIQUES

### *STRUCTURAL APPROACH*

The syllabus incorporates structural items (linguistic items) which form the core of the COURSE CONTENT for each year. They have been arranged in such a way that the earlier structural facilitate learning the latter ones. The textbook writer and the teacher may change the order of the structural items, if necessary.

Illustrations given against each linguistic items, determine the scope of the structural items to be learnt at a particular level. The other aspects of the same may be introduced in higher classes.

### *SITUATIONAL APPROACH (Meaningful Learning)*

Language is primarily used to communicate thoughts, ideas, feelings, etc. The teachers are advised not to teach the structural items in isolation but to use them in the situation which would appeal to the learner and inspire him to use the language in his own context whenever it is desired. The communicative aspect of the language should never be ignored.

### *ARUAL-ORAL APPROACH*

Each structural item used in the particular situation should be presented orally first on each occasion so that the learner gets opportunities to develop the ability of listening. Optimum efforts must be made to involve the learner in speech and conversation.

## **MULTI-SKILL APPROACH**

In the early stage, emphasis is being laid on developing the oral skills, as they facilitate learning the skills of reading and writing. It is not desirable to ignore reading and writing at the same time. So, balance in the development of all the four skills has to be maintained.

### **4. ORAL WORK**

The first year syllabus is expected to be implemented orally. However, reading and writing could be introduced and practised incidentally. The learner should be exposed to the use of the language and encouraged to act and take part in conversation.

In upper Primary classes, about four weeks in the beginning of every year could be devoted to oral work. During that period the language learnt in the earlier class(es) could be practised in the form of remedial work which would help the learner to regain confidence and facilitate the process of learning further.

The syllabus emphasises the crucial role of oral work which should be freely resorted to during the entire period of learning English, as it is the quickest means of practising and ensuring assimilation of new constructions and usages.

### **5. PRONUNCIATION**

The teacher should realise the importance of pronunciation in language learning. Stress should be laid on fluency. Practice of language learning class.

### **6. READING**

Knowledge of the letters of the alphabet is not essential for acquiring the Mechanism of reading. So the learner should be initiated to the Skills of reading right from the beginning. 'Look and Say' is the most useful method for introducing READING in the early stage. For which teachers are advised to prepare their own flash cards and reading charts. No doubt, the black-board is the most useful device which could conveniently be used for 'learning to read'. The teacher should understand that the Reader is not the only device for teaching reading.

The skill of reading aloud is important but more important is the acquisition of the skill of silent reading with a fair degree of speed and comprehension.

The learner must be encouraged to read more and more books for pleasure and information. Simplified and graded material should be made available at all stages.

### **7. USE OF THE READER**

The learner should be asked to read the lesson after he has acquainted himself with the usages of all the language items used in it. The Reader (Textbook) is not a device for introducing the language items but a source that supplies interesting material to re-inforce what has been

learnt orally. It also provides excellent samples of modern usages and demonstrates how to use the language in connected sequences in real-life situation which cannot be contrived within the limits of the class-room. The Readers must be used in such a way that it accelerates the process of achieving the goals of learning English as well as the larger goals of education.

## **8. WRITING**

Practising strokes forms the background to 'learn to write'. Then the formation of the letters of the alphabet (Small and Capital) should follow. Only the print script is desirable at this stage.

In the early stage of writing (copying) the learner must be asked to copy words, phrases and sentences from the blackboard and paragraphs from the book. Once he has acquired the mechanism of writing he should be involved in practising exercises on linguistic items learnt orally. Periodical dictation exercises from an effective method of teaching the skill of writing.

Graded copy books should be made available to pupils for this purpose.

## **9. COMPOSITION**

The teaching of Composition will begin with oral work at the preliminary stage. It should follow oral and written exercise on the matter read and should lead to reproduction of stories, narration of events with the help of guidelines and linguistic cues.

## **10. GRAMMER**

The chief aim of the teaching of English is to develop comprehension and direct expression. Hence teaching the formal aspect of grammar is not expected at this stage but the functional aspect, that is, explanation of the usage of the linguistic item may be done as a short-cut to quick understanding.

## **11. USE OF MOTHER-TONGUE**

The mother-tongue of the learner should not be used indiscriminately. It should be used, if necessary, to explain the meaning of content words, the behaviour of language items and certain points of usages.

## **12. POEMS**

Poems are to be learnt for pleasure. The rhythm of the language is acquired incidentally through poems. Each Reader should include some simple and enjoyable poems for recitation.

## **13. VOCABULARY**

A list of content words is given in Part-III. About 150/200 words may be used in the fifth standard and the number may be increased in subsequent years so that the learner would have mastered about 1500 words at the end of Standard VIII. Some other words occurring naturally in the course

of conversation but not listed, may also be taught by the teacher. Similarly, freedom is given to add to, or to subtract from the select vocabulary to the extent of ten percent. Thus there is ample scope for initiative and experiments on the part of enterprising and imaginative teachers or textbook writers.

#### **1.4. HOMEWORK**

Homework need not be merely textual. Activities and tasks enjoyable by the learner should be set and they should be asked to use appropriate language. The assignment may include collecting pictures and naming them, writing names of members of the family, relatives, friends etc., visiting places of works and talking to people in English.

#### **1.5. USING LANGUAGE INFORMALLY**

Some of the structural items, phrases, vocabulary items (words) included in the syllabus for all the classes could be presented and practised whenever the occasion arises. For this the teacher need not hesitate even to change the order of the structural item. He should first use it in the oral work as it would fit well in the context. This would help him to create the proper atmosphere for learning and conduct activities in the class.

Here are just a few items for incidental learning :

Social Manners

Numerals

Ordinals

Day, Date, Time, Weather, etc.

Anomalous Finites (can, may, should, etc.)

Commands

Verbs and Perception

#### **1.6. READERS (COURSE BOOKS)**

Readers should be written in accordance with the syllabus laid down for each class. They should provide interesting and useful materials for developing all the skills (Listening, Speaking, Reading, Writing) of language learning. It is desired that the materials in the Readers would expose the children to the use of the language in the modern way of life. The balance should be struck between Indian and foreign background.

Poems should be selected very carefully only for recitation and comprehension at this level.

Exercises should be employed for intensification of language patterns learned orally as well as for composition.

#### **1.7. EVALUATION**

Learner's behavioural changes in achieving the final goals should be observed and record for

the assessment of teaching/learning process. It is not only the end-product but the process of learning that matters in this regard. Various tools of evaluation should be adopted at each level to suit individual differences among learners.

Periodical tests and sessional examinations are to be administered to supplement the assessment of the individual.

To make results a true index of the learner's attainments :

- (a) all the skills should be tested
- (b) questions should be objective based
- (c) questions on different difficulty levels should be set
- (d) different types of questions (objective type, short answer and essay type) should be incorporated in the question paper.

As the emphasis is laid on developing aural-oral skills at this stage, due weightage should be given to test these abilities.

## 18. TRAINING OF TEACHERS

For effective implementation of the syllabus in English it is necessary to entrust the teaching of English to those who have been specially trained to teach the English language. Under the present circumstances, it would be in the fitness of things to conduct orientation courses, each of at least a fortnight's duration for the teachers.

19. Finally it is hoped that the teaching and learning of English (like the teaching and learning of all other subjects), should contribute towards the realisation of the larger goals of education.

**PART II**  
**Objectives and their specifications**  
**Std. V**

**1. The Skill of Listening**

The student :

- \* gets used to the sound of English  
(listening to radio, TV, recorder, gramophone etc.
- \* pays attention to whatever is being said
- \* listens so as to be able to copy the sounds and stress in words
- \* distinguishes between simple intonation patterns (rise and fall)
- \* understands simple statements
- \* follows commands/directions given orally
- \* enjoys listening to rhymes, songs and short poems.
- \* understands simple questions
- \* listens to a simple dialogue or story of about 50 to 100 words (e.g. Aesop's fables) either from word of mouth or from a recording and understands the main points/central idea.

**2. The Skill of Reading**

The student :

- \* identifies capital and small letters
- \* reads aloud words with and without supplementary picture-cards
- \* recognizes a full-stop or a question-mark as a pause-point
- \* reads aloud patterned sentences from the blackboard
- \* reads sentences from a substitution table in the textbook in a natural manner
- \* reads in chorus.

**3. The Skill of Speaking**

The student :

- \* produces the different consonant and vowel sounds, with special attention to :
  - (a) consonants : (f, v, z, θ, ð)
  - (b) vowels : (X, U, O, A)and the vowels in words such as fear, gate)
- \* makes simple statements : (be + complement) about himself/herself family, friends and familiar activities.

Note : Care should be taken to establish the listening and speaking skills before connecting spoken sounds with written letters and spoken words with written words.

**4. The Skill of Writing**

The student :

- \* copies capital and small letters (in print script) on ruled paper (in four lines)
- \* writes
  - (a) numerals 1 to 50 in figures
  - (b) numerals 1 to 20 in words
  - (c) names of the days of the weeks, the months, colours, shapes, body parts etc.
  - (d) personal and family names



- \* spells Indian personal names
- \* completes the given incomplete sentences
- \* writes simple sentences about family, school, a given picture etc.
- \* punctuation : The student uses the following marks : full-stop, question-mark, capitalization.

### **5.The Skills of Reproduction**

- \* (a) Listen and say :  
The student says after the teacher : words, short expressions, short poems
  - \* (b) Look and writes :  
The student copies from the blackboard or the book
  - \* (c) Look and say :  
The student reads or gives a word for an object
  - \* (d) Say from memory :  
The student recites from memory simple poems and songs
  - \* The student puts (nouns, adjectives) in a particular order, following a model.
- Note** Translation from and to the mother tongue should not be introduced in this standard.

### **6. The Skill of Conversation**

The student :

- \* uses greetings and other phatic expressions
- \* uses polite expressions
- \* asks and answers simple questions about self and family
- \* introduces himself/herself and others
- \* addresses others with appropriate terms of address and courtesy titles.

### **7. Miscellaneous Skills**

The student :

- \* makes use of a pictorial dictionary
- \* makes a list of words that can be made out of a given word (e.g. ant, hat, etc. out of 'elephants').

## Linguistic Items

Social manners	Hello, Good morning, Good evening, Good-afternoon, etc. How do you do ? How are you? Fine, Thank you, Thanks, Sorry, Welcome, etc.
Numerals to be taught incidentally	1 to 50
1. This/That is (name of person) Mr. Mrs. Miss.	This is Mr. Ram Bapat. This is the Mrs. Alka Bapat. This is Miss Rohini Bapat. That is Ramesh.
2. This/That is (indefinite articles) a an	This is a table. That is an elephant.
3. (Possessive Adjectives) my/your/his/her	Mandar is my freind That is your hand This is his bag That is her pen
4. I am/you are	I am Vasant. You are Nalini.
5. He/She	He is Prasad She is Nanda.
6. It (It's contracted form)	This is a book. It is my book (It's my book)
7. here/there	Sharad is here. Lata is there.
8. on/in (spatial)	My book is on this table Your pen is in his bag
9. Definite Article : the (a) unique in the situation (b) back reference (for objects previously referred to)	That is the Sun That is a book. That is a table. The book is on the table

10. Verbal questions  
(contracted form isn't)
- (a) Is it a Pencil?  
Yes, it is.  
(b) Is it a pen?  
No. It isn't.  
No. It is not.
11. Wh-questions  
What.....?  
  
Where.....?
- What is your name?  
What is this? It is a book.  
  
Where is your note-book?
12. under/over/near/between
- The cat is under the table.  
The fan is over my head.  
My house is near the bus stop.  
My school is between the hospital and bus-stand.
13. Commands
- Stand up, Sit down,  
Come here, Go there. etc.
14. Present Progressive  
(Affirmative and Negative Statements)
- SV  
SVE  
SVO  
SVOE
- I am writing.  
A bird is flying over that tree.  
Mohan is opening the door.  
Narendra is giving a duster to his teacher.
15. Present-Progressive  
(Verbal question)
- Is he singing ?  
Are you reading?
16. Present-Progressive  
Wh-questions
- What is Veena writing?  
Where is Mr. Wani sitting?
17. to/from
- Nirmala is going to the door.  
Nitin is coming from the Post Office.  
I am going from the table to the door.
18. me/you/him/her
- I am here. Chitra, come tome.  
Prakash, I am coming to you.  
Narendra is there. Naseem, go to him.  
Shalini is there, Vasant, go to her.

- |     |  |   |
|-----|--|---|
| 19. | Adjectives (Attributive and<br>Predicative use)<br>(Colour, Size, Quality)   | This is a red ribbon.<br>Archana is a beautiful girl.<br>The big box is here.<br>This box is big.<br>That ribbon is red.                                  |
| 20. | Wh-question  | What Colour is your shirt?  |
| 21. | Days of the week and months<br>of the year.<br>(today, tomorrow, yesterday.<br>Sunday to Saturday.<br>January to December) | It is Monday today.<br>Today is Monday.<br>It was Sunday yesterday.<br>Yesterday was Sunday.<br>It will be Tuesday tomorrow.<br>Tomorrow will be Tuesday. |
| 22. | Telling the time<br>(a) Full hour<br>(b) Wh-question   | It is six o'clock now.<br>What time is it?<br>(What's the time?)  |
| 23. | Plural Number of Nouns<br>these/those  | These are bats.<br>Those are balls.   |
| 24. | and  | Mr. Gaikwad and Mr. Joshi are here.   |
| 25. | have /has  | I have three pens.<br>My brother has long fingers.  |

## PART III

### Vocabulary for Standard V-VIII

With a very few exceptions only, the basic forms of the words are given. The other forms of the verbs, the derived pronominal forms, irregular plurals of nouns, agent noun forms, the forms of the cardinal and ordinal numbers other than those given here, are all to be taught; but only the simplest cognates and idiomatic collections should be used at this stage.

Addition to and subtraction from this list, up to ten percent, is permitted, provided that the changes made are in conformity with the principles underlying vocabulary selection for this stage.

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#### Keys of Abbreviations used

adj.	-adjective	prt.	- particle
adv.	-adverb and adverbial	pers.	- personal
art.	-article	pl.	- plural
anom.	-anomolous	pred.	- predicative
aux.	-auxiliary	prep.	- preposition
conj.	-conjunction	pron.	- pronoun
deg.	-degree	reflx.	- reflexive
det.	-determinative	rel.	- relative
indef.	-indefinite	sing.	- singular
interj.	-interjection	subs.	- substitute
n.	-noun	v.	- verb
part.	-participle		

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*Note* : This vocabulary contains the words for Std. V to VIII.

## A

a, an - indef. art & prep.  
able - adj.  
above - prep. & adv.  
about - prep.  
absent - adj.  
accept - v.  
across - adv. & prep.  
act - v. & n.  
actor - n.  
admission - n.  
admit - v.  
add - v.  
address - v. & n.  
advice - v. & n.  
acropplane - n.  
afraid - adj.  
after - prep. adv. & conj.  
afternoon - n.  
good afternoon - n.  
again - adv.  
against - prep.  
age - n.  
ago - adv.  
agree - v.  
ah! - interj.  
aid - n.  
air - n.  
algebra - n.  
alike - prep. adj. & adv.  
alive - pred. & adj.  
all - det.  
allow - v.  
almost - adv.  
alone - pred., adj. & adv.  
along - adv., prt. & prep.  
aloud - adj.  
already - adv.  
also - adv. & conj.  
altogether - adv.  
always - adv.  
amount - prep.  
and - conj.  
angle - n.  
animal - n.

angry - adj.  
another - det.  
answer - v. & n.  
ant - n.  
any - det.  
apple - n.  
appear - v.  
application - n.  
April - n.  
arithmetic - n.  
arm - n.  
arrow - n.  
article - n.  
around - prep. & adv.  
arrive - v.  
as - conj.  
ash - n.  
aside - adv.  
ask - v.  
asleep - adv., pred. & adj.  
ass - n.  
at - prep.  
attach - n. & v.  
attend - v.  
August - n.  
aunt - n.  
another - det.  
autumn - n.  
away - adv. & prt.  
axe - n.

## B

baby - n.  
back - n. & adv.  
bad - adj.  
bag - n.  
bake - v.  
ball - n.  
bamboo - n.  
bandage - n.  
bangle - n.  
bank - n.  
banyan tree - n.  
barber - n.

bark - n. & v.  
basket - n.  
bath - n.  
bathe - v.  
bathroom - n.  
bat - n.  
batsman - n.  
bazar - n.  
be - v. (including am, are etc.)  
beast - n.  
bee - n.  
been - p. pert.  
beak - n.  
bear - n.  
beard - n.  
beat - v. & n.  
beautiful - adj.  
because - conj.  
become - v.  
bed - n.  
bedroom - n.  
before - prep. adv. & conj.  
beg - v.  
begin - v.  
behind - prep. & adv.  
believe - v.  
bell - n.  
belong - v.  
below - adv.  
belt - n.  
beneath - prep.  
bench - n.  
bend - v.  
beside - prep.  
best - adj. & adv.  
better - adj. & adv.  
between - prep. & adv.  
beyond - prep. & adv.  
bicycle - n.  
big - adj.  
bind - v.  
bird - n.  
birth - n.  
birthday - n.  
bite - v.  
black - adj. & n.

blacksmith - n.  
blame - v.  
blanket - n.  
bless - v.  
blind - a.  
blood - n.  
blouse - n.  
blow - adj.  
board - n.  
blackboard - n.  
noticeboard - n.  
boat - n.  
body - n.  
boil - v.  
bold - adj.  
bone - n.  
book - n.  
bookseller - n.  
born - part.  
borrow - v.  
both - det. & adv.  
bottle - n.  
bottom - n.  
bow - n.  
bowl - n. & v.  
box - n.  
boast - n.  
boy - n.  
boyhood - n.  
bracket - n.  
brake - n.  
branch - n.  
brass - n.  
brave - adj.  
bread - n.  
break - v.  
breakfast - n.  
breath - n.  
brick - n.  
bright - adj.  
bridge - n.  
broad - adj.  
broom - n.  
brother - n.  
brown - adj. & n.  
brush - n.

bucket - n.  
build - v.  
bull - n.  
bullet - n.  
bullock - n.  
bunch - n.  
bundle - n.  
burn - n. & v.  
bus - n.  
bush - n.  
busy - adj.  
but - conj. & prep.  
building - n.  
bullock-cart - n.  
butter - n.  
butterfly - n.  
button - n.  
buy - v.  
by - prep. & adv.

## C

cage - n.  
cake - n.  
calendar - n.  
calf - n.  
call - n.  
camel - n.  
camp - n.  
cap - anom. v.  
candle - n.  
cap - n.  
captain - n.  
car - n.  
card/s - n.  
care - n. & v.  
carry - v.  
cart - n.  
catch - v. & n.  
cattle - n.  
ceiling - n.  
centre - n.  
chain - n.  
change - v. & n.  
chalk - n.

champion - n.  
chance - n.  
chase - v.  
chatter - n. & v.  
cheap - adj. & adv.  
check - v.  
chicken - n.  
cheer - n.  
chemistry - n.  
chest - n.  
chief - n.  
chin - n.  
child - n.  
choose - v.  
church - n.  
cinema - n.  
circle - n.  
circus - n.  
city - n.  
clap - v.  
class - n.  
clay - n.  
clean - adj. & v.  
clear - adj.  
clever - adj.  
climb - v. & n.  
check - n.  
close - v.  
cloth - n.  
clothes - n.  
cloud - n.  
clown - n.  
club - n.  
coat - n.  
cock - n.  
coconut - n.  
coffee - n.  
coin - n.  
cold - adj. & n.  
collect - v.  
college - n.  
colony - n.  
colour - n. & v.  
comb - n.  
come - v.  
compartment - n.



competition - n.  
complete - n.  
contain - v.  
continue - v.  
cook - v. & n.  
cool - adj.  
copy - v. & n.  
corner - n.  
correct - adj. & v.  
cost - n. & v.  
costly - adv.  
cot - n.  
cottage - n.  
cotton - n.  
cough - n. & v.  
count - v.  
country - n.  
courage - n.  
cousin - n.  
cover - v. & n.  
cow - n.  
cricket - n.  
crawl - v.  
cream - n.  
crew - n.  
crop - n.  
cross - v. & n.  
crowd - n. & v.  
crown - n.  
cruel - adj.  
cry - v. & n.  
cub - n.  
cup - n.  
cupboard - n.  
curds - n.  
cure - v. & n.  
curry - n.  
curtain - n.  
curve - n.  
cut - v. & n.  
cushion - n.  
cassette - n.  
cheerful - adj.  
customers - n.

## D

dairy - n.  
dam - n.  
dance - v. & n.  
danger - n.  
dark - adj. & n.  
date - n.  
daughter - n.  
day - n.  
dead - adj. & pl. n.  
deaf - adj.  
deal - v.  
dear - adj.  
death - n.  
debate - n.  
December - n.  
decide - v.  
deep - adj. & adv.  
defeat - n. & v.  
describe - v.  
desert - n.  
desk - n.  
develop - v.  
dew - n.  
dictionary - n.  
diamond - n.  
diary - n.  
dictation - n.  
die - v.  
different - adj.  
difficult - adj.  
dig - v.  
dinner - n.  
dining - room - n.  
dip - v.  
dirty - adj.  
discipline - n.  
dish - n.  
disease - n.  
dispensary - n.  
distant - adj.  
district - n.  
dive - v.  
divide - v.  
do - v.

doctor - n.  
dog - n.  
doll - n.  
donkey - n.  
door - n.  
double - adj.  
doubt - n.  
down - adv. & prep.  
downstairs - adv.  
dozen - det. & n.  
draw - v.  
drag - v.  
drama - n.  
drawer - n.  
dream - n. & v.  
dress - n. & v.  
drill - v. & n.  
drink - v. & n.  
drive - v.  
driver - n.  
drop - v. & n.  
drown - v.  
drum - n.  
dry - adj. & v.  
duck - n.  
dull - adj.  
during - prep.  
dust - n. & v.  
duster - n.  
duty - n.  
diamond - n.  
draw - v.  
drawing - n.

## E

each - det. & adv.  
eager - adj.  
eagle - n.  
ear - n.  
early - adv. & adj.  
earn - v.  
earth - n.  
earthen - adj.  
east - n.  
easy - adj.

eat - v.  
edge - n.  
effort - n.  
egg - n.  
eight - det.  
eighty - det.  
elbow - n.  
either - det.  
elder - adj.  
electronic - n.  
elephant - n.  
eleven - det.  
empty - adj. & v.  
end - n. & v.  
enemy - n.  
engine - n.  
England - n.  
English - n.  
enjoy - v.  
enough - det. & adv. of degree  
envelope - n.  
enter - v.  
equal - adj. & n.  
even - adv.  
evening - n.  
good evening - n.  
ever - adv.  
every - det.  
examine - v.  
examination - n.  
example - n.  
except - prep.  
excuse - v. & n.  
exercise - v. & n.  
expect - n.  
experiment - n.  
explain - v.  
eye - n.

## F

fade - n. & v.  
factory - n.  
fail - v.  
fair - adj.

fairly - adj.  
fall - v. & n.  
false - adj.  
family - n.  
famine - n.  
fan - n.  
famous - adj.  
far - adv. & adj.  
fare - n.  
farm - n.  
farmer - n.  
fashion - n.  
fast - adj. & adv.  
fat - adj.  
father - n.  
fault - n.  
fear - n. & v.  
feast - n. & v.  
feather - n.  
February - n.  
fee - n.  
feasible - adj.  
feet - n.  
feel - v.  
female - n.  
fence - n.  
festival - n.  
fetch - v.  
fever - n.  
few - det.  
field - n. & v.  
fielder - n.  
fielding - n.  
fifteen - det.  
fifty - det.  
fight - v. & n.  
finger - n.  
fill - v.  
film - n.  
full - adj.  
find - v.  
final - adj.  
fine - n. & v.  
finger - n.  
finish - n. & v.  
fire - n. & v.

firm - adj. & n.  
first - n. det., & adj.  
fish - n. & v.  
fit - adj.  
five - det.  
fix - v.  
flame - n.  
flag - n.  
flat - n. & adj.  
flood - n.  
floor - n.  
flour - n.  
flow - n. & v.  
flower - n.  
fly - n. & v.  
fold - n. & v.  
fellow - v.  
fond of - adj.  
food - n.  
fool - n.  
foot - n.  
football - n.  
for - prep. & conj.  
forbid - v.  
force - v.  
forehead - n.  
forest - n.  
form - n.  
foreign - adj.  
forget - v.  
fort - n.  
forty - det.  
forward/s - n.  
fountain - n.  
four - det.  
fowl - n.  
fourteen - det.  
frame - n.  
free - adj.  
fresh - adj.  
Friday - n.  
friend - n.  
frog - n.  
from - prep.  
front - n.  
fruit - n.

full - adv.  
full of - n.  
fur - n.  
furnish - v.  
furniture - n.  
future - n.  
fair - n. & adj.  
foot-print - n.

## G

gain - n. & v.  
gallery - n.  
game - n.  
garage - n.  
garden - n.  
gardener - n.  
gardening - n.  
gas - n.  
gate - n.  
gather - v.  
gentleman - n.  
geography - n.  
get - v.  
girl - n.  
give - v.  
ghost - n.  
glad - pred. & adj.  
glass - n.  
glove - n.  
go - v.  
goods - n.  
goat - n.  
God - n.  
gold - n.  
good - adj.  
good day - n.  
good morning - n.  
good afternoon - n.  
good evening - n.  
good night - n.  
good bye - n.  
goose - n.  
governor - n.  
government - n.  
grape - n.

grand - adj.  
grammar - n.  
grass - n.  
graze - v.  
great - adj.  
grain - n.  
green - adj.  
grey - n. & adj.  
grind - v.  
grind-stone - n.  
grocer - n.  
ground - n.  
group - n. & v.  
grow - v.  
growth - n.  
guess - n. & v.  
guest - n.  
gun - n.

## H

habbit - n.  
hair - n.  
half - n., det. & adv. of degree  
hall - n.  
hallow! - n. interj.  
hammer - n.  
hand - n. & v.  
handkerchief - n.  
handle - n. & v.  
handsome - adj.  
hang - v.  
happen - v.  
hard - adj. & adv.  
harm - n. & v.  
harvest - n.  
haste - n.  
hat - n.  
hate - v.  
have - aux. & v.  
hawker - n.  
hay - n.  
he - pron. & pers.  
head - n.  
headmaster - n.  
heal - v.  
health - n.

healthy - adj.  
heap - n.  
hear - v.  
heart - n.  
heavy - adj.  
help - n. & v.  
hen - n.  
her - det.  
here - adv.  
hide - v.  
high - adj., & adv.  
hill - n.  
his - det.  
history - n.  
hit - n. & v.  
hold - n. & v.  
hole - n.  
holiday/s - n.  
home - n. & adv.  
honest - adj.  
honey - n.  
hook - n.  
hope - v. & adv.  
horn - n.  
horse - n.  
hospital - n.  
hot - adj.  
hotel - n.  
hours - n.  
house - n.  
how - n.  
hundred/s - det.  
hungry - adj.  
hunt - v.  
hurry - n. & v.  
hurt - v.  
husband - n.  
hut - n.

## I

I - pers., & pron.  
ice - n.  
idea - n.  
idle - adj.

if - conj.  
ill - adj.  
imaginary - adj.  
important - adj.  
in - prep. & adj.  
inch - n.  
indeed - interj.  
India - n.  
indoors - adv.  
ink - n.  
insect - n.  
instead - adv.  
instrument - n.  
insult - n.  
iron - n.  
it - pres. & pron.  
innocent - adj.  
intelligent - adj.  
interval - n.  
invite - n.  
ivory - n.

## J

Jail - n.  
January - n.  
jar - n.  
join - v.  
joint - n.  
joke - n.  
jolly - adj.  
joy - n.  
judge - n.  
 juggler - n.  
juice - n.  
July - n.  
jump - n. & v.  
June - n.  
jungle - n.  
junior - adj.  
just - adv.  
jewel - n.

## K

kettle - n.  
keep - v.  
key - n.  
kick - n. & v.  
kill - v.  
kind - n.  
king - n.  
kingdom - n.  
kitchen - n.  
kite - n.  
kitten - n.  
knee - n.  
knife - n.  
knit - v.  
knock - n. & v.  
knot - n.  
know - v.

## L

laboratory - n.  
ladder - n.  
lady - n.  
lake - n.  
lamp - n.  
lane - n.  
language - n.  
large - adj.  
last - adj. & adv.  
late - adj. & adv.  
laugh - n. & v.  
laundry - n.  
lay - v.  
lazy - adj.  
lead - n. & v.  
leaf - n.  
learn - v.  
least - det. & adv.  
leather - n.  
leave - v.  
left - n. & adj.  
leg - n.  
lemon - v.  
lend - v.  
less - det. , adv. & prep.

lesson - n.  
let - v.  
letter - n.  
letter-box - n.  
library - n.  
lie - n. & v.  
lift - v.  
light - n., v. & adj.  
lightning - n.  
like - adj. & adv.  
Lily - n.  
line - n.  
lion - n.  
lip - n.  
liquid - n.  
list - n.  
listen - v.  
little - adv. , adj. & det.  
live - v.  
load - n.  
loaf - n.  
lock - n. & v.  
log - n.  
long - adj. & adv.  
length - n.  
look - n. & v.  
looking-glass - n.  
loose - adj.  
lorry - n.  
lose - v.  
lot - n.  
lotus - n.  
loud - adj.  
love - n. & v.  
lovely - adj.  
low - adj. & adv.  
luck - n.  
lunch - n.  
lunge - n.  
luggage - n.  
lamp-post - n.  
lier - n.  
life - n.  
loss - n.

## M

mad - adj.  
machine - n.  
madam - n.  
magazine - n.  
magic - n.  
magnet - n.  
main - adj.  
male - n.  
make - n. & v.  
man - n.  
mango - n.  
manner - n.  
manufacture - n.  
many - det.  
map - n.  
marble - n.  
match - v.  
March - n. & v.  
mark - n. & v.  
market - n.  
marry - v.  
master - n. & v.  
mat - n.  
matches - n.  
mathematics - n.  
matter/s - n. & v.  
may-anom. & v.  
May - n.  
Mayor - n.  
me - pers. & pro.  
meal - n.  
mean - v.  
means - n.  
meaning - n.  
meat - n.  
melt - v.  
medicine - n.  
meet - v.  
member - n.  
mend - v.  
merchant - n.  
message - n.  
metal - n.  
metre - n.  
method - n.  
midday - n.

middle - n.  
midnight - n.  
mile - n.  
milk - n. & v.  
mind - n. & v.  
minute - n.  
mirror - n.  
miss - v.  
Miss - title  
mistake - v. & n.  
mixture - n.  
mix - v.  
model - n.  
Monday - n.  
moment - n.  
money - n.  
money-order - n.  
monkey - n.  
month - n.  
moon - n.  
more - det., adv. & adj. of degree  
morning - n.  
mosque - n.  
most - det., adj., adv. of degree  
mother - n.  
motor-car - n.  
mountain - n.  
mouse - n.  
mouth - n.  
move - v & n.  
Mr. & Mrs. - title  
much - det., adj., & adv of degree  
mud - n.  
museum - n.  
music - n.  
must - v. & anom.  
my - pers, & adj.  
mine - pron.

## N

nail - n.  
name - n. & v.  
narrow - adj.  
nature - n.  
naughty - adj.

near - adj. & prep.  
neat - adj.  
necessary - adj.  
neck - n.  
need - aux., v. & n.  
needle - n.  
neighbour - n.  
nephew - n.  
nest - n.  
net - n.  
never - adv.  
new - adj.  
news - n.  
next - des. & adv.  
nice - adj.  
niece - n.  
night - n.  
nine - adj.  
ninety - det  
no - det. & adv. degree  
nobody - n. subs.  
nothing - n. subs.  
notice - n.  
nowhere - n. subs.  
noise - n.  
none - det.  
noon - n.  
nor - conj.  
norht - n. & adv.  
nose - n.  
not - adv.  
note-book - n.  
November - n.  
now - ad. & prt.  
number - n. & v.  
nurse - v. & n.  
nut - n.  
newspaper - n.  
non-sense - adj.

## O

obey - v.  
object - n.  
October - n.  
of - prep.

off - prep. & adv.  
office - n.  
officer - n.  
often - adv.  
oh - interj.  
oil - n.  
old - adj.  
on - prep., adv. & prt.  
once - adv.  
one - det. & n.subs. perso-pron.  
only - det. & adv.  
open - adj. & v.  
opposite - adv.  
or - conj.  
orange - n. & adj.  
order - n. & v.  
ordinary - adj.  
organ - n.  
orphan - n.  
ornament - n.  
other - det.  
our - det.  
out - adv. prt.  
outside - n. adj., adv. & prep.  
over - adv.prt. & prep.  
owe - v.  
owl - n.  
own - det. & v.  
ox - n.  
out-door - adj.

## P

page - n.  
pain - n.  
pair - n.  
paisa - n. pl. paise  
palace - n.  
pale - adj.  
palm - n.  
paper - n.  
parcel - n.  
paragraph - n.  
parden - n. & v.  
parent - n.  
park - v.



parrot - n.  
part - n. & v.  
party - n.  
pass - n. & v.  
past - adj. adv. & n.  
paste - n. & v.  
pat - n. & v.  
patient - n., v. & adj.  
path - n.  
pause - n.  
pay - v. & n.  
peace - n.  
pearl - n.  
peep - v.  
pen - n.  
pencil - n.  
penny - n.  
people - n.  
perfect - adj.  
period - n.  
permanent - adj.  
person - n.  
pet - adj.  
petal - n.  
petrol - n.  
photograph - n. & v.  
physics - n.  
picnic - n.  
pick - v.  
picture/s - n.  
piece - n.  
pig - n.  
pillar - n.  
pillow - n.  
pin - n.  
pink - adj. & n.  
pipe - n.  
pity - n. & v.  
place - n.  
plain - n. & adj.  
plan - n. & v.  
plant - n.  
plantain - n.  
plastics - n.  
plate - n.  
platform - n.

play - v. & n.  
playground - n.  
please - v.  
plenty - n. & det.  
plough - n. & v.  
plus - v.  
pocket - n.  
poem - n.  
poet - n.  
point - n. & v.  
poison - n. & v.  
policeman - n.  
police-station - n.  
pole - n.  
polish - n.  
pond - n.  
poor - adj.  
possible - adj.  
potato - n.  
post - n.  
postman - n.  
postmaster - n.  
post office - n.  
post-card - n.  
pound - n.  
pour - v.  
power - n.  
powder - v. & n.  
practice - n.  
praise - v. & n.  
pray - v.  
prayer - n.  
present - n.  
pretend - v.  
pretty - adj.  
price - n.  
priest - n.  
prince - n.  
print - v.  
prize - n.  
profit - n.  
programme - n.  
progress - n.  
promise - n. & v.  
pronounce - v.  
proud - adj.

property - n.  
pull - v.  
pump - n. & v.  
punish - v.  
pup - n.  
pupil - n.  
pure - adj.  
purple - n. & adj.  
purse - n.  
push - v. & n.  
put - v.  
palace - n.  
paint - v. & n.  
painting - n.  
pearl - n.  
philosopher - n.  
pleasure - v.  
prompt - adj.

## Q

quarrel - v & n.  
quarter - n.  
queen - n.  
question - n & v.  
quick - adj.  
quite - adv. of deg.  
quiet - adj. & n.

## R

race - n.  
radio - n.  
railway - n.  
rain - n. & v.  
rainbow - n.  
raise - v.  
rare - adj.  
rat - n.  
raw - adj.  
read - v.  
readingroom - n.  
ready - adj.  
real - adj.  
reason - n.  
record - n. & adj.

red - n. & adj.  
refuse - v.  
register - n.  
relation - n.  
remember - v.  
remove - v.  
reply - v.  
request - n. & v.  
report - n.  
reserve - n. & v.  
respect - n. & v.  
(1) rest - v. & n. repose  
(2) rest - n. remaining part  
restaurant - n.  
result - n.  
return - n. & v.  
reward - n.  
rice - n.  
rich - adj.  
ride - v. & n.  
right - adj., n. & adv.  
ring - n. & v.  
ripe - adj.  
rise - n. & v.  
risk - n.  
river - n.  
road - n.  
roar - n. & v.  
rock - n.  
roll - n.  
roof - n.  
room - n.  
rope - n.  
root - n.  
rose - n.  
rough - adj.  
round - adj., adv. & prep.  
rub - v.  
rude - v.  
rule - adj.  
run - n. & v.  
rupee - n.  
repeat - v.  
ribbon - n.  
rug - n.  
rush - v.

rust - n.

## S

sad - adj.

safe - adj. & n.

sailor - n.

saint - n.

salt - n. & adj.

salary - n.

salute - n. & v.

same - det.

sand - n.

sandals - n.

satisfy - v.

Saturday - n.

saucer - n.

save - v.

scene - n.

say - v.

scent - n.

school - n.

science - n.

scissors - n.

scout - n.

scream - v.

screen - n.

sea - n.

season - n.

seat - n.

second - det. & n.

section - n.

see - v.

seed - n.

seen - v.

self - n.

sell - v.

send - v.

sentence - n.

September - n.

serve - v.

set - v. & n.

settle - v.

seven - det.

seventeen - det.

seventy - det.

several - det.

sew - v.

shade - n.

shawdow - n.

shall - aux. & v.

shake - v.

shake-hand - n.

shape - n.

share - n. & v.

sharp - adj.

shave - v.

she - pers. pron.

sheep - n.

sheet - n.

shelf - n.

book shelf - n.

shell - n.

shine - v.

ship - n.

shirt - n.

shield - n.

shoe - n.

shop - n.

shore - n.

short - adj.

shorts - n.

shoulder - n.

should - v.

show - v.

shower - n.

shut - v.

shy - adj.

sick - adj.

side - n.

signal - n.

silent - adj.

silk - n.

silver - n.

simple - adj.

since - prep., adv. & conj.

sing - v.

single - adj.

sir - n.

sister - n.

sit - v.

six - det.

sixteen - det.  
sixty - det.  
size - n.  
skin - n. & v.  
shirt - n.  
sky - n.  
sleep - n. & v.  
slice - n.  
slip - v.  
slow - adj. & v.  
small - adj.  
smell - n. & v.  
smile - n. & v.  
smoke - n. & v.  
smooth - n. & adj.  
snake - n.  
snow - n. & v.  
so - adv. of deg., adv. of manner & conj.  
soft - adj.  
soap - n.  
sock/s - n  
sofa - N.  
soil - n.  
soldier - n  
some - det.  
sometimes - adv.  
sun - n.  
song - n.  
soon - adv.  
sorry - n & adj.  
sound - n. & v.  
sour - adj.  
south - n. & adj.  
sow - v.  
spade - n.  
speak - v.  
speed - n.  
spell - v.  
spend - v.  
spill - v.  
spoon - n.  
sport - n.  
spread - v.  
spring - n. & v.  
stage - n.  
stair case - n.

stamp - n. & v.  
standard - class - n.  
star - n.  
start - v.  
stay - v.  
state - n.  
station - n.  
steal - v.  
steam - n.  
steamer - n.  
steps - n.  
stick - n. & v.  
still - adv.  
stock - n.  
stomach - n.  
stone - n.  
story - n.  
stool - n.  
stop - n. & v.  
storm - n.  
straight - adj. & adv.  
strange - adj.  
stranger - n.  
straw - n.  
stream - n.  
street - n.  
strict - adj.  
strike - v.  
string - n.  
strong - adj.  
study - n. & v.  
student - n.  
subject - n.  
subtract - v.  
such - det.  
suddenly - adv.  
suffer - v.  
sugar - n.  
suit - n.  
summer - n.  
sun - n.  
sunshine - adj.  
Sunday - n.  
supper - n.  
sure - adj.  
surface - n.

surprise - n.  
swam - n.  
sweep - v.  
sweet/s - n. & adj.  
sweetmeat - n.  
swim - v.  
swimming - n.  
swing - n.  
sword - n.  
satisfaction - n.  
serious - adj.  
servant - n.  
shout - v.  
statue - n.  
sticker - n.  
spectacle - n.  
sum - n.

## T

table - n.  
tale - n.  
tail - n.  
tailor - n.  
take - v.  
talk - n. & v.  
tall - adj.  
tame - adj. & v.  
tank - n.  
taste - n. & v.  
tea - n.  
teach - v.  
team - n.  
tear - v.n  
tell - v.  
temple - n.  
ten - det.  
term - n.  
test - n.  
text - n.  
than - conj.  
thank - v.  
that - det.  
the - det.  
their - det.  
then - adv.

there - adv.  
therefore - conj.  
they - pers. & pron.  
thick - adj.  
thief - n.  
thin - adj.  
thing - n.  
think - v  
thirsty - adj.  
thirteen - det  
thirty - det.  
this - det.  
thorn - n.  
those - pl. det. & n. subs.  
though - adv.  
thousand - det.  
thread - n. & v.  
three - det.  
third - det.  
threat - n.  
throat - n.  
through - prep. & adv.  
throw - n. & v.  
thumb - n.  
thunder - n. & v.  
Thursday - n.  
ticket - n.  
tide - n.  
tidy - adj.  
tiger - n.  
tight - adj.  
till - prep.  
time/s - n.  
time-table - n.  
tin - n.  
tiny - adj.  
tip - n. & v.  
tired - adj.  
to - prep.  
to-day - adv.  
toe - n.  
together - adv.  
to-morrow - adv.  
tongue - n.  
too - adv.  
tooth - n.

top - n.  
touch - n. & v.  
towards - prep.  
towel - n.  
tower - n.  
town - n.  
toy - n.  
train - n. & v.  
trade - n.  
travel - n.  
tray - n.  
tree - n.  
trouble - n. & v.  
true - adj.  
trunk - n.  
try - v.  
Tuesday - n.  
turn - n. & v.  
tune - n.  
tunnel - v.  
twelve - det. & n.  
twenty - n. & det.  
twice - adv.  
two - det. & n.  
taperecorder - n.  
telegram - n.  
telephone - n.  
television - n.  
tube - n.  
tubelight - n.  
tyre - n.

## U

unite - v.  
ugly - adv.  
unless - conj.  
umbrella - n.  
umpire - n.  
uncle - n.  
under - prep.  
understand - v.  
up - adv. & prep.  
upstairs - adv.  
use - n. & v.  
used to - aux., v. & adj.

## V

valley - n.  
value - n.  
van - n.  
vase - n.  
vegetable - n.  
very - adv. & det.  
view - n.  
village - n.  
visit - n. & v.  
vanish - v.

## W

was - v.  
wait - v.  
waist - n.  
waiting room - n.  
wake - v.  
walk - n. & v.  
wall - n. & v.  
want - v.  
war - n.  
warm - adj. & v.  
wash - n. & v.  
waste - v.  
watch - n. & v.  
water - n. & v.  
wave - n. & v.  
way - n.  
we - pers. & pron.  
weak - adj.  
wealth - n.  
weapon - n.  
wear - n. & v.  
weather - n.  
wedding - n.  
Wednesday - n.  
week - n.  
welcome - n. v. & adj.  
weep - v.  
(1) well - n.  
(pit in the earth)  
(2) well - adv.

west - n. & adv.  
wet - adj.  
what - interrogative or conjunctive word  
wheat - n.  
wheel - n.  
when - interrogative or conjunctive word  
(rel. adv. & subordinative conj.)  
where - interrogative or conjunctive word  
which - interrogative or conjunctive word  
rel. pron.  
while - conj.  
whistle - adj. & n.  
who - interrogative or conjunctive word  
rel.pron.  
whole - adj.  
whose - interrogative or conjunctive word  
rel.pron.  
why - interrogative or conjunctive word prt.  
wicked - adj.  
wide - adj. & adv.  
wife - n.  
wild - adj.  
will - aux, v. & n.  
win - v.  
wind - n. & v.  
window - n.  
wing - n.  
winter - n.  
wise - adj.  
wish - n. & v.  
with - prep.  
woman - n.  
wonder - n. & v.  
wood - n.  
wool - n.  
word - n.  
work - v.  
world - n.  
worm - n.  
worry - n. & v.  
worship - v.  
wound - n. & v.  
wrist - n.  
write - v.  
wrong - n., adj., v. & adv.  
waterfall - n.

weave - v.  
without - prep.  
whisper - v.

## Y

yard - n.  
year - n.  
yellow - n. & adj.  
yes - adv. & prt.  
yesterday - adv.  
yet - adv. conj.  
you - pers. pron.  
yoke - n.  
your - det.  
young - n. & adj.  
youth - n.

## Z

zero - n.  
zoo - n.

# MATHEMATICS

## Introduction

The Central Government declared the National Policy on Education : 1986. The subject of mathematics is given an important place in the school syllabus in the plan made according to this policy. It is decided that mathematics should be a compulsory subject upto the upper primary level.

Instead of viewing mathematics as one particular subject, mathematics may be regarded as the medium to develop students' abilities for thinking, reasoning, analysis and logically correlating various things. Collection and measurement of numerical data plays an important role in each subject. Keeping this in mind, learning mathematics has to be considered with all possible contexts, without restricting it only to the surroundings of the students.

At the lower primary level students should master knowledge of numbers, numerals/symbols, knowledge of geometrical shapes, counting of currency and operations of measurement of time, length and capacity. Further, they should be able to use it in their day-to-day life.

At the upper primary level, the student should be introduced to concepts and principles in addition to this. He should assimilate business mathematics, measurements, statistics/numerical calculations, applied geometry and algebra. Some skills in the abilities of measuring, drawing figures and preparing models is also expected. Graphs and numerical data should be understood. He should be able to use tables to solve sums.

The syllabus of mathematics at the primary level should be practical. Study of arithmetic and business mathematics should be completed on the primary level. He should be acquainted with mathematical signs, international nomenclature, numbers and symbols.

### Objectives of Teaching Mathematics (Standards I to V)

1. To introduce concepts of set or collection of objects and comparison (such as smaller than/greater than) of sets.
2. To represent mathematically, numbers and their numerals as well as the order relation among them; the smaller than/greater than relation and comparison between them.
3. Elementary operations in mathematics - to correlate addition, subtraction, multiplication and division.
4. To acquire skill in accurately solving oral and written sums involving elementary operations on integers/natural numbers, vulgar fractions and decimal fractions.
5. To clarify concepts of distance, weight, time, currency, area, volume and capacity in day-to-day life.
6. To recognise properties related to shapes with the help of geometrical figures.
7. To explain fundamental concepts related to space.



## Standard I

Sr. No.	Topic	Learning outcome
1	2	3
I.	<b>Unit- Knowledge of Numbers</b> <i>Sub-unit 1 One Digit Numbers.</i>	The student is able
1.1	Sets/Collection of objects.	To form sets of available objects according to their similarity in colour, shape, use etc.
1.2	Comparing the size of sets/collections.  compare	To compare the size of sets collections according to the number of objects in them. To sets having more/fewer objects and arrange them in order accordingly.
1.3	Associating the names of numbers and the number of objects in a set for 1 to 10.	To tell the number of objects in a set by counting.
1.4	Sets containing as many objects as the name of a given number.	To form sets with one, two... ten objects as indicated from a pile of objects.
1.5	Names of numbers from 1 to 10.	To tell the names of numbers from 1 to 10 in the serial order.
1.6	Reading numerals.	To read the numerals, 1, 2, 3, 4 .. 10 written on cards, blackboards or slate.
1.7	Associating objects with the corresponding numerals and the names of numbers.	To associate the objects in a set with the numerals and the name of the number i.e given any one of the three to recognise the remaining two.
1.8	Writing numbers.	To write numbers 1, 2, 3, 4,... 10.
1.9	Introducing 10.	To recognise the relation - "greater than - by one" and to learn that the number that follows number 9 is 10. To tell numbers immediately preceding and following a given number.
1.10	Order relation among numbers.	To recognise the greater and smaller of the two given numbers. To write given numbers in ascending or descending order.

1	2	3
<i>Sub-unit 2 - Ordinal Numbers</i>	Among objects or persons arranged in a row, to recognise and tell the first, the second, the third — the ninth, the tenth object or person according to its position.	
<i>Sub-unit 3 - Concept of Zero</i>	Use of the numeral 0, for zero to indicate 'Nothing is there'.	
<i>Sub-unit 4 - Two Digit Numbers</i>		
4.1 Sets of tens and units.	From a pile of objects, to prepare sets-groups-strings each containing ten objects. To tell how many sets of tens are made and how many loose objects, less than ten in number, are left.	
4.2 Names of sets of tens.	To recognise the names of one set of tens as ten, two sets of tens as twenty, three sets of tens as thirty — ten sets of tens as hundred.	
4.3 Two-digit numbers : Sets of objects, names of numbers and numerals	Given a set of objects, to tell how many tens and units there are and to recognise and read the two-digit numeral for it. To tell accurately names, ten, eleven, twelve upto ninety-nine. To associate sets of objects in tens and units, names of numbers and numerals with each other and given any one of the three, to recognise remaining two.  To understand the relation between 99 and 100 as " the preceding number and the following number". To tell that ten tens make a hundred or a century.	
4.4 Writing of two digit numbers.	To recognise order relation for numbers upto 100. To write numbers in an ascending or descending order.	

**II. Unit Operations on Numbers**

*Sub-unit 1 - Addition of One-digit Numbers.*

1.1 Concept of addition.	To understand the meaning of the operation of addition (of two numbers) as "number of objects in a set obtained by putting together
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1	2	3
		the objects in two sets". To represent the addition of one-digit numbers (with answer upto ten) with the help of sets of objects.
1.2	Writing the addition.	To read and write the addition of one-digit numbers using numerals and signs + and = $5 + 3 = 8$ .
1.3	Commutativity of addition.	To verify that the sum of two numbers remains the same, when added in either order.
1.4	Addition tables:	$1+1, 1+2, 1+3 \dots 1 + 10$ $2+1, 2+2, 2+3 \dots 2 + 9$ $3+1, 3+2, 3+3 \dots 3 + 8$ $8+1, 8+2,$ $9+1$ To learn these addition tables by heart.
<i>Sub-unit 2'-Subtraction of One-digit Number</i>		
2.1	Concept of subtraction.	To remove some objects from a set. Given a set, to form and separate a set containing the given number of objects. To understand the meaning of subtraction as 'to compare two sets and to tell which set is larger/smaller than the other by how many objects'.
2.2	Writing the subtraction.	To demonstrate concretely subtraction of numbers upto ten by using pictures or objects and signs. To read and write subtraction of one-digit numbers using numerals and signs '-' and '=', $8-3 = 5$ .
2.3	Subtraction tables.	To learn the subtraction tables by heart. $2-1$ $3-1, 3-2$ $4-1, 4-2, 4-3$ $5-1, 5-2, 5-3, 5-4$ $10-1, 10-2, 10-3 \dots 10-9$
<i>Sub-unit 3 -Concept of Zero</i>		
3.1	Addition of zero.	To verify that when, from a given number one is subtracted repeatedly, finally the remaining is '0'. To understand that by adding '0' to a given number, you get the same number and to write it ( $5+0 = 5$ ).

- |     |                      |   |
|-----|----------------------|---|
| 1   | 2                    | 3   |
| 3.2 | Subtraction of zero. | To understand and read that after subtracting '0' from a given number, the remainder is the same number ( $5-0=5$ ).<br>To recognise that the remainder is '0' when a number is subtracted from itself ( $5-5=0$ ). |

*Sub-unit 4 - Addition of Two Numbers*

- |     |   |   |
|-----|---|---|
| 4.1 | Addition of two digit numbers without carrying. | Give two-digit numbers, to represent them in terms of sets of tens and units and to tell the sum of those numbers (without carrying) by putting these sets together.<br>To read and write addition of two multiples of ten (with total upto 100). |
| 4.2 | Vertical arrangement of addition.               | Given two two-digit numbers to read and write their addition without carrying in vertical arrangement by writing in corresponding columns of tens and units.  |
| 4.3 | Commutativity of addition.                      | To verify that the sum of two two-digit numbers is the same when added in either order.   |

*Sub-unit 5-Subtraction of Two-digit Numbers*

- |     |  |  |
|-----|--|--|
| 5.1 | Subtraction of two-digit numbers, without borrowing. | Given two two-digit numbers to represent them in sets of objects of 73 of tens and units to compare these sets, by setting up one-to-one correspondence between them and to tell the difference (without borrowing).                       |
| 5.2 | Vertical arrangement of subtraction.                 | To perform, read and write subtraction of multiples of ten. Given two two-digit numbers, to arrange their subtraction (without borrowing) vertically by writing them in columns of tens and units, and to read and write this subtraction. |

**III. Unit - Measurement**

- |   |  |
|---|--|
| Sub-unit. An informal idea about measurement. | To compare two objects and describe their relative properties less-more, smaller - larger, heavier-lighter, near-far, shorter-longer, which even takes place before-after, earlier-later than the other event. |
|---|--|

**IV. Unit Application**

Sub-unit. Practical verbal sums on addition of one-digit numbers.

Given verbal sums on addition of one digit numbers involving objects, persons or animals around to arrange sums using numerals and to tell the answer orally by performing the addition.

*Sub-unit - 2 Practical verbal sums on subtraction of one digit numbers.*

Given verbal sums on subtraction of one digit numbers involving objects, persons, animals around, arrange the sums using numerals and to tell the answer orally by performing the subtraction.

**Unit-Geometry**

Informal introduction to spatial properties.

To observe objects and to recognise longer-shorter, smaller-bigger, behind in-front of, inside-outside of and other properties relating to their position and shape.

**Standard II****I. Unit Knowledge of Numbers**

The student is able to

*Sub-unit -1 Three Digit Numbers*

**1.1 Concept of hundreds, tens and units.**

Using locally available objects such as sticks, pieces of paper, leaves, beads etc. to make sets of tens, and to make a set of hundreds from ten such sets of tens. In this manner, to separate given objects into sets of hundreds-tens-units and to write a three-digit number in numerals accordingly.

**1.2 Reading and writing of three-digit numbers.**

To tell how many hundreds, how many tens and how many units are there in a three-digit number. To read and write in words three-digit numbers. To represent a given three-digit number using visual aids such as those listed below.

A square sheet with one hundred smaller squares/houses ruled on it for one hundreds, a column of ten squares/houses for tens and loose small squares for units.

To correlate sets of hundreds, tens, units, objects with the name of the corresponding number and with the numeral denoting it. To indicate the other two when any one of these three is given.

		To recognise that 'ten hundreds make one thousands' and '1000 is the number following 999'.
1.3	Three-digit numbers expanded and regular form .	To write a three-digit number in its expanded form as : $326 = 300+20+6$ . To rewrite the expanded form as a three-digit number (in a regular manner). To tell the place value of digits in a three-digit number.
1.4	Counting by steps.	To count numbers in steps of 2, 3, 4, 5, 10, 100. To write numbers in the ascending and descending order.
	<i>Sub-unit 2 -Ordinal Numbers</i>	To tell the serial number of objects in a row such as first, second, nineteenth, twentieth.
	<i>Sub-Unit 3 -Fractions.</i>	To fold symmetrical pieces of paper such as a rectangle square, circle, etc. and to recognise it 'half', or 'quarter' part.
3.1	Learning whole, one half and one quarter with the help of diagrams.	
3.2	Informal learning of half/quarter of a number.	By dividing a set of objects into two/four parts, to tell how many constitute its 'half', 'quarter' part.
<b>II.</b>	<b>Unit Operations on Numbers</b>	
	<i>Sub-unit 1 -Addition of one-digit Numbers.</i>	
1.	Addition stories of numbers.	To verify with the help of visual aids such as blocks, strips and squares, that any of the numbers upto 10 can be rewritten as the sum/ addition of two numbers e.g. the number 6 as $1+5, 2+4, 3+3, 4+2, 5+1, 6+0$ .
1.2	Addition tables.	To learn by heart addition tables for one-digit numbers upto $9+9 = 18$ .
1.3	Addition in columns.	Given three or more one-digit numbers, to arrange them in a column vertically and to add them from bottom to top or from top to bottom.
	<i>Sub-unit 2 - Addition of numbers with at the most three digits, without carrying.</i>	
2.1	Addition of multiples of hundred.	Given two multiples of a hundred, to tell their

- sum orally. Given more than two multiples of hundred, to write them one below the other in a column and add them orally.
- 2.2 Arrangement of addition with the help of objects. Given two, three-digit numbers, to arrange them in sets of hundreds-tens-units. To put the respective sets together for addition without carrying and to tell how many hundreds, tens and units constitute the total.
- 2.3 Addition without carrying : Vertical arrangement. To write two three-digit numbers one below the other in columns of hundreds-tens-units and to write the answer by adding the columns for sums of addition without carrying. To write more than two, three-digit numbers one below the other, into columns of hundreds-tens-units and to write the answer by adding the columns in sums of addition without carrying. Given two or more one-digit, two-digit and three-digit numbers, to perform addition without carrying by appropriately arranging them in columns of hundreds-tens-units.
- Sub-unit 3 - Addition of numbers, containing upto three digits involving carrying.*
- 3.1 Understanding addition of two-digit numbers with carrying, using sets of objects. Given two two-digit numbers, to represent them into sets of tens and loose objects. To put together the respective sets of objects for sums of addition involving carrying, to form a set of tens from the loose objects (units) and to transfer or carry this tens to the set of tens. To tell the answer as so many tens and so many units.
- 3.2 Reading and writing : Addition of two-digit numbers involving carrying. To add two two-digit numbers with carrying by arranging in vertical columns. To read and write the addition.
- 3.3 Understanding addition of two three-digit numbers using sets of objects. To represent two three-digit numbers into sets of hundreds, tens and units (loose objects). Putting together sets of hundreds, tens and units, to form a set of tens from the units (loose objects) and carry or transfer it to the tens, and then to form a set of hundreds out of the tens

- 3.4 Reading and writing of addition of three-digit numbers with carrying.

and to carry or transfer it to the hundreds. After this rearrangement, to tell the answer as so many hundreds, so many tens and so many units.

To write two three-digit numbers in columns of hundreds - ten-units and carry out the addition involving carrying.

(1) Carrying only the units

(2) Carrying only tens

(3) Carrying both units and tens, with their sum being a three-digit number. To solve the sum, to read and write it. To add more than two three-digit numbers with carrying by writing them in columns of hundreds-tens-units. Given several one-digit, two-digit and three digit numbers, to add them with carrying in vertical arrangement.

*Sub-unit 4 -Subtraction of Three-Digit Numbers Without Borrowing.*

- 4.1 Understanding subtraction of two three-digit numbers without borrowing by using sets of objects.

Given two three-digit numbers, to arrange them one below the other in the form of sets of objects in hundreds-tens-units. To find the remainder of a subtraction without borrowing by one for one method (by removing one set from the sets of hundreds-tens-units corresponding to the original number for each set from the respective sets corresponding to the number to be subtracted).

- 4.2 Reading and writing of subtraction in vertical arrangement.

To perform subtraction of two three-digit numbers without borrowing by writing them one below the other in columns of hundreds-tens-units. To read and write the subtraction.

*Sub-unit 5 - Subtraction of Numbers Containing upto Three-digits with Borrowing.*

- 5.1 To solve subtraction of two-digit numbers of representing them as sets of objects.

To arrange the given two-digit numbers one below the other, representing them as sets of objects of tens and units. The 'units' in the original number are less than the units in the number to be subtracted. Therefore, to rearrange the sum by borrowing 10 units from the tens of the original number and then to carry out the subtraction by the one for one



		method (removing as many sets from the original number as are in the number to be subtracted).
		Therefore, to re-arrange the sum by borrowing 10 units from the tens of the original number and then to carry out the subtraction by the one for one method (removing as many sets from the original number as are in the number to be subtracted).
5.2	To solve a sum on subtraction, representing it vertically/in columns.	To write two-digit numbers, one below the other in columns. To borrow one tens from the tens in the original number and add it to the units. To solve the sum on subtraction with borrowing. To read and write it.
5.3	To represent a subtraction involving three-digit numbers, in the form of sets of objects and to solve it.	To represent two, three-digit numbers as sets of objects of hundreds-tens-units. If the digits in the units' and tens' places of the original number one smaller than those in the number to be subtracted, to rearrange the sum by borrowing one digit from the next column on the left hand side and then to solve the sum by using the one for one method of subtraction and to tell the answer.
5.4	Reading and writing of subtraction with borrowing.	To arrange two three-digit numbers one below the other in columns of hundreds-tens-units. To solve, read and write sums of subtraction involving borrowing of types such as only the digit in the units place of original number is smaller than that in the number to be subtracted (by borrowing one tens from a set of tens of the original number and put together with the sets of tens of the original number and put together with the sets of units). To borrow 10 tens from a set of hundreds to perform subtraction where only tens place in original number is smaller than that in the number to be subtracted. To solve sums which need borrowing in both places; tens and units. To solve sums in which the original number has 0 in units place, tens place or both these places and need to borrow one from the next set, on

the left- hand side. To solve sums of subtraction of two-digit and one-digit numbers from a three-digit number.

*Sub-unit 6 - Properties of Operations of Addition and Subtraction.*

- |             |  |  |             |             |             |             |
|-------------|--|--|-------------|-------------|-------------|-------------|
| 6.1         | Commutative property of addition .               | To verify that two numbers, added in either order, give the same sum.  |             |             |             |             |
| 6.2         | Associative property of addition.                | To verify that adding the numbers in a column either from top to bottom or from bottom to top, given the same sum total.   |             |             |             |             |
| 6.3         | Addition and subtraction are inverse operations. | <p>To understand that subtraction is an inverse operation of addition and for a given addition to write an inverse operation of subtraction such as :</p> <table border="0" style="margin-left: 20px;"> <tr> <td><math>4 + 3 = 7</math></td> <td style="padding-left: 100px;"><math>7 - 3 = 4</math></td> </tr> <tr> <td><math>3 + 4 = 7</math></td> <td style="padding-left: 100px;"><math>7 - 4 = 3</math></td> </tr> </table> | $4 + 3 = 7$ | $7 - 3 = 4$ | $3 + 4 = 7$ | $7 - 4 = 3$ |
| $4 + 3 = 7$ | $7 - 3 = 4$                                      |  |             |             |             |             |
| $3 + 4 = 7$ | $7 - 4 = 3$                                      |  |             |             |             |             |

*Sub-unit 7 -Multiplication by One Digit Number*

- |     |   |   |
|-----|---|---|
| 7.1 | Concept of multiplication.  | To understand the meaning of multiplication as to put together sets, each containing the same number of objects and to tell how many objects there are altogether. To grasp that multiplication means a condensed operation of repeated addition. |
| 7.2 | Reading and writing multiplication.                               | To write multiplication by using sign of multiplication 'X' and '='. To interpret $3 \times 4$ in two ways as " four times three".  |
| 7.3 | Multiplication tables upto 10.                                    | To prepare multiplication tables from 1 to 10 and to learn the multiplication tables by heart.  |
| 7.4 | Multiplying two-digit number by a one-digit number with carrying. | To multiply any two-digit number by a one-digit number and 10 (with carrying).  |
| 7.5 | Commutative property of multiplication.                           | To verify that two numbers, multiplied in either order, give the same product.  |
| 7.6 | Multiplicative property of one and zero.                          | Any number multiplied by one gives the same   |

1	2	3
		number. Any number multiplied by zero gives zero. (Product of any number and zero is zero.)
7.7	Property of multiplication by ten	To understand the rule that to multiply by ten means to write the number followed by zero.
<b>III.</b>	<b>Unit - Measurement</b>	
	<i>Sub-unit 1 -Rupees, paise, amounts.</i>	
1.1	Introduction to currency	To recognise the coins and notes in Indian currency.
1.2	Conversion	To tell relation between rupees and paise, to recognise relations between notes and coins of various denominations, to write amounts in rupees and paise using a point.
1.3	Addition and subtraction	To add and subtract amounts in the same unit - either rupees or paise. To perform addition involving rupees and paise adding upto 99. To solve verbal sums orally.
	<i>Sub - unit 2 -Telling the time</i>	
2.1	Days	To tell the names of the days in a week.
2.2	Days and months	To tell the names of months in the Gregarian and Indian calendar.
2.3	Interrelation between days-weeks-months-year	To tell the relation between days in a week, days and weeks in a month and months in a year.
	<i>Sub-Unit 3 : Measuring length, weight and liquid</i>	
3.1	Improved units and measuring instruments	To prepare and use instruments from available material for measuring length, weight and liquids.
3.2	Standard Units	To give reasons regarding the necessity of standard units for measuring length, weight and liquids.

*Sub-Unit 1 : Verbal sums on addition and subtraction*

To present mathematically verbal sums on addition and subtraction involving numbers upto three digits and to solve them.

*Sub-unit 2 -Practical verbal on multiplication*

To present mathematically verbal sums on multiplication by one digit numbers and to solve them.

**V. Unit - Algebra**

Informal use of letters in place of numbers

To use a blank square or a letter in the place of an answer to be found in problems of addition, subtraction, multiplication.

$$7 - 4 = \square$$

$$3 + 4 = \square$$

To write a letter in place of a number on the number-line and to find the value of that letter. To name objects in a row by letters and tell their ordinal number.

**VI. Unit - Geometry**

Introduction to geometric shapes

To recognise and name shapes, such as cubes, bricks, cylinders, canes, and spheres. To tell more examples of these shapes. To name shapes/ figures such as a line, a point, a rectangle, a square, a triangle and a circle.

**Standard III**

1	2	3
<b>I. Unit-knowledge of numbers</b>		
<i>Sub-unit 1 -Four-digit numbers</i>		The student is able to
1.1 Concept of four-digit numbers		To group objects into sets of units, tens, hundreds and thousands. Ten hundreds make a thousand. Arrange these numbers using the marked cards to indicate thousands, hundreds, tens and units.
1.2 Reading and writing four digit numbers		To read, to write four digit numbers in words and numerals. To recognise a four digit number in the form how many thousands, how many hundreds, how many tens and how many units. To understand the concept that 'ten thousands means putting together ten sets of thousands', and also that 'it is the number following 9,999'.

1	2	3
1.3	Place value	To tell the place value of digits in a four digit number. To write the four digit number as an expansion into a sum of multiples of ten and vice-versa.
1.4	Order relation	To arrange the given numbers in ascending or descending order.
	<i>Sub-unit 2 -Fractions</i>	
2.1	Concept of fractions	To grasp the concept of fractions as : 'to divide an object into equal/identical parts and to take some parts out of them'. To understand the practical correspondence.
2.2	Reading and writing of fractions	To read a (Proper) fraction with a one digit number in both the numerator and denominator, e.g. to read $\left(\frac{5}{7}\right)$ as five upon seven. Given a fraction, to tell its meaning by recognising its numerator and denominator, and to read and write it. To correlate the following three things : shaded part of a diagram, name of a fraction and its written representation with a numerator and denominator.
<b>II. Unit-operations on numbers</b>		
	<i>Sub-unit 1 -Addition</i>	
		To add four digit numbers with answers in four digits
	<i>Sub-unit 2 : Subtraction</i>	
		To solve sums on subtraction of four digit numbers
	<i>Sub-unit 3 : multiplication</i>	
		To multiply a three digit number by a two digit number. To prepare multiplication tables of numbers upto 20 and those of 25 and 30.
	<i>Sub-unit 4 -Addition and subtraction of fractions</i>	
		Addition and subtraction of fractions with a common denominator (with a proper fraction as an answer).
	<i>Sub-unit 5 -Division</i>	
5.1	Concept of division	To understand the meaning of division as 'to divide a given set of objects into equal/

1	2	3
		identical parts and to remove the same number of objects repeatedly from the set', through handling objects.
5.2	Reading and writing of division	To read and write the division by using the signs — and =. To tell the meaning of '12 ÷ 3' in two ways as : 'If you divide a set of twelve objects into three equal parts, how many objects will there be in each part?' and 'out of twelve objects, if we make identical parts each containing three digits, how many parts will there be?'
5.3	Division - an inverse operation of multiplication	To understand that division is an inverse operation of multiplication and to write sentences connecting multiplication and division such as, $3 \times 5 = 15$ $15 \div 5 = 3$ $5 \times 3 = 15$ $15 \div 3 = 5$
5.4	Division of a three-digit number by a one-digit number (with remainder zero)	To solve sums of division by using multiplication tables. To divide two or three digit numbers by a single digit number.
5.5	Properties of division	Any number divided by one gives the same number. Any number divided by itself gives division equal to one. Zero divided by any number gives division equal to zero. Division by zero is not possible.
<b>III.</b>	<b>Unit-measurement</b>	
	<i>Sub-unit 1 -Rupees, paise</i>	To solve sums on addition and subtraction involving units rupees and paise, based on the relation 100 paise = one rupee (using a point for the writing of rupees and paise).
	<i>Sub-unit 2 : Length, weight, measuring liquid, time</i>	Introduction to units for measuring length, weight, liquid, time (c.m. metre, kilometer, gram, kilogram, quintal, litre, seconds, minutes) in day to day use.
	<i>Sub-unit 3 : Addition and subtraction of units</i>	To solve sums involving addition and subtraction of measures of length, weight,

1	2	3
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*Sub-unit 4 : Telling time by a clock*

liquid and time, given in the same units.

Observing a clock, to tell how many minutes are past what hour (minutes to be multiples of 5 minutes).

**IV. Unit-Application**

*Sub-unit 1 - Verbal sums involving addition, subtraction, multiplication and division*

Setting up verbal sums on addition, subtraction and multiplication mathematically and to solve them. To solve verbal sums involving addition and subtraction based on relation between rupees and paise. To solve verbal sums involving division by a one-digit divisor. To solve verbal sums involving decimal units used in day-to-day life.

**V. Unit - Algebra**

*Sub-unit 1 : Informal use of a letter in place of a number*

To solve simple straight forward oral sums such as to find a number to fill in a blank, or to substitute a letter in three terms of a given mathematical statement of addition, subtraction and multiplication.

**VI. Unit-Geometry**

*Sub-unit 1 -Segment*

1.1 Segment

Using a ruler and folded paper, to draw a segment of given length.

1.2 Segment and measuring distance

To measure in centimetres the length of a given segment, sides and width of an object, distance between two objects by using a ruler or a measuring tape.

1.3 Classification of figures

To classify different figures by finding similarities between them.

1.4 Planer figure

To recognise and name figures like angle, square, rectangle, triangle and circle.

**Standard IV**

1	2	3
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**I. Unit-knowledge of numbers**

*Sub-unit 1 : Numbers upto ten lakhs (a million)*

The student is able to

1	2	3
1.1	Reading and writing of numbers	To read, write in numerals and in words six and seven digits numbers after learning that ten sets of ten thousands make a lakh and ten lakhs make a million.
1.2	Place value	To recognise the place value of digits in a large number. To write numbers in the ascending and descending order. To collect information involving large numbers relating to population, national income, expenditure, employment guarantee scheme etc. being published in newspapers, magazines, news, etc.
	<i>Sub-unit 2 - Roman number system</i>	To write numbers from 1 to 30 using roman numbers, roman numerals. Given numbers in roman numerals to write them using international numerals.
	<i>Sub-unit 3 -Fractions</i>	
3.1	Mixed numbers, proper and improper fractions	To recognise proper and improper fractions, conversion of improper fractions into mixed number and vice-versa.
3.2	Equality of fractions	To verify that the same fractions can be represented in the form of various fractions having the same value.
3.3	Decimal fractions	Conversion of fractions having denominators 10,100, 1000 ... into decimal fractions.
<b>II.</b>	<b>Unit-Operations on numbers</b>	
	<i>Sub-unit 1 : Multiplication</i>	To multiply a four digit number by a three digit number with product upto ten lakhs.
	<i>Sub-unit 2 : Division</i>	To perform division with a remainder of a five digit dividend by a two digit divisor.
	<i>Sub-unit 3 : Divisibility</i>	
3.1	Multiple divisor	To recognise relation of multiple and divisor between numbers. To tell factors of numbers.
3.2	Even and odd numbers	To recognise even and odd numbers.



1	2	3
3.3	Tests for divisibility	To recognise whether a given number is a multiple of 2 or 3 or 5 or 9 or 10 by using certain tests.
	<i>Sub-unit 4 : Addition and subtraction of fractions</i>	To solve sums of addition and subtraction of fractions with a common denominator.
III.	<b>Unit-Measurement</b>	
	<i>Sub-unit 1 -Units of measuring distance, weight and liquid.</i>	<p>10 m.m = 1 cm  100 c.m. = 1 Metre  1000 metres = 1 KM  1 Kilogram = 1000 grams  1 litre = 1000 milliliters</p> <p>To recognise the relation between units and convert these into each other. To write the measures using the decimal notation.</p>
	<i>Sub-unit 2 -Units of time</i>	<p>1 day = 24 hours  1 hour = 60 minutes  1 minute = 60 seconds</p> <p>Using this formula convert units of time into each other. To use the calendar to note event. To tell the date and the corresponding day from the calendar.</p>
IV.	<b>Unit Application</b>	
	<i>Sub-unit 1 : Verbal sums based on addition, subtraction, multiplication and division of large numbers</i>	To solve verbal sums based on day-to-day life involving addition, subtraction, multiplication and division containing numbers (upto three digit numbers).
	<i>Sub-unit 2 : Addition and subtraction of fractions</i>	To solve sums on addition and subtraction of fractions with a common denominator.
	<i>Sub-unit 3 : Various units</i>	To solve verbal sums on decimal system and on units of time. To solve verbal sums on perimeter of figures.
V.	<b>Unit-Algebra</b>	
	<i>Sub-unit 1 : Informal introduction to algebraic equation</i>	To solve orally for X from equations such as, $X + 3 = 7$ , $X - 6 = 9$ , $4 X = 24$ .
VI.	<b>Unit-Geometry</b>	
	<i>Sub-unit 1 : Perimeter</i>	Understanding that perimeter means the sum of lengths of all sides of a closed figure/ diagram, to solve sums on perimeter of square rectangles and triangles.

1	2	3
	<i>Sub-unit 2 : Circle</i>	To draw a circle of a given radius using a compass. Given an angle to draw an angle equal to it, using a compass and a ruler.

### Standard V

1	2	3
I.	<b>Unit-knowledge of numbers</b> <i>Sub-unit 1 : Natural numbers/Integers</i>	The student is able to.
1.1	Numbers upto crore	To recognise and read numbers upto a crore , and to write them in numerals and words. To tell the place value of digits, ascending and descending order of large numbers.
II.	<b>Unit-operations on numbers</b> <i>Sub-unit 1 : Fundamental Operations on integers (Natural numbers)</i>	To solve sums on addition, subtraction, multiplication and division involving numbers upto crore.
	<i>Sub-unit 2 : Divisibility</i>	
2.1	Prime numbers, composite numbers	To tell concepts of multiples, common multiples, the least common multiple of given numbers.
2.2	Writing number into product of prime factors	To find divisors, common divisors, (factors) and the highest common factor (the greatest common divisor) of given numbers.
2.3	Least common multiple	Prime numbers, composite numbers, to write a given number as a product of prime numbers.
2.4	Highest common factor	To find L.C.M. and H.C.M. by the method of factorisation. To tell the relation of L.C.M. and H.C.F. of two numbers with their product.
	<i>Sub-unit 3 : Fractions</i>	
3.1	Addition, Subtraction	To use the L.C.M. for addition and subtraction of fractions with distinct denominators.
3.2	Multiplication	To multiply a fraction by an integer and by another fraction. The fraction in its lowest terms (reduced form).

1	2	3
3.3	Division	To divide a fraction by a non-zero integer and by another fraction.
	<i>Sub-Unit 4 : Decimal fractions</i>	
4.1	Multiplication by multiples of 10	To multiply a decimal fraction by 10, 100, 1000.
4.2	Multiplication by an integer or a fraction	To multiply a decimal fraction by a decimal or by another decimal fraction.
4.3	Division by multiples of 10	To divide a decimal fraction by a non-zero decimal or by another decimal fraction. Recurring decimal fractions.
	<i>Sub-unit 5 : Percentage</i>	To compare two numbers
5.1	Concept	To tell that 'percentage is a comparison' and to explain the need for it. To tell the sign used to indicate percentage and to write it.
5.2	Finding percentage	To find how much percentage a number is of the given number. To find the given percentage value of a number.
<b>III.</b>	<b>Unit- Measurement</b>	
	<i>Sub-unit 1 : Decimal units</i>	Introduction to decimal units in practice, their conversion rules. Introduction to measured property, measuring instrument and measuring unit and practice in handling these in day-to-day life.
	<i>Sub-Unit 2 : Temperature</i>	Celsius unit of temperature. Fahrenheit unit. Demonstration of measuring body temperature with a clinical thermometer.
<b>IV.</b>	<b>Unit-Application</b>	
	<i>Sub-unit 1 : Sums involving operations on integers</i>	To set up mathematically and solve verbal sums on the four basic operations involving large numbers.
	<i>Sub-Unit 2 : Divisibility</i>	To solve verbal sums on L.C.M. and H.C.F.
	<i>Sub-unit 3 : Decimal fractions</i>	To solve verbal sums involving decimal fractions based on the four basic fundamental operations.

*Sub-unit 4 : Unitary method*

To solve sums by finding the price of one object from the price of several objects using division, and finding the price of several objects from the price of each object using multiplication (In short, solve the sums using the unitary method).

*Sub-unit 5 : Interest*

To recognise the meaning of the words principal, period, percentage, rate, interest, amount. To find the interest when the principal period and rate are given.

*Sub-unit 6 : Time, distance, speed*

To recognise the multiple multiplier- product and dividend-divisor-division relation amongst time distance-speed. To solve sums based on it.

*Sub-units 7 : Reading a time table*

To tell by looking at a railway or bus time-table when would a given train/bus reach which place. To read and prepare charts/time tables for various types of information.

*Sub-unit 8 : Area*

To solve verbal sums related to area and rate price.

*Sub-unit 9 : Day -to -day life mathematics*

To solve verbal sums based in day-to-day life and prices of involving bills, receipts, post-cards, inland letters, moneyorders, telegrams, etc. To solve verbal sums based on railway or bus fares.

**V. Unit : Algebra***Sub-unit 1 : Use of letters in the place of numbers*

To use letters to name numbers. To write general rules for addition, subtraction, multiplication etc. of fractions by using letters.

*Sub-unit 2 : Using a letter as a variable in a formula.*

To write the formulae for finding percentage, interest, area or perimeters using letters.

*Sub-unit 3 : To find the answer using simple equations*

To use a letter for the term to be evaluated in a sum based on unitary method, and to solve the sum by informal use of equation,

**VI. Unit-Geometry**

*Sub-unit 1 : (a) Measurement of angle*

To draw an angle of a given measure using a protractor.

*Sub-unit 2 : (b) Right angle*

To recognise the right angle. To draw right angle with a set square.

*Sub-unit 3 : Drawing a square and a rectangle.*

To draw a square and a rectangle using a set-square and ruler.

*Sub-unit 4 : Area*

To understand that the concept of area means the amount of place surrounded by a closed figure. To recognise the unit of area to be square centimetres. To find a formula for the area of a rectangle and a square.

*Sub-unit 5 : Use of compass and ruler*

To draw a circle with a compass. To draw a hexagon and an equilateral triangle using compass to draw perpendicular bisector of a given segment and to bisect an angle.

# SCIENCE

## Introduction

In the present social dynamic life and in view of the future social, economic, educational and other problems which the student of today and citizen of tomorrow is likely to face, it is imperative that Science should form an integral part of general education. In order to meet his needs of tomorrow, the field of Science should be looked upon as the part and parcel of general education to be imparted to him. It has become very essential to look upon the Science Education from a new angle because of the internal and external impact of Science and the technology based upon the principles of Science.

Since Science education is the integral part of general education it should help to fulfil the objectives of general education. An individual collects data from various sources. The data so collected has to be sorted out carefully and examined and accepted only after meticulous scrutiny, evaluating the utility or otherwise. It is necessary for the democratic life accepted by us.

The ten core elements envisaged in the National Policy of Education include protection of environment and inculcation of Scientific attitude. These are directly related with Science education. But the other core elements such as equality of sex, hinderances in social progress, universal equality and concept of secularism need the teaching of Science education from a new point of view and this is the need and demand of the time.

The child begins it's life in a particular environment. This environment can be used for early education of the child. Taking into account the strong influence of the environment, teaching of Science at the lower primary stage need not be done as an independent subject. Instead the child may be introduced to the environment through the keen observation which will supplement his education at lower primary stage the principles of the subject. Science, History, Geography etc. are not to be taught in isolation but these should be taught simply as introduction to life. These principles are spread over in the study of the environment. Of these, the principles of Science can be systematically taught in Stds. III and IV. In these standards the emphasis should be on correlated study only. Environment should form the basis of this education. But in the upper primary stage these principles are to be taught in organised and correlated method. The child will thus realise the principles acquired incidentally and in scattered manner now form an important part of the subject. The student will realise the inter-relation between the physical, chemical and biological principles and connection of these principles with nature and individual daily life.

Every subject has it's own characteristics. The symbols, signs and formulae are speciality of Science and Mathematics. Science also involves chemical formulae. The important feature of Science is that everything is proven and verified by experiment. Science does not take things for granted. It accepts only the truth testified by experiments. The progress of Science is developed through this attitude only. The Science education presumes experimental skills in the students.

Science should be taught as an integrated subject instead of dividing it into Physics, Chemistry, Biology etc. But while doing so the individuality of the branches of Science should be maintained.

The concepts of Science and the experiments based on them have some processes. Some of them are free and some are bound. Therefore the processes should be used with discretion.

While teaching Science the main problem is that of terminology. The language Directorate of this State has prepared uniform terminology for Science subject. This uniform terminology has been used here for teaching of Science. A new word may be found difficult or clumsy being unusual. The authors while writing the text books and the teachers while teaching should elaborate words in detail.

There is no reason to believe that there is difference in the intelligence between rural and urban students. However, the experiences of these rural and urban students are different. The authors and the teachers should use these differences of experiences skilfully while explaining the subject. Various activities should be taken up by the Science club.

Every school must have a Science Laboratory. The word "Laboratory" need not puzzle. Since we are using environment as medium for curiosity and observation, a small museum type laboratory is sufficient.

The framers of the Science syllabus expect that the content of the Science syllabus should be more and more transmitted through the text-books and teaching. For this the hand books for the teachers should be published with the text books or before that.

It is felt essential that there should be a handbook for experiments to be demonstrated by the teachers in the class and discussions thereof and the activities to be undertaken by the students in and outside the classroom.

It is a misunderstanding that the study of Science is dry. In order to make the subject interesting at lower primary level, use of word competitions, phrase competition as in languages will be supplementary. An imaginative and conscientious teacher can do it.

### **OBJECTIVES OF TEACHING LEARNING SCIENCE**

The objectives of teaching-learning Science at lower primary level and upper primary level are given below.

#### **Primary Level - (Standards III to V)**

- i) To get acquainted through observation with one's own house, school, environment, physical surroundings, plant and animal life, clothing, local professions, means of transport and the sky.
- ii) To distinguish between the living and the non-living.
- iii) To collect data in respect of physical element and incidents to classify and deduce conclusions from them.

iv) To inculcate healthy habits.

v) To inculcate curiosity about the environment and happenings in the environment.

vi) To perform simple experiments.

## Environmental Study 2 SCIENCE Standard III

Sr. No.	Topic	Learning Outcome
1	2	3

### Unit —1:

### LIVING WORLD

**Sub-Unit 1** Living and non-living things surround us.

Can identify between living and non-living things.

Can tell that plants cannot change their place.

1.1 Plants and animals are living things.

1.2 Man made objects and some natural objects are non-living.

Can tell man made objects and some natural objects which are non-living and quote examples of these.

1.3 Living beings have special characteristics. Can classify living and non-living on the basis of easily recognised characters. Can tell that plants and animals make movements, and living gives birth to living and that the living beings die.

**Sub - Unit 2** Plants and animals have different parts.

2.1 Root is the part of a plant under the soil. Can identify different parts of a plant.

2.2 Stem, leaves, flowers and fruits are the parts of plants above the soil. Can tell the parts of a flowering plant.

2.3 Different parts of flowering plants are almost similar.

2.4 Most animals have a head, neck, chest, stomach and legs. Can tell different parts of an animal

**Sub-Unit 3** Animals eat food in different ways and make movements in different ways.

3.1 Some animals swallow food without chewing. Can tell and quote some animals examples of which swallow food without chewing



- |     |  |   |
|-----|--|---|
| 3.2 | Some animals tear their food, chew and then swallow it.  | Can tell that kite, crow and vulture tear flesh and swallow.    |
| 3.3 | Some animals eat pieces of food and then ruminates.  | Can tell the names of ruminants.                                |
| 3.4 | Some animals live on liquid food.  | Can tell the names of the animals who live on liquid food.      |
| 3.5 | Some animals can run, some crawl, whereas the birds and insects can fly and some animals can swim. | Can tell the names of the animals who run, crawl, fly and swim. |

**Sub-Unit 4**      Some animals build nests/make shelter for themselves.

- |     |   |  |
|-----|---|--|
| 4.1 | Many animals depend upon natural shelter.                           | Can tell the shelter of monkey, wildcow, deer etc.   |
| 4.2 | Birds build their nests on the trees or other safe places.          | Can tell the names of the birds who build nests on the tree.<br>Can identify nests of different birds. |
| 4.3 | Some animals dig holes in the ground to live in.                    | Can list the animals who live in the holes in the ground.  |
| 4.4 | Some animals establish colonies e.g. honeybee, ants and white ants. | Can tell the names of the animals who establish colonies and live unitedly.                            |

**UNIT-2 : HUMAN BODY, NUTRITION AND HEALTH**

**Sub-Unit 1**      Human body has different parts as seen externally.

- |     |  |   |
|-----|--|---|
| 1.1 | Head, chest, trunk and hands and legs are different parts of a human body                                | Can tell different parts of a human body as chest, stomach, head, trunk and limbs.          |
| 1.2 | Organs are made of different parts (e.g. Arm is made up of upper arm, forearm, wrist, palm and fingers). | Can tell that different organs are made up of different parts and name the different parts. |
| 1.3 | Eyes, ears, nose, tongue and skin are sensory organs.  | Can tell that eyes, ears, nose, tongue and skin are sensory organs.                         |

**Sub-Unit 2** Different external parts of the body have different functions.

2.1 The sensory organs help us to see, hear, taste, smell and feel the touch.

Can tell the functions of the sensory organs.

2.2 Limbs help us to do many works.

Can tell that limbs help to work. Can tell specific work of each organ.

**Sub-Unit 3** All human beings have same body parts but still each one of us is different from the other.

3.1 Though every human body has the same parts, every individual is different from the other.

Can tell that parts of human body are similar but there is difference in each individual.

**Sub-Unit 4** Food consists of different components which have specific functions from the point of view of our health.

4.1 We take different types of food.

Can tell the food in daily meal. Can tell the substances which give energy.

4.2 Some elements in the food give us energy for work. Cereals, oil, fatty substances, sugar are energy giving substances.

Can tell the use of milk, eggs, meat to the body.

4.3 Proteinaceous food builds the body and replenishes the wear and tear of the body.

Can tell the examples of food containing proteins. Can tell the importance of milk in the food.

4.4 Some food elements increase resistance towards disease in the body.

Can tell the importance of leafy vegetables and fruits.

Can tell water and roughage are useful in daily meals.

4.5 Milk is complete food for body building, energy yielding and for protection.

Can tell the importance of milk in the food.

4.6 Water and roughage are also useful for our body.

Can tell that water and roughage are useful for our body.

**Sub-Unit 5**      Some food is cooked before eating and some food is eaten raw.

- |     |  |  |
|-----|--|--|
| 5.1 | Some components of the food become more useful after cooking and cooking makes the food soft and easy to digest. | Can tell cooked food is easy to digest.<br>Can tell the changes occurring in cooked foods. |
| 5.2 | Cooking makes food safe and improves taste and flavour.  | Can tell the changes occurring in cooked foods.  |
| 5.3 | Some foods like cucumber, carrot and fruits should be eaten raw.   | Can tell the importance of eating raw foods.   |
| 5.4 | Fruits and vegetables should be washed properly before eating.   | Can tell the importance of washing vegetables and fruits before eating.                    |

**Sub-Unit 6**      Cleanliness and regular toilet habits (bath etc.) are essential for good health.

- |     |   |   |
|-----|---|---|
| 6.1 | Regular habit of bowel movement at least once a day is essential for good health.   | Can tell the importance of regular habit of bowel movement.<br>Can tell the need of clean toilet.                 |
| 6.2 | Defecation in a sanitary latrine is a healthy practice.   | Can tell the disadvantages of defecation in open field.   |
| 6.3 | Defecating in open field is dangerous for the health of the community.  |   |
| 6.4 | If sanitary latrine is not available one can construct a pit or a trench latrine.   | Collects information about the pit and trench latrine and tells their uses.                                       |
| 6.5 | Hands and legs should be washed properly after defecation.  | Tries to inculcate healthy habits.  |
| 6.6 | Eyes, ears, nose should be washed with clean water regularly. Nails should be cut regularly and the care of the hair should be taken regularly. | Can tell the importance of keeping the eyes, ears and nose clean.<br>Can tell how to clean eyes, ears, nose, etc. |
| 6.7 | Regular bath is good for health. Body   | Can tell why and how regular bath should be   |

should be wiped with clean cloth after bathing and washing. taken.

**Sub-Unit 7** Teeth maintain health hence, their care should be taken.

- |      |  |   |
|------|--|---|
| 7.1  | Good teeth are necessary for chewing food, hence their care should be taken.                         | Tells the need of teeth for chewing food. Can tell the harmful effects on the body if there are no teeth or the teeth are bad. Takes care of teeth. |
| 7.2. | Teeth appears only twice in one's life e.g., milk teeth and permanent teeth.                         | Tells that teeth appear twice in life.  |
| 7.3  | Proper cleaning and brushing keep the teeth healthy.   | Collects information for keeping the teeth healthy and tries to keep the teeth healthy. Tells when and how we must brush teeth.                     |
| 7.4  | Bad teeth lead to indigestion and stomach troubles and tooth-aches.                                  | Tells harmful effects of bad teeth.   |
| 7.5  | Food particles get stuck in the crevices and cause tooth decay and spoil the teeth.                  | Takes care of the teeth well knowing that food particles get stuck in the crevices.   |
| 7.6  | Teeth and gums get good exercise by eating hard and fibrous food. Massaging also exercises the gums. | Tells the need of teeth and gum exercise.   |

### UNIT 3 ... MATTER AND THEIR PROPERTIES

**Sub-Unit 1** Matter exists in solid, liquid and gaseous state and they can be identified separately from each other.

- |     |   |   |
|-----|---|---|
| 1.1 | Solids have definite shape and cannot be poured.                      | Tells that solids do not change shape.  |
| 1.2 | Liquids have no definite shape. They take the shape of the container. | Tells that liquid has no definite shape and takes the shape of container.                       |
| 1.3 | Gases have no definite shape. They occupy all the space available.    | Tells that gases have no definite shape and they change shape according to the space available. |

**Sub-Unit 2**      Solid, liquid and gases are the three states of matter.

- |     |  |  |
|-----|--|--|
| 2.1 | Sufficiently heated ice changes into water and water into steam. | Can tell the solid, liquid and gaseous state of matter and the changes in states of matter can tell the examples of these changes in states of matter in daily life. |
| 2.2 | When cooled steam changes into water and water into ice.         | Tells why the steam changes into water and water into ice.   |

**Sub-Unit 3**      There are many uses of the matter according to their states (solid, liquid, gas).

- |     |   |                            |
|-----|---|----------------------------|
| 3.1 | Solids are used in many ways.   | Tells the uses of solids.  |
| 3.2 | Some liquids are used as fuel, some are used for washing, some are used for cleaning and some are used for cooking. | Tells the uses of liquids. |

**Sub-Unit 4**      Many substances dissolve in water

- |     |   |   |
|-----|---|---|
| 4.1 | Many solids dissolve in water.                          | Tells a list of solid substances dissolving and not dissolving in water, verifies whether the substances dissolve in any other liquid or not. |
| 4.2 | Some solids dissolve in water easily than other solids. | Tells that some solids dissolve easily in water and some require more time for dissolving.  |
| 4.3 | Solids dissolve more in hot water than in cold water.   | Tells that solids dissolve more in hot water than in cold water.  |
| 4.4 | Powdered solids (solute) dissolve easily when stirred.  | Tells that solutes when powdered dissolve easily.   |
| 4.5 | Some liquids dissolve in water.                         | Tells the examples of liquids dissolving in water   |
| 4.6 | Carbon-dioxide gas dissolves in water.                  | Tells that carbon-dioxide gas dissolves in water.   |

**Sub-Unit 5**      Water is the best solvent and we make use of this property in many ways.

- |     |   |   |
|-----|---|---|
| 5.1 | Use of water as a solvent in different ways in daily life.                                  | Tells the use of water as the best solvent.     |
| 5.2 | Some solvents (Kerosene) can be used for removing oiliness, colour, tar (from the surface). | Tells that some solvents are used for cleaning. |

#### UNIT 4 AIR, WEATHER AND SEASON

##### Sub-Unit 1 Weather often changes.

- |     |   |  |
|-----|---|--|
| 1.1 | Weather changes during the day from time to time. | Tells that weather changes from time to time during the whole day. |
|-----|---|--|

##### Sub-Unit 2 There are different types of weather.

- |     |  |  |
|-----|--|--|
| 2.1 | Kinds of weather as rainy, dry, stormy, hot, cold. | Tells information about weather (e.g. weather is rainy, dry, stormy, hot, cold, etc) |
|-----|--|--|

##### Sub-Unit 3 Many factors affect a change in weather.

- |     |   |  |
|-----|---|--|
| 3.1 | Sun, wind, clouds, rain, determine weather. | Tells the factors affecting the change in weather. |
|-----|---|--|

##### Sub-Unit 4 Weather influences our life in many ways.

- |     |   |   |
|-----|---|---|
| 4.1 | Travelling is risky in stormy and foggy weather.        | Tells why it is risky to travel in stormy and foggy weather.      |
| 4.2 | Bad weather affects our work and playing                | Can tell that the weather affects our life.                       |
| 4.3 | Good weather is pleasant for travel, sports and picnic. | Tells which weather is pleasant and which weather is troublesome. |

##### Sub-Unit 5 Changes in seasons affect the public life.

- |     |  |  |
|-----|--|--|
| 5.1 | Rainy, winter and summer are the three recognised seasons. | Can tell the names of the seasons and how they affect the public life. |
| 5.2 | People wear different clothes in different seasons.        |  |

- |     |   |   |
|-----|---|---|
| 5.3 | People use different devices to keep their homes warm in winter and cool in summer. | Can tell the changes made by people in houses in different seasons and can tell the reasons of these changes. |
| 5.4 | Different vegetables and fruits are available in different seasons.                 | Tells that different fruits and vegetables are available in different seasons.                                |
| 5.5 | Different crops are grown in different seasons.                                     | Tells that different crops grow in different seasons.   |
| 5.6 | Different flowers bloom in different seasons.                                       | Prepares the list of flowers in different seasons.  |

## UNIT 5 : THE SKY

**Sub-Unit 1**      Though sun and moon are big in size they appear small in size from the earth's surface.

- |     |  |  |
|-----|--|--|
| 1.1 | The sun, moon, planets and the stars are seen in the sky.  | Can tell that the sun, moon, planets and the stars are seen in the sky. Also can tell that objects at a very long distance appear small.   |
| 1.2 | The sun and the moon are very large in size but appear small.  | Tells that illuminated part of the moon changes every day. Full moon day moon is seen completely and why it is not seen on 'new moon day'. |
| 1.3 | The stars and the planets are seen clearly during the night. By continuous observation the star, cluster of stars and the planets can be identified. | Can recognise some stars and cluster of stars and can name them such as Dhruva, Saptarishi, etc. Can name the planets. (e.g. Mars, Venus). |

**Sub-Unit 2**      Phases of the moon

- |     |  |   |
|-----|--|---|
| 2.1 | Bright portion of the moon goes on changing in a regular pattern. These changes are called phases of the moon. | Tells what are the phases of the moon in simple language. |
|-----|--|---|

**Sub-Unit 3**      Our ancestors have made use of heavenly bodies namely the planets and the stars.

- |     |                                       |   |
|-----|---------------------------------------|---|
| 3.1 | Our festivals occur on specific days. | Tells the festivals occurring on specific days from the position of heavenly bodies (e.g. |
|-----|---------------------------------------|---|

Kojagiri, Id, etc.)

- |     |  |   |
|-----|--|---|
| 3.2 | Our ancestors have given the names of the planets to the days of the week. | Tells the names of planets given to the days of the week.                 |
| 3.3 | Directions can be identified by the position of 'Dhruva Tara' star.        | Identifies Dhruva Tara and the directions by the position of Dhruva Tara. |

**Environmental Study - 2**  
**Standard IV Science**

**UNIT 1 : LIVING BEINGS**

**Sub-Unit 1** Different parts of a plant have different functions.

- |     |   |   |
|-----|---|---|
| 1.1 | The roots hold up the plant firmly to the soil.                             | Tells different parts of plants. Recognises roots.  |
| 1.2 | Roots absorb water and salts (minerals) from the soil.                      | Describes different roots. Draws the figure of roots.   |
| 1.3 | Stem translocates water and salts from the roots to the parts of the plant. | Tells the functions of root. Arranges experiments to show the functions of root, stem and leaves. |
| 1.4 | Green leaves prepare food for plant.  |   |
| 1.5 | Many plants bear flowers and fruits.  |   |
| 1.6 | Seeds in the fruits give rise to plants.                                    |   |

**Sub-Unit 2** Animals and plants are useful to men in many ways.

- |     |  |   |
|-----|--|---|
| 2.1 | Plants give us food like cereals, vegetables, fruits, pulses, tuberous roots, etc. | Tells which substances are obtained from plants. Tells the e.g. of herbivorous animals. |
| 2.2 | Plants also supply food to other animals.  | Classifies the commonly found plants in the surroundings according to their uses.       |
| 2.3 | Plants give us wood for timber and fuel.   | Tells the uses of useful plants in the surroundings.                                    |
| 2.4 | We get fibers from plants (e.g. Cotton, Jute).                                     |   |



- 2.5 Some plants are medicinal (as discussed in Ayurvedic and unani-systems). Tells the medicinal properties of common plants in the surroundings. Tells their uses. Tells how plants are used in Ayurvedic system.
- 2.6 Domestic animals help us in many ways (e.g. food, transport, agriculture). Names the domestic animals. Tells how the domestic animals are useful to us.
- 2.7 Some animals give us wool and fur.
- 2.8 The skin of some animals is used to make leather.
- 2.9 Parts of plants and dung of the animals and are used as manure. Can tell that how animals, excreta (e.g. dung) parts of plants are useful from the point of view of manures.

**Sub-Unit 3** Plants and animals need care and protection.

- 3.1 Plants and animals should be protected against pests and disease germs. Tells how to take care of plants and animals.
- 3.2 Domestic animals need proper shelter. Can describe the proper shelter for domestic animals.
- 3.3 Domestic animals should be provided with clean water for drinking.
- 3.4 Care should be taken of domestic animals. Takes care of domestic animals.
- 3.5 Breaking of trees and killing the animals has harmful effects on the environment.

**Sub-Unit 4** Dispersal of seeds is necessary for reproduction of plants.

- 4.1 If seeds are not dispersed then too many seedlings grow near the mother plants and competition for getting food, space etc. begins between them. Tells the advantages to the plants due to dispersal of seeds. Tells the relation between the dispersal of seeds and increase in the number of plants.
- 4.2 Some seeds are dispersed by wind. Tells the examples of plants which have dispersal of seeds by wind.

- |     |                                      |  |
|-----|--------------------------------------|--|
| 4.3 | Some seeds are dispersed by water.   | Tells the examples of plants which have dispersal of seeds by water.   |
| 4.4 | Some seeds are dispersed by animals. | Tells the examples of plants which have dispersal of seeds by animals. Collects seeds of plants which have dispersal of seeds by water, wind, etc. Tells the co-relation between the kinds of seeds and their dispersal. |

## UNIT 2 : OUR BODY, NUTRITION AND HEALTH

### Sub-Unit 1      Human body works as a single unit.

- |     |   |   |
|-----|---|---|
| 1.1 | Human body has different parts and they perform different functions, but there is harmony in the functions. | Tells that human body works as a single unit.               |
| 1.2 | Some organs like heart, lungs, liver, stomach are not seen externally. They are called internal organs.     | Recognises and names different internal organs of the body. |

### Sub-Unit 2      Different internal organs have different functions.

- |     |   |  |
|-----|---|--|
| 2.1 | Different internal organs have different functions. | Tells that internal organs - heart, lungs, stomach etc., have different functions.   |
| 2.2 | The heart circulates the blood throughout the body. | Tells by experience that the number of heart beats increase and also the breathing becomes faster after doing hardwork.<br>Should count the number of heart beats at rest and after running. |
| 2.3 | Lungs help in breathing.                            |  |
| 2.4 | Liver and stomach helps digestion.                  |  |

### Sub-Unit 3      For proper health our meal should include adequate and proper food elements/constituents.

- |     |  |  |
|-----|--|--|
| 3.1 | For nutrition our daily diet should contain the food elements which will build the body, replenish the wear and tear of the body, protect the body | Tells the food elements in daily diet and tells their functions. |
|-----|--|--|

from diseases and provide the energy to the body.

- 3.2 Children have more need of body building food. Sprouted seeds, fermented food, increase the nutritional value of the food.

**Sub-Unit 4** After eating, food is changed into soluble forms which are absorbed by the body and are used for energy and growth by the body.

- 4.1 Food we eat is broken down to small pieces by the teeth. Digestion starts in the mouth due to saliva. Tells the ultimate change in the food eaten. Tells the use of food to the body.
- 4.2 In the stomach digestive juices convert food into soluble form. Tells the change of food that occurs in the stomach. Tells what is digestion.
- 4.3 Digested food is absorbed into the blood stream. Tells what happens of the digested food.
- 4.4 Undigested food is discharged out of the body. Tells the uses of water to the body.
- 4.5 Water facilitates digestion and absorption.

**Sub-Unit 5** Care should be taken not to waste food and not to reduce its nutritional value while cooking, serving and eating.

- 5.1 Vegetables and fruits should be washed before eating. Tells that the care should be taken before eating the vegetables and fruits.
- 5.2 Vitamins and salts (minerals) are washed away if vegetables and fruits are washed after cutting. Tells why the food should not be over cooked. Tells with examples that the nutrients of food are destroyed due to different ways of cooking.
- 5.3 After cutting, vegetables and fruits should be used early. Tells proper methods of serving and eating food to avoid wastage of food.
- 5.4 Over cooking destroys vitamins.

- 5.5 Some vitamins and minerals dissolve in water added for cooking. Hence this water should not be thrown away but should be consumed. Knows and tells how the proper and safe handling of food is done. Tells how to avoid wastage of food while serving, eating and storing it.
- 5.6 Food should be stored in a container covered with a tight lid. Relates the unhygienic handling of food to possible causes of diseases by contamination of food and water.
- 5.7 Should avoid the wastage of food due to improper methods of serving and eating the food.
- 5.8 Food should be kept clean and served in a proper manner.

**Sub-Unit 6** Eatable food if exposed to dust, flies, causes diseases.

- 6.1 Flies are the carriers of disease germs.
- 6.2 Food exposed to dust should be avoided. Food should be kept covered. Tells why the food exposed to dust should be avoided.
- 6.3 Sanitation in and outside the house helps to prevent breeding of flies and mosquitoes. Tells the measures to destroy flies and mosquitoes.

**Sub-Unit 7** Safe drinking water is essential for health.

- 7.1 Keeping the sources of water, reservoirs of water safe is essential.
- 7.2 Water gets polluted due to sewage water, effluent from industries water containing chemicals, animal waste etc. Tells how water is polluted. Tells the bad effects of drinking polluted water. Suggests measures to prevent pollution of water.
- 7.3 Washing clothes, bathing of human beings and animals in or near the water reservoirs pollute water. Tells the importance of keeping the drinking water clean.
- 7.4 Water can be made clean and safe by many ways like boiling, filtration and use of chemicals. Can tell the measures to clean drinking water.

- 7.5 Water pollution should be prevented.
- 7.6 Drinking water should be stored in clean vessels and should be handled properly. Water should not be wasted. Tells the proper methods of handling drinking water.

**Sub-Unit 8** Cleanliness of the surroundings helps to prevent diseases.

- 8.1 Home, school and surroundings should be kept clean. Tells what should be done to keep home, school and surroundings clean.
- 8.2 Sanitary facilities in the neighbourhood should be maintained properly. Tells how to use properly cleanliness facilities at home and school.
- 8.3 Public places should be kept clean. Explains the relation between the cleanliness of public places and social hygiene. Cleans the public places himself and motivates others to do so.

### UNIT 3 : MATTER AND IT'S PROPERTIES

**Sub-Unit 1** All substances are characterised by specific properties.

- 1.1 Some substances are soft, some are hard. Tells that some substances are hard and some are soft. Knows that the hard substance make scratches on soft substances. Tells that the substance on which scratch is made is soft and the other is hard.
- 1.2 Light passes through some substances and does not pass through some other substances. Tells that - Light passes through some substances and does not pass through some others.) - (Can tell that some substances when heated at one place gets heated completely.
- 1.3 Heat is passed through some substances easily. Some bodies get heated only at the place where it is heated and does not get heated to the other end quickly.
- 1.4 Some substances dissolve in water, others do not. Tells that some substances dissolve in water and some others do not.

- 1.5 Some substances break easily, others some others do not.
- Tells that some substances are broken to pieces and some others are not.  
He could tell how many kinds of substances he has seen (studied).  
Tells the substances as  
(1) Hard, (2) Brittle, (3) Transparent, (4) Opaque, (5) Conductors of heat, (6) Bad conductors of heat, (7) Easily broken to pieces, (8) Not broken to pieces easily.  
Tells that hardness, transparency, opaqueness, softness are the specific properties of substances.

**Sub-Unit 2** All matter is made up of small particles  
(Give the examples of solids only).

- 2.1 Solids are made up of small particles (Pieces of chalk, pieces of paper can be made to small and smaller bits). Tells that solids are made up of small particles.
- 2.2 Solids while dissolving in water is broken into small particles. Tells that solids dissolve in water and while dissolving it is broken into small particles.
- 2.3 The particles of dissolved solid spread uniformly in the liquid. Tells that the particles of dissolved solid spread uniformly in the liquid.  
Tells that all matter is made up of small particles.
- 2.4 The molecular form of matter was first stated by Maharshi Kanad. Tells that Maharshi Kanad stated the molecular theory first.

**Sub-Unit 3** There is a space between two molecules of a liquid.

- 3.1 When solid dissolves in liquid the volume of liquid remains almost the same, it does not increase. Tells that there is a space between two molecules of a liquid.

**Sub-Unit 4** Insoluble substances can be separated from the liquid by different methods.

- 4.1 The solid substances can be separated from the liquid by methods such as sedimentation, decantation and filtration. Tells the reasons and shows that the insoluble substances can be separated from a mixture.

**Sub-Unit 5** The solids dissolved in the liquid can be separated from the solution by the method of crystalization.

- 5.1 Salt can be separated from its solution by methods of evaporation and crystalization. Performs the experiment to obtain common salt crystals.
- 5.2 Crystals of different substances have different shapes. Names some substances in crystal-forms in daily life.

#### UNIT 4 : WEATHER AND CROPS

**Sub-Unit 1** The sun plays an important role in the changes of weather.

- 1.1 The sun heats the earth. Tells that the sun heats the earth.
- 1.2 The earth gets heated more in summer than in winter.
- 1.3 During the day land gets heated sooner than water.
- 1.4 At night land cools faster than water.

**Sub-Unit 2** Water plays an important part in changing the weather.

- 2.1 Water mixes into the air due to evaporation. Knows that water changes into vapour on evaporation and vapour changes into water on cooling. Can verify these processes himself.
- 2.2 Water vapour in the atmosphere may condense in the form of rain, dew, hail and snow.

**Sub-Unit 3** Weather conditions such as hail, heavy rain and wind can seriously

affect the crops in the field.

- 3.1 (A) Hail storm (frost) damages standing crops      Tells that how crops are damaged because of untimely rains and hailstorm.
- (B) In the period of harvest heavy rains spoil (damages) the crops.

## UNIT 5 : SOIL AND CROPS

**Sub-Unit 1**      Cultivable land is an important natural resource.

- 1.1 Clay, loam and sand are different forms of soil.      Can classify the soil in clay, loam and sand.
- 1.2 Different forms of soil differ from one another in colour, particle size, humus content and behaviour towards water (retention and percolation).      Can make the list of local crops. Tells the particular type of soil for the growth of these crops.
- 1.3 Soil is made fertile by adding manures and chemical fertilisers, ploughing and crop rotation.      Can tell the advantages of rotation of crops. Tells that the fertility of soil remains constant due to rotation of crops.

**Sub-Unit 2**      Different crops require different types of soil for growth.

- 2.1 Certain crops grow in well aerated sandy soil.
- 2.2 Certain crops grow better in wet clay soil.
- 2.3 Certain crops grow better in loamy soil.
- 2.4 Different crops grow in different types of soil.

**Sub-Unit 3**      Crop yields can be increased by using modern methods of agriculture.

- 3.1 Agriculture production can be increased by using different modern methods,      Takes note of the modern methods of agriculture.



e.g. use of improved seeds, methods of irrigation etc. Tells that how the modern techniques are organised in agriculture. Tells that the production can be increased using modern methods.

3.2 Crops are protected by spraying insecticides.

**Sub-Unit 4** Crops need to be stored properly after harvest.

4.1 Some pests and insects spoil the stored foodgrains. Tells that foodgrains not stored properly are wasted.

4.2 Foodgrains need to be stored in containers which will not be affected by animals and insects.

**Sub-Unit 5** Certain conditions are necessary for germination of seeds.

5.1 Germination of seeds require moisture, warmth and air. Tells that certain conditions are necessary for germination of seeds.

5.2 In equal conditions seeds germinate differently.

## UNIT 6 : WORK AND ENERGY

**Sub-Unit 1** For doing work energy is essential.  
(Only operational and not conceptual.)

1.1 Using energy devices like rockoil, petrol, etc., work can be done. Tells that work is done using different energy devices.

1.2 Using coal as energy device work can be done. Tells that energy is required for different functions of the body.

1.3 Machines such as fans, pumps, motors, flour mills and machines in the factory run on electricity.

1.4 Energy is also necessary for activities like swimming, singing, dancing, playing etc. ,

**Sub-Unit 2**      There are different forms of energy.

- 2.1      Mechanical energy is a form of energy.      Tells the different forms of energy. Tells that energy in one form can be converted into another form of energy.
- 2.2      Heat is a form of energy.
- 2.3      Light is a form of energy.
- 2.4      Sound is a form of energy.
- 2.5      Electricity is a form of energy.

**Sub-Unit 3**      There are many sources of energy.

- 3.1      The sun is the prime source of energy.      Tells that the sun is the prime source of all energies.
- 3.2      Energy is obtained from fuels.      Tells with examples that we get energy from different fuels.
- 3.3      Water falling from a height, wind are the traditional sources of energy.      Tells that energy is obtained from natural sources like water, wind.

**UNIT 7 : THE SKY AND EARTH**

**Sub-Unit 1**      Our earth revolves around the sun.  
It is a planet.

- 1.1      Heavenly bodies that revolve around the sun are called planets.      Tells what is a planet.
- 1.2      Earth is a planet .      Tells that earth is a planet.

**Sub-Unit 2**      The moon revolves around the earth.

- 2.1      A body revolving around a planet is called satellite.      Tells the difference between a planet and satellite.
- 2.2      The moon is a natural satellite.
- 2.3      Man has launched artificial satellites around the earth.

**Sub-Unit 3**      Indians had contributed to the study of heavenly bodies.

- 3.1      Our calendar, festivals and agricultural activities are related with the heavenly bodies.      Tells with examples that Indians had contributed to the study of heavenly bodies. Tells the units of time with reference to the sun and the moon.
- 3.2      Aryabhata, Rohini, etc. are the artificial satellites, that India has launched in the space.
- 3.3      In older days the directions used to be determined from the stars.

**Environmental Study - 2 Science Standard V**  
**UNIT 1 : LIVING BEINGS**

**Sub-Unit 1**      Living beings have some special characters.

- 1.1      Living beings respire.      Can classify objects into living and non-living things.
- 1.2      Living beings grow.
- 1.3      Living beings respond to environmental stimuli.      Observes living and non-living and can compare their special characters.
- 1.4      Living beings reproduce.      Can tell specific characters of living beings.

**Sub-Unit 2.**      The structure and the life process of plants and animals have basic differences.

- 2.1      Green plants produce their own food.      Observes plants and animals and explains the difference between external characters of plants and animals.
- 2.2      Animals depend on plants for their food.
- 2.3      Plants cannot change their place.

2.4 Almost all animals make movement and change their place.

2.5 Animals have specific form and figure.

**Sub-Unit 3** Animals and plants adopt themselves to the surrounding environment for their survival.

3.1 Aquatic animals and plants have special structure. Tells special characters of the plants and animals growing in specific environment.

3.2 Desert animals and plants have special structure of their body.

3.3 Animals and plants living in mountainous region have special structure of their body. Observes the body structure of animals and guesses to which environment those animals are adopted.

3.4 Animals which fly in the sky have special structure of their body.

**Sub-Unit 4** Almost all plants reproduce their form seeds.

4.1 Almost all plants are reproduced from germination of seeds. Plant is reproduced from seed. Observes the process of germination and describes it.

4.2 One type of plant seed reproduces into the same type of plant only, e.g., a bean seed gives rise to bean plant. Tells that one type of seed reproduces into same type of plant only.

**Sub-Unit 5** Some factors are favourable to germination of seeds.

5.1 Optimum temperature, sufficient air and water are essential for germination of seeds and growth of plants. Tells factors which promote germination, Proves by experiment that air and water are required for germination.

5.2 Even when similar optimum conditions for germination of many seeds of same type are given the power of germination of these seeds differs. Measures the plant while it grows. Compares the difference in growing plants in similar conditions. Tells power of germination of one type of seed differ under similar conditions.

## UNIT 2 : OUR BODY, NUTRITION AND HEALTH

**Sub-Unit 1** Our body consists of small and big bones.

- 1.1 Our body consists of many small and large bones. Recognises bones in different organs.
- 1.2 Body gets form and shape due to bones and bones protect delicate organs inside the body.

**Sub-Unit 2** Large part of our body is made up of bones and muscles.

- 2.1 Our body consists of many muscles, bones and muscles give shape to the body. Recognises simple joints in the body such as 'hinge joint', etc.
- 2.2 Body movement can be done because of joints.

**Sub-Unit 3** Different parts of the body can make movement due to muscles.

- 3.1 Contraction and relaxation of muscles make the movement of body possible. Tells that movement of body is due to joints and muscles.
- 3.2 Movement of some muscles is voluntary while we have no control on movements of some muscles.
- 3.3 Regular exercise and appropriate posture of the body help the muscles grow well. Tells importance of regular exercise.

**Sub-Unit 4** Food requirement of individuals change depending on age, sex and profession.

- 4.1 Nutritious food is required for growth of the body of children. Collects information about quality of food consumed by 3 - 4 families in the surrounding, classifies this data on the basis of age, sex and

profession and draws conclusions.

- 4.2 Individual who has stationary job requires less food than an individual who has labourous work.

**Sub-Unit 5** Inadequate and unbalanced diet cause deficiency diseases.

- 5.1 Inadequate consumption of nutritious and energy giving food over a long period causes stunted growth. Tells deficiency diseases in persons round about. Tells bad effects on individuals due to malnutrition.
- 5.2 Inadequate consumption of green leafy vegetables, vitamin 'A' and vegetables consisting of carotin, cause night blindness.
- 5.3 Bad effects of malnutrition are seen in most of the children in our country.
- 5.4 Balanced diet can avoid deficiency diseases.

**Sub-Unit 6** Society has many traditional methods of preparing food.

- 6.1 Some traditional methods and notions of preparing food are useful to health e.g. food prepared by fermenting rice and udad dal and use of sprouted grains. Tells traditional food habits. Differentiates between balanced and unbalanced diet. Advocates and motivates people in the vicinity to consume balanced diet.
- 6.2 Society should be well informed of importance of balanced diet and ill effects of unbalanced diet.

**Sub-Unit 7** Proper method of storage and preservation of grain keeps it safe for long time.

- 7.1 Dried grains and pulses can be stored in airtight place. Recollects and tells different methods of storage of grains, etc.
- 7.2 Drying and salting etc., are the different methods of storing and preserving food. Classifies different types of food on the basis of different methods of storage of food.

**Sub-Unit 8**      Germs of diseases spread through different ways and cause spread of diseases.

- 8.1      Different germs cause different diseases.      Tells common diseases spreading in the surrounding.
- 8.2      Disease germs spread through air, water, food and actual contact.      Tells that various diseases spread through various routes.
- 8.3      Some disease germs spread through insect bite.

**Sub-Unit 9**      Preventive measures followed to restrict the spread of contagious diseases.

- 9.1      If some precautions are taken, spread of disease germs can be prevented e.g. isolation of a patient.      Tells different methods to prevent spread of contagious diseases.  
Makes efforts to restrict spread of diseases, e.g. takes care of self cleanliness and social cleanliness.
- 9.2      If some precautions are taken production and growth of disease germs can be prevented.      Informs the local health centre when his own family members suffer from contagious disease.
- 9.3      Spread of disease can be prevented by vaccination, oral medicinal dose, etc.      Gets himself vaccinated.
- 9.4      "National Health & Social Welfare Programme" is implemented for preventing and controlling spread of contagious diseases.      Takes part in National Programme of "Preventive Campaign for Contagious Diseases". Motivates individuals in the family and society to take part in these campaigns. Tells correlation of uncleanliness and spread of diseases and tells causes of spread of diseases and their effects.

**Sub-Unit 10**      It is essential to keep the surrounding clean for good health and hygiene of society.

- 10.1      Many rubbish substances are lying in the surrounding, e.g., excreta of the animal, rotten vegetables, sweepings      Tells waste material lying near school, house and surrounding area.  
Tells how the waste material is produced and

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|-------|--|--|
|       | in the house, waste papers, broken glasses, used tins etc.   | can classify the waste material. Tells the ill effects of undisposed waste material. |
| 10.2  | It is necessary to dispose off the waste material.   |  |
| 10.3  | Waste material should be disposed off by burning, burying, etc.  |  |
| 10.4  | If waste matter is not disposed off properly, it rots and emits foul smell and attracts flies causing spread of disease and damages social health. | Tells how it is harmful to health to defecate and spit any place,                    |
| 10.5  | It is our responsibility to keep the surrounding clean.  |  |
| 10.6  | Some waste material can be used again e.g., paper, bottles, tin, etc.  | Collects information about waste material which can be re-used again.                |
| 10.7. | Animal excreta, plants, can be used to generate dung gas, bio-gas and thus this waste can be disposed off.   | Tells the importance of dung or bio-gas.   |

### UNIT 3 : EROSION OF SOIL

**Sub-Unit 1** More and more land can be made useful by preventing soil erosion. It is necessary to take care of this.

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|-----|---|---|
| 1.1 | Soil particles flow away due to impact of rain and wind.                          | Tells the causes of soil erosion and effects of soil erosion. |
| 1.2 | Soil can be protected by planting trees, growing grass and bunding and terracing. | Tells the bad effects of soil erosion.                        |
| 1.3 | Indiscrete cutting of forest trees causes erosion.                                |   |



## UNIT 4 : AIR AND IT'S UTILITY

**Sub-Unit 1** Air consists of many components and they are useful.

- 1.1 Air consists of oxygen which is used for respiration and burning. Tells the constituents of air and their uses.
- 1.2 Air consists of nitrogen. Nitrogen is useful for preparing fertilizers. Similarly nitrogen reduces the intensity of oxygen.
- 1.3 Air contains carbon-dioxide which is used for photosynthesis process and assimilation of food by plants. Verifies by experiment that air contains carbon-dioxide and water vapour.
- 1.4 Air contains water vapour.

**Sub-Unit 2** Air has many other uses.

- 2.1 Air is used to inflate balloons, football, pillow, motor and cycle tubes, etc. Tells the names of devices working on air pressure. Uses different devices working on air pressure and observes the functioning of these devices.
- 2.2 Air is removed to start the function of syringe and ink refill tube.

**Sub-Unit 3** Fresh air is essential for good health.

- 3.1 Air gets polluted due to burning of objects, vehicles, crowd, smoke emitted by factories etc. Tells the ways through which air gets polluted. Goes for walk in the morning and takes regular exercise.
- 3.2 Polluted air is harmful for health. Tells places of fresh air and polluted air and identifies differences between them.
- 3.3 Houses should have doors and windows face to face so that fresh air easily circulates and there is good ventilation. Grows trees and motivates to do it. Takes part in tree procession.
- 3.4 We should try to reduce air pollution, e.g. planting of trees.

## UNIT 5 : ENERGY

**Sub-Unit 1** Work is said to be done if a body is displaced by a force acting on it.

- 1.1 Force can be applied on a body in various ways. Muscle, gravitation, electricity, friction, magnetism are different kinds of forces. Tells the effects of gravitational force on a body. Tells the effects of applying force on a body.
- 1.2 Work is performed when a body is displaced through some distance when force is applied on that body.

**Sub-Unit 2** We use simple types of machines to do different works.

- 2.1 Lever, pulley, screw and inclined plane are simple machines. Describes simple machines used in daily work.
- 2.2 Compound machine is made up of combination of simple machines. Uses simple machines in daily life.

**Sub-Unit 3** Proper use of Energy is essential.

- 3.1 Electricity, heat, muscles, solar are different types of energy. Tells different types of energy. Tells how to avoid waste of energy.
- 3.2 Energy is required for all types of works. Uses energy carefully and tells the methods of proper use of energy.
- 3.3 Sources and reserves of energy are limited.
- 3.4 It is essential to use energy properly.

## UNIT 6 : THE EARTH AND THE SKY

**Sub-Unit 1** Obstructed light causes shadow.

- 1.1 Formation of shadow depends on a) kind of object, (transparent/ opaque) (b) size of the object and source of light, (c) distance between the object and the source of light. Classifies the objects on the basis of power of reflection of light - into transparent and opaque.

Explains the relation between the distance of object and source of light and formation of shadow.

**Sub-Unit 2** Explanation of solar and lunar eclipses from shadow formation.

- 2.1 Solar eclipse occurs on no moon day and lunar eclipse on full moon day. Describes the traditional beliefs and behaviour of people in solar and lunar eclipse.
- 2.2 Lunar eclipse occur when shadow of earth falls on moon. Observes the inter-relation between formation of shadow and eclipse and describes it.
- 2.3. The solar eclipse occurs when the moon lies between the sun and the earth. Tells the reasons of occurrence of solar and lunar eclipse.
- 2.4 From ancient times people could forecast the occurrence of solar and lunar eclipse accordingly.

**UNIT - 7 : NATURAL WEALTH ON THE EARTH**

**Sub-Unit 1** Various types of natural wealth is available from the earth.

- 1.1. Animals and plants are natural wealth. Tells the natural wealth found in the nearby surroundings.
- 1.2 Earth, soil, rock, water, air, minerals, etc., are also our natural wealth.
- 1.3 Coal, petroleum, etc., dug from the soil are also our natural wealth. Tells the natural wealth dug from the soil.

**Sub-Unit 2** The mankind uses this natural wealth in various ways.

- 2.1 Plants, animals, soils, air, water, etc., is the natural wealth. This natural wealth is useful to mankind. Tells the use of natural wealth in daily life.
- 2.2 From the natural wealth mankind gets metals, fuels, salts, fertilizers, etc.

**Sub-Unit 3**      Natural wealth should be used properly.

3.1      Resources of natural wealth is limited. It cannot be replenished.

Tells the examples of places where natural wealth is misused and wasted.

3.2      Natural wealth should be used judiciously and protected and conserved.

Take care to avoid wastage of natural wealth such as water, minerals, plants, salts, etc.

## Environmental Studies (Primary Level)

The syllabus in Environmental Studies at the primary level consists of two parts. The first part includes the syllabus for Stds. I and II while the second part includes the syllabus for Stds. III, IV and V. The second part is further divided into two sections. The first section pertains to Environmental Study: Social Sciences and the second section consists of Environmental Studies : Natural Sciences.

Interrelated areas in our environment have been considered together in the syllabus for Stds. I and II. Environment, here, consists of both physical as well as social environment. For this purpose, areas in the immediate surroundings of the students have been selected. Careful thought has been given to which minimum learning abilities should be developed in the students through the syllabus. It is expected that environmental studies at this level should be informal and flexible. Naturally, though the syllabus has been divided into several units, it can be modified to suit the needs and likings of the children. Each unit of the syllabus states the content expected to be conveyed. But, this is only by way of example and the teaching/learning strategies and actual content should be determined according to the local situation.

It is essential for the teacher to see that the minimum learning abilities mentioned in the syllabus are developed in the students. The units in the syllabus have not been divided standardwise, for Standards I & II because (1) the content and the organisation of units are flexible. Its scope and depth should depend on the age-group of the children and (2) The minimum learning abilities aimed at an each unit may not be attained in one year. The teacher is expected to attain the desired level of achievement by expanding the scope of the subject by the end of Std. V.

The syllabus does not impose a hard and fast time table on the teacher. Adequate time should be devoted to the teaching of this subject out of 200 teaching days. A time-schedule has been proposed for Std: III onwards. However, it is not rigid. The teacher is expected to balance the time devoted to learning and the time devoted to activities. However, the teacher should allocate at least 50% of the time available to him for activities outside the classroom.

The New Educational Policy has been the prime frame-work while preparing the present syllabus. However, the recommendations of the Chiplunkar Committee (1982) and the recommendation of the School Education Reform Commission have also been considered. The students in Standards I and II are of the age group 6 to 8. They enter the world of formal instruction after completing activity-based schooling at the pre-primary stage. Naturally, (1) These children are full of vitality. (2) They prefer physical movements to being confined to their desks. (3) They are curious about everything around them. (4) They prefer activity to formal studies. (5) They enjoy voluntary creations. (6) Because children at this stage are extroverts, they prefer to work in groups. The observations about the children enumerated above suggest that the environment may afford the teacher opportunities in imparting instructions in subjects other than Environmental Studies. The teacher can use the environment or surroundings to make the learning and teaching of other subjects such as Mathematics and mother-tongue (language) more enjoyable to the students, for Environmental Studies bring together study of the environment, through the environment and for the environment.

Environmental Studies is not so much a separate subject as a method of learning. It (the method of learning) should aim at developing in the students abilities of different kinds. There is, therefore, no need to prescribe a book for this subject. There should, however, be a hand book for the teachers.

While many reasons have been put forward to explain the alarming number of dropouts at the primary stage, it is undoubtedly the irrelevance of the subject matter and the dull, uninteresting and boring teaching strategies that are responsible for the drop-out rate. This drawback (in our present system) can easily be overcome if the teachers adopt the strategy of activity based teaching techniques making use of the surroundings in which the students live. The terminology used in the present syllabus is for the consumption of the teachers. It is for the teachers to further simplify it for their students so that the students are able to understand the content easily. For example, one of the units is titled : Energy (Sources of Energy). The teacher should explain this term (or phrase) with the help of words or phrases with which the students are already familiar. The syllabus consists of 18 units to be taught over a period of two years. The teacher may select the easier units for instruction in Std. I and take up the rest in Std. II.

New Educational Policy keeps before it the aim of reaching and educating every child in the country upto the primary stage within a prescribed time limit. If the student about (wishing) to enter the primary school is taught the subjects with reference to his surrounding situation he will find the learning experience an enjoyable one and will not think of dropping out of school before he finishes primary education.

We trust that the teacher marching towards the twenty first century will, through Environmental Studies, face the challenge adequately.

### **Objectives of Environmental Studies (Std. I and II)**

- (1) The student should develop a liking for learning.
- (2) The student should develop the habit of self learning.
- (3) The student should participate in day-to-day social and cultural activities.
- (4) The student should cultivate habits promoting cleanliness and a healthy life.
- (5) The student should develop the right kind of attitudes towards cleanliness and hygiene in the environment.
- (6) The student should be able to enjoy the pleasures offered by nature in his/her environment.
- (7) The student should develop the awareness that life depends on nature.
- (8) The students should feel motivated towards the conservation of his/her natural environment.
- (9) It should help to develop the students creativity.
- (10) The student's aesthetic sense should be developed.
- (11) The students should develop a scientific attitude through practical experience.
- (12) The student should feel motivated to co-operate with others for the betterment of the whole society.
- (13) The student should develop a healthy personality.
- (14) Respect for national unity and democracy should be awakened in the minds of the students.
- (15) Fixation of the basic concepts in mathematics and language should be facilitated.

## Abilities :

Listed below are the minimum learning abilities to be developed through Environmental Studies. Development of these abilities does not depend on any particular environment/surroundings. These are to be cultivated by studying the social, physical, geographical and cultural aspects of the local environment.

The student is able :

- (1) To observe the natural and social environment and feels free to ask questions about it boldly.
- (2) To give an oral account of his observation.
- (3) To compile the information obtained.
- (4) To classify the information obtained (regarding objects, names of objects and facts).
- (5) To develop an awareness of the cause and effect relationship.
- (6) To carry out simple experiments.
- (7) To draw rough maps (not to scale).
- (8) To use natural resources economically and properly.
- (9) To maintain personal and environmental cleanliness and to avoid pollution.
- (10) To cultivate a feeling of co-operation.
- (11) To develop a sense of respect towards the various religions, castes and their customs and traditions.
- (12) To protect personal as well as public property.
- (13) To follow rules.
- (14) To identify food items in the environment and make the proper choice.
- (15) To take adequate precaution in the use and consumption of food-stuff and water.
- (16) To cultivate habits leading to good personal and public health.

## Environmental Studies

### Stds. I and II

Content	Learning outcome
<b>Unit I. : Human Body</b>	
<b>Sub-Units</b>	<b>The student</b>
1. Introducing the human body - the main parts of the body - external organs - head, neck, chest, stomach, hands, legs and organs of sensory perception.	- Knows the various parts of the body, can name them, and can read and perhaps write these names.  - Learns the functions of eyes, ears, nose, tongue, limbs, fingers,
2. Introducing the sense organs - their functions - nose, ears, eyes, tongue and skin.	- Can classify individuals in a group according to their physical features - - can spot the similarities and differences.

3. Taking care of one's organs, do's and don'ts of personal hygiene, importance of personal and public hygiene. Care and cleanliness of eyes, ears, nose, teeth and hair. Good habits of eating and excretion.
  - Learns that organs of all human beings are basically similar.
  - Recognizes the variation in heights of individuals in a group and can line them up according to their heights.
4. Hygienic habits (with demonstrations).
  - Learns the habits essential for personal cleanliness and hygiene.
5. Importance of regular rest, exercise and correct physical postures.
  - Acquires good habits of physical cleanliness.
6. - Cleanliness of body and clothes.
  - Learns the importance of using toilets at home, in school and in public places.
  - Acquires the habit of washing hands and feet before and after eating, and after using the toilet.
  - Learns the importance of right posture.
  - Learns how good habits and cleanliness are related to one's health.
  - Learns the following :
    - (a) Parts of the body and their functions.
    - (b) Everyone has identical body parts.
    - (c) Good habits are essential for health.

## Unit II : The Family

### The Student

- Recognises the relationships among the members of the family.

### Sub-Units

- (1) Structure of the family
  - The various family relations.
  - Knows the duties of the family members and helps to do the household chores.
- (2) Small and large families,
  - the advantages and disadvantages.
  - Learns the advantages of a small family and the drawbacks of a large family.
- (3) Duties of family members,
  - Role of parents and other adults,
  - Learns the food-stuffs necessary for the family and other needs of the family.



housekeeping, household chores of children, health and education of children.

- Can classify food-stuffs.

- Can distinguish between wholesome food and harmful food.

(4) Diet, dietary habits, wholesome diet.

(5) Etiquette.

(6) Food for the family - types and classification, Cooking food.

(7) Clothes for the family - their care and maintenance.

(8) Recreation for the family-hobbies for children.

(9) Festivals and special occasions.

(10) Domestic animals and pets-their uses.

### Unit III : Houses

#### Sub-Units

#### The Student

(1) History of human shelters.

- Gets to know about human shelter.

(2) Information about how the primitive man sought shelter for protection.

- Learns the types of houses.  
- Gets to know about building materials.

Progress from cave to hut, to mud house to a modern building.

- Understands what a hygienically good house is like.

(3) Types of shelter - huts, tents, mud houses brick-cement buildings, types of houses in different regions.

- Learns about the uses and maintenance of houses.  
- Understands that houses offer protection.

(4) Importance and use of shelter, protection and shelter, shelter for livestock.

- Learns that a clean house is essential for good health.

(5) Hygienically ideal house - plenty of light, ventilation, open space, etc.

- (6) Materials required to build houses — stone, mud, mortar, bricks, cement, wood.

Corrugated tin-sheets, tiles.

Parts of a house are made from these.

- (7) Artisans involved in house-building — masons, carpenters, potters and blacksmiths.

#### Unit IV : The School

##### Sub-Units :

##### The Student

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| <p>(1) Information regarding the school environment. Recording observations. Drawing sketches of the classroom and surroundings.</p>                  | <p>- Learns about the duties of the various employees in a school.<br/>- Records his/her observations regarding school and its surroundings.</p> |
| <p>(2) Information regarding the people working in a school - Duties of the headmaster, the teachers and the other staff.</p>                         | <p>- Knows the direction and distance of his/her house from the school.</p>  |
| <p>(3) Observation and maintenance of the school equipment and playground.</p>  | <p>- Observes discipline in the school.<br/>- Draws a rough map of the class-room, playground and school-surroundings.</p>                       |
| <p>(4) To determine the direction and distance of one's house from the school.</p>  |  |
| <p>(5) Information regarding the school equipment, such as chairs, desks, black-boards, educational aids, sports equipment and their maintenance.</p> | <p>- Participates with keen interest in the daily routine as well as the various programmes in the school.</p>                                   |
| <p>Recording observations.</p>  |  |
| <p>(6) Cleaning and decorating the school and its surroundings.</p>   | <p>- Takes adequate care of the equipment, educational, aids, etc., in the school.</p>   |
| <p>(7) Information regarding the daily routine in the school.<br/>Information regarding the various</p>   | <p>- Cultivates an affectionate, respectful attitude towards teachers and fellow students.</p>   |

programmes. Recording observations - studies, prayers, health check-ups, examinations, sports and games. Cleaning the school and its surroundings. Festival and cultural programmes.

## Unit V : Environment : Physical

### Sub-Units :

1. The physical environment around the house and the school-recording (hills, hillocks, rivers, streams, roads, railway lines, fields, buildings, temples, etc. in the case of rural areas.

Railway, roads, bus-stops, hospitals, post-office, shops for the urban areas.

The student -

Makes records of the hills, hillocks, rivers, streams, roads and railways in the surroundings.

(In urban areas : The student records the prominent buildings, hospitals, railway or bus terminals), the post office and the market).

- Determines the directions of the prominent landmarks from his house.
- (2) The impact of the physical environment on the life style of the people. The impact of regional climate (hot/cold) and rainfall on the life-style.
    - Draws a rough map of his/her surroundings.
    - Learns the following :
      - (a) Topographical variation in the surroundings.
      - (b) A landmark can be located given its distance and direction from known place.
  - (3) Determining, roughly, the direction and distance of one landmark in the environment from another. Drawing rough maps of the landmarks in the surroundings.

## Unit VI : Environment : Animals and Plants

### Sub-Units :

1. Observation of animals and plants in the environment and recording the observations. (In urban areas, local parks, gardens and zoos can be utilized to make these observations.)

2. A broad classification of the plants in the environment. (It should not be too technical or theoretical).

3. A broad classification of the animals in the environment. (size, whether insect, bird etc.)

4. Pets and their food.

5. Shelter of animals.

6. Uses of plants and animals.

### The student -

Observes the plants in the environs and records his observation.

Broad classification of the plants observed:  
(a) large - small,  
(b) trees/climbers  
(c) trees, bushes, shrubs, etc.

- Observes the animals in the environment and records his/her observations.  
- Classifies broadly the animals in the environment.  
(Such as four-legged animals, birds, insects, reptiles, etc.)

- Describes orally the food habits of animals.

- Draws pictures of plants and animals.

Describes orally the characteristics, food and other habits, size, etc. of the animals in the environment.

- Tells the uses of plants and animals in the environment.  
- Learns that there are various plants and animals in the environment and that they differ in their physical characteristics and food habits.

## Unit VII : Environment : Social

### Sub-Units :

(1) Occupations of the people in the environment (agriculture, trade, service etc.)- local artisans and local occupations.

### The student -

- Learns about the occupations of people.  
- Learns about the usefulness of the services rendered by the people.

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| <p>(1) Blacksmith (2) Carpenter<br/> (3) Goldsmith (4) Tailor (5) Washerman<br/> (6) Barber (7) Cobbler</p>  | <p>- Learns about the production processes in the surroundings.</p>  |
| <p>(2) Useful services rendered by the people around us.</p>   | <p>- Learns about the religious places/places of worship in the environment.</p>                                 |
| <p>(3) Information regarding the production processes in the environment (farming, dairy, poultry, rural industries, etc.).<br/> Information regarding large factories.</p>  | <p>- Respects the customs and traditions of people of different religions, participates in the celebrations.</p> |
| <p>(4) Religious places or places of worship in the environment.<br/><br/> (Temples, mosques, gurudwaras, churches, agiaris, etc.)</p>   | <p>- Makes a record of the items available in the local market.<br/><br/> - Helps clean the environment.</p>     |
| <p>(5) Festivals celebrated in the local area and their significance.</p>  | <p>- Learns about the means of transport and classifies them according to their speed.</p>                       |
| <p>(6) Cleanliness of the environment -<br/> Observing whether the environment is clean, cleaning the environment, the necessity of a clear environment. Ill effects of the dust, dirt and rubbish in the environment. Inculcating the habits that promote public hygiene.</p> | <p>- Learns about the standard of living of the people in the environment as also the special features.</p>      |
| <p>(7) Standard of living of people around us.</p>   |  |
| <p>(8) Observing traffic and means of transport.<br/> Traffic rules.</p>   |  |

**Unit VIII : Environment : Water**

The student —

**Sub-Units :**

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| <p>(1) Sources of water - information regarding the local sources of water-rivers, wells, lakes, tanks, streams, tap-water, etc.</p> | <p>- Records the local sources of water supply.<br/><br/> - Learns about the uses of water in daily life.<br/><br/> - Knows the difference between clean and polluted water.</p> |
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| 2. Uses of water - drinking, washing, cleaning, farming, etc.  | - Learns to find out the causes of water-pollution.   |
| Awareness that life depends on water.  | - Learns the proper methods of using drinking water.  |
| 3. Causes of water-pollution — bathing, cleaning and washing; urinating and defecation at the source of water.   | - Learns that used water should be channelized to plants instead of wasting it.<br>- Drinks clean (safe) water using clean vessels.   |
| 4. Methods of cleaning and purifying water— settling, filtering. Boiling (especially during epidemics) Ill effects of using polluted water.                          | - Avoids defecating/urinating near a source of water.<br>- Observes the methods of water-purification and describes them.   |
| 5. Storage and uses of water : Storing water, protecting stored water from becoming polluted. Using water economically, precautions to be taken while storing water. | - Learns about the various sources of water.<br>- Knows what the sources of water-supply are.<br>- Understands that keeping water clean and using only clean water are indispensable for good health. |

## Unit IX : The Earth

### Sub-Units :

### The Student

- |  |   |
|--|---|
| 1. Topographical variation - observing and recording the various features of local topography - e.g. ground, soil, various kinds of rocks, stones, hills and hillocks, rivers and streams. | - Observes and describes the topographical variation in the environment.<br>- Observes and describes man-made modifications in topography.<br>- Classifies objects on earth into living and non-living. |
| 2. Man-made modifications in topography - dams, buildings, roads, wells, bridges, canals - their uses and ill effects.   | - Talks about the man-made modifications in topography.<br>- Learns the following -   |
| 3. Life on earth : Plants and animals.   | - Things on earth are either natural or man-made.<br>- Some of the man-made modifications are harmful to life on earth., e.g. pollution   |

## Unit X : The Sky

### Sub-Units

### The student

1. Observing the sky during daytime and at night .
    - Objects visible during daytime— the sun.
    - The sun rises in the east and sets in the west.
    - Objects seen at night — the moon and the stars. Phases of the moon.
    - Fullmoon, waxing and waning phases, new moon. Some stars twinkle while others shine steadily.
  2. Inferring the directions from sunrise.
  3. Life depends on the sun. The sun gives us light and heat. The life of plants and animals depends on these.
  4. Other phenomena in the sky - clouds, their colours, rain and the rainbow.
- Observes and describes the objects seen in the sky during daytime.
  - Observes and describes the objects seen in the sky at night.
  - Compare this observation of the sky during daytime and at night.
  - Talks about the similarities and differences.
  - Recognises the sun, the moon and the stars.
  - Observes that the sun rises in the east and sets in the west and infers the four major directions from this observation.

## Unit XI : Occupations

### Sub-Units

### The Student

1. Occupations in the rural area:  
(1) Farmer (2) Tailor (3) Carpenter  
(4) Blacksmith (5) Barber (6) Washerman  
(7) Potter (8) Weaver (9) Postman
  - The work these people do.
- Occupations in the urban area:  
(1) Driver (2) Bus Conductor (3) Tailor  
(4) Washerman (5) Milkman (6) Vendors
- Learns about the various local occupations.
  - Learns how these occupations are useful to society.
  - Observes the tools and implements used in various occupations.
  - Learns the names of these tools and draws their pictures.

2. The usefulness and value of these people and the work they do.

## Unit XII - Festivals and Special Days

The student

Learns about the religious festivals of people belonging to various religions in the surroundings.

### Sub-Units

#### National Festivals

15th August - Independence day  
26th January : Republic Day

- Learns about the stories associated with these festivals.

Their significance (in elementary terms), ways of celebrating the national festivals in schools.

- Learns about the significance of national and other festivals.
- Learns about the importance of tolerance, respect for their religions.
- Recognises the picture of the national flag.
- Recites the national anthem in the proper manner.

2. The various religious festivals celebrated in the involvement — Padva, Diwali, Dasara, Bakr-i-Id, Mohurrum, Baisakhi, Christmas, Parsi New Years Day, Savanteran and other important religious festivals. The historical stories associated with these festivals.

Information in brief regarding how these festivals are celebrated.

3. Decorations in school and at home on festive occasions.
4. Participation in decorating schools and celebrating the festivals/special occasions there.

## Unit XIII : Means of Transport in the Environment

### Sub-Units :

The student

1. Means of transport in the past: - Learns that means of transport are necessary



- Palakhi , “Mena”, etc.
2. Means of transport in modern times.
    - Classifies the means of transport into fast moving and slow moving vehicles.
  3. Use of animals for transport, e.g. , elephants, horses, camels, donkeys, mules, buffaloes.
    - Draws pictures of some of the vehicles.
  4. Means of transport used in the rural areas: bullock-carts, S.T. buses, bicycles.
    - Carefully observes the pictures of vehicles used in the past.
 Means of transport in the urban areas: trains, aeroplanes, buses, motor-cars, motorcycles, scooters, etc.
  5. Means of transport on waterways : ships, boats, ferry-boats, etc.
  6. Classification of the means of transport.
    - (a) Fast-moving and slow-moving
    - (b) Modern and of past times
    - (c) Those used in peculiar geographical conditions.

#### Unit XIV : Air

##### Sub-Units :

1. Demonstrating with the help of simple experiments that air is everywhere and that it occupies space.
  - The Student—
2. Air is essential for plant and animal life. Plants supply oxygen which is essential for human and animal life.
  - Carries out simple experiments.
3. Air pollution : i) due to dust, fuels, smoke emitted by the vehicles and factories.
  - Learns two experiments to show that air is everywhere.
 ii) The need for purification of air.
4. Trees and plants are essential for reducing air-pollution.
  - Understands that air is essential for life (both animal and plant life).
5. Changes in weather during the day : Before the dawn, the temperature is
  - Learns that air gets polluted due to various reasons.

- at its lowest, it is high towards noon and afternoon and it begins to drop in the evening.
- Feels the temperature in the morning, afternoon and at night.
6. Seasonal changes in weather. There are three seasons in India : the rainy season, winter and summer.
    - Learns about the seasonal changes in weather.
  7. Changes in air, diet according to the changes in weather.
    - Studies the effects of the climate on the way of life of the people (e.g. the effects on food habits, clothing and shelter).
    - i. Cold items consumed during summer to keep the body cool. (These could be elicited from the children or be told to them.)
    - ii. Items consumed during winter which supply heat to the body (these could be elicited from the children or be told to them)
  8. Changes in air, clothing according to the changes in the weather.
  9. Different types of shelters according to the local climate.

## Unit XV : Clothing

### Sub-Units

- The student
1. Uses of clothes : to cover the body to protect it.
    - Learns that clothes are necessary to protect the body.
  2. Types of clothes, the different costumes worn in the environment.
    - Learns the importance of wearing clean and well-maintained clothes.

Types of cloth : cotton, wool, silk, made from synthetic fibre etc.
  3. People involved in making clothes and maintaining them : weavers, tailors, washermen, etc.
    - Gets to know about the materials used for washing clothes.
  4. Clean clothes and hygiene : Keeping clothes clean and well maintained and its correlation with hygiene.
    - Learns about the different types of clothes and their colours.

5. Materials used for washing clothes : soap, soap-nuts, detergents, etc. - Makes a drawing of a design on a cloth and colours the drawing.
6. Changes in clothing according to the season. - Learns about the processes of making clothes.
7. Colours of clothes and designs on them.

## Unit XVI : Food

### Sub-Units :

- |  |  |
|--|--|
|  | The student  |
| 1. Our food is mainly derived from plants. Food stuff derived from plants : (vegetarian food) cereals, pulses, vegetables, fruits etc. | - Learns that food is derived from plants as well as from animals. |
| 2. Food stuff derived from animals : milk, meat, fish, eggs, etc.  | - Can classify food items into various categories.                 |
| 3. Constituents of food : starchy substances, proteins, fats, salts and water.   | - Learns about the various ways of preparing food-items.           |
| 4. Uses of food : food gives us energy and strength and helps body growth.   | - Learns about the uses of food.                                   |
| 5. Ways of preparing food-items: cooking, roasting, baking, frying, steaming, etc.   |  |
| 6. Storage of food : sun-drying, salting, preserving in syrup.   |  |
| 7. Proper ways of eating food :  |  |
| i) One should sit properly while eating food.  |  |
| ii) One should chew each mouthful several times.   |  |
| iii) One should not leave unfinished food in the plate.  |  |
| iv) One should not eat sweet stuff all the time.   |  |
| v) It is important to maintain cleanliness while eating.   |  |

## Unit XVII : Systems of Communication

### Sub-Units :

1. Ancient means of communication through messengers or carrier birds.
2. Modern means of communication - post, telegraph, telephone, radios, television.
3. Information regarding how to use the modern means of communication :
  - i) How to write the address on a post-card, inland letter, envelope, etc. The prices of the above as well as of stamps.
  - ii) Visiting the local post office and getting to know its work.
  - iii) Information regarding when and how a telegram is sent.
  - iv) Information (with demonstration) about how to make a phone-call.
4. Uses of radio and television.

### The student

- Learns about the means of communication used in ancient times.
- Learns about the means of communication used in modern times.
- Learns about the benefits of communications.

## Unit XVIII : Energy (Sources of Energy)

### Sub-Units

1. The sun is the main source of energy. We get heat and light from the sun. The energy we get from the sun is essential for the growth of plants and animals.
2. Introduction of the conventional means of obtaining energy, wood, charcoal, electricity, kerosene, coal, gas.
3. Introduction of the non-conventional means of obtaining energy - solar cooker, bio-gas plants, wind mill.

### The student

- Learns that the sun is source of energy for earth.
- Learns that energy is essential for life.
- Learns that as much energy should be saved as possible.

4. Shortage of energy and need of saving it, saving of energy by using modern appliances.

# HISTORY - CIVICS AND ADMINISTRATION CURRICULUM

## STANDARDS III to V

Ten national common core components, included in the National Policy on Education are related nearly with all subjects in curriculum. But they are more closely related with History-Civics. In that content, the place of this subject in the curriculum is important. These national common core components lay foundation of the development of personality of the pupils. These national common core components are as follows:

1. History of India's freedom movement.
2. Constitutional obligations.
3. Content essential to nurture natural identity.
4. Indian common cultural heritage.
5. Equalitarianism, democracy and secularism.
6. Equality of the sexes.
7. Protection of environment.
8. Removal of social barriers.
9. Observance of a small family norm.
10. Inculcation of scientific temper (attitude).

Nearly all the aforesaid principles are very important in teaching History which lay foundation of social life.

The environmental reorganisation of study programme at I and II primary level aims at acquainting the child with physical and social environment. It is expected that social sciences should be taught at primary level in standards III to V through the medium of environment. The independent curriculum for History-Civics is introduced from standard III. Stories of great leaders and historical events, giving proper shape to human history, have been included in the curriculum of History-Civics at Primary level. It is expected that the writing should inspire the pupils.

Teaching of History-Civics aims at developing knowledgeable and responsible citizen of India. At the same time it also aims at students understanding of cultural heritage of the world as a constituent of the modern world.

The students have also to face the challenges in future. This also should be taken into consideration while teaching 'History-Civics'.

## Nature of Curriculum of History at Primary Level. (Standards III to V)

The point of view in framing this curriculum is to get pupils at primary level acquainted with incidents in human life that took place in the past, to give them general idea of calendar and to know progress and development made by man. Understanding of present and inspiration for the future is very important in teaching of History. It is expected that they should be acquainted not in details, with the important incidents and persons that enrich the culture of the world and affect the human life. This curriculum has been framed with the point of view to develop understanding among the students. This curriculum should not remain conventional, but should give impetus and the presentation should be easy and encouraging.

### History - Civics

#### General Objectives - Standards III to V (Primary Level)

1. To enable the students to obtain knowledge of social and physical environment and develop understanding of the same.
2. To enable the students to understand the process of development of society from ancient time to the present.
3. To enable the students to understand the process of interdependability between man and man and man and environment.
4. To inculcate among the students competence of minute observation, collection of information, promoting tendency of curiosity, developing skill in debating and developing one's own views.
5. To enable the students to develop a sense of ardent patriotism and international understanding.
6. To enable the students to create among themselves the value of equality and humanity without any reference to sex-difference, places of devotion (faith) and language.
7. To help the students to have understanding of cultural heritage of India, in the context of social changes, by remaining aloof from unfavourable and conservative tendency.
8. To inculcate trust in values such as democracy, socialism and secularism included in Indian constitution.
9. To inculcate a sense of respect for Indian unity and integrity among the students.

## Stds. III - History & Civics

### History Unit I – Our Heritage

Unit	Learning Outcomes
History through stories (with picture aids)	
1. Man in Stone Age	* Students learn that because of discovery of fire, metals, wheels etc. There was a change in the life of “Man in Stone Age”.
2. Discovery of Fire	* Students learn what inspired man to discover new things.
3. Agriculture - Settled Life	* Students recognise pictures of tools, houses and vehicles of Ancient Man.
4. Use of Metals	* Students are able to tell chronologically the changes and developments that took place in life of ancient man.
5. Civil Life	* Main points of understanding. Students obtain knowledge of how discoveries made by Ancient Man were responsible for improvement in Human Life.
6. Discovery of Wheel	* Students obtain knowledge of how man made use of nature and natural resources for his prosperity.
7. Means of Communication	

### CIVICS -

#### Unit II - Facilities that make Citizen's Life Happy

Unit	Learning Implication
1. Introduction of working of schools and colleges.	- Students obtain knowledge of the working of Panchayat Samiti, Municipal Councils, Corporation, Fair Price Shops, Dispensaries and Schools.
2. Introduction of working of dispensaries, Primary Health Centres and Veterinary Hospitals.	- Students obtain knowledge of the service of persons working in the above mentioned institutes on Human Life.
3. Introduction of working of Fair Price Shops and Banks.	- Main points of understanding - Students learn that because of the services of workers in Local Self Government, Institutions, Banks and Dispensaries our life becomes happy.
4. Introduction of working of Villages, Panchayats, Municipal Councils and Municipal Corporation.	- Students learn that it is our duty as knowledgeable citizens to co-operate with people who make our life happy.



## Standard - IV

### History and Civics

#### History Unit I - The Things that make our Life Happy and Prosperous

Unit	Learning Outcomes
I. Inhabitants of India, and how they helped to make India one nation.	* Students obtain knowledge of Languages spoken in India recognised by the Constitution and know different religions in India.
II. Formation of Indian Culture and facts that contributed to her prosperity and variety.	* Students obtain knowledge of food, dress, customs, houses, festivals, sports and attractions of different languages of the people of India.
III. Saints of Maharashtra	* Students can describe historical remains related to buildings of historical importance in India.
1. Saint Dnyaneshwar	
2. Saint Namdeo	
3. Saint Tukaram	* Students can recognise musical instruments and handicrafts found in different parts of the country.
4. Saint Eknath	
5. Saint Ramdas	
IV. Life of Shivaji through stories.	Main points of understanding -
1. Shivaji Maharaj - Establishment of Swaraj	* Students understand that people of different religions speaking different languages and following different customs are the constituents of India.
2. Shivaji's Administration	
3. Coronation	* Students understand how the saints of Maharashtra and Shivaji Maharaj created a sense of unity and well being in the people of Maharashtra.

#### Unit II - The Working of the Government

Unit	Learning Implication
1. Introduction to Panchayat Samiti and Zilla Parishad.	* Students understand rights and duties of a citizen.
2. Formation of Constitution (Elementary	* Students understand that our government is run

Introduction) Our National Aims and Objectives.

3. Rights and Duties of a Citizen Value of Franchise.
4. Correct use of Voting  
Payment of Taxes, Respect for Public Property.
5. National Symbols - National Flag,  
National Emblem, National Anthem.

by Indians only through their representatives.

\* Students understand importance of National Symbols and learn to respect them.

### Standard V - History and Civics

#### History Unit I - Changing World

##### Unit

##### Learning Outcomes

1. Gautam Buddha
2. Socrates
3. Spartacus
4. Abraham Lincoln
5. Karl Marx
6. Sun Yat Sen
7. Swami Vivekananda
8. Martin Luther King

- \* Students understand how man has constantly fought against injustice and has fought for independence and equality.
- \* Students understand that man has no alternative but to fight for independence and equality.
- \* Students understand how great leaders and thinkers contributed to strengthen the fight for independence and equality.

#### Unit II Our Struggle for Independence

##### Unit

##### Learning Outcomes

1. Establishment of British Rule in India
2. Effect of British Rule on Social and Economic Life.
3. War of Independence of 1857 (Uprising) against British Rule - Nature and Effects.

- \* Students can narrate story of struggle for freedom.
- \* Students learn how many leaders worked and sacrificed for Independence of India, and for creation of Independent India (Nav Bharat) by uniting Indians from different parts of India.
- \* Students learn that our independence is a result of hard struggle of Indians from

4. Important thoughts and action in Social Revival.
5. Establishment of Congress.
6. Swaraj, Swadeshi, Boycott and National Education.
7. Jallianwala Bagh Massacre—Non-Co-operation Movement, Total Independence, Dandi March.
8. Work of Revolutionaries.
9. Azad Hind Sena.
10. Quit India Movement - 1942.
11. Naval Uprising
12. Achievement of Independence.

different parts of the country.

- \* Students learn how leaders went through a number of difficulties and selflessly laid down their lives for independence.

### Unit III - United Nations

## CIVICS

### Unit

### Learning Outcomes

1. United Nations - Aims and Objectives - Introduction

- \* Students can narrate objectives of United Nations Organisation.

- \* Students understand India's role in achieving the objectives of UNO.

- \* Students understand the role of U.N.O. regarding human rights, maintaining peace and struggle against discrimination of race.

Main points of understanding -

- \* Students are made to understand that co-operation of other nations is necessary for the establishment of world peace for the prosperity of human race and for the development of each individual in his country.
- \* Students learn that the U.N.O. is like one family of many nations that maintains peace and develops a sense of co-operation among different nations.

# GEOGRAPHY

The syllabus of Geography includes the study of Astrology, Physical Geography, Regional Geography, and Observational Geography. The study of geography starts from Std. IIIrd with the introduction of district, Maharashtra for Std. IVth, general introduction of India for Std. Vth, neighbouring countries of India for Std. VIth general study of continents in southern hemisphere for Std. VIIth and general study of continents in northern hemisphere for Std. VIIIth. In this way the scope of the environmental study is broadened step by step from district to the study of the world.

The teaching concept of Geography is to improve the standard of living of human beings with the use of geographical conditions and creating a geographical view among the pupils. In order to create this view, observation, information of geographical phenomena, comparative study of natural regions of the world have been included in this syllabus. It is expected that the inter-relationship between human-being and nature should be appealed through the study of geography. To live a happy and prosperous life, man always makes changes in nature with the help of his intelligence, efforts and skill. However the natural calamities such as, cyclones, floods, earthquakes destroy the human life. The aims of geography study are to create the ambition of overcoming these natural calamities and to know how the human life is related to the geographical environments and how man adjusts himself in the adverse circumstances. At the same time the creation of the integrated view about the ways of life of different people in different geographical environments is expected.

The local needs can not be satisfied with the limited production aids and dense population so the exchange starts. This enables the confirmation of the idea of interdependence. The increase in population creates problem as regards the fulfillment of daily needs of man, so it is essential to emphasize this problem.

Map reading, map filling, have been included under 'practical' unit to encourage the students for the use of maps. To create the interest in observation, some innovative programmes have been suggested under 'observation' unit.

Geography is not meant only for class teaching but it is essential to teach by establishing the intimate contact with nature to get idea of geographical phenomena.

## Objectives of Geography Teaching (For Std. IIIrd to Std. Vth)

1. To promote an understanding of the effect of the different elements of physical environment on man's way of living.
2. To acquaint the pupils with - how the human being tries to make maximum use of natural gifts to mean his own needs and understanding that how the people living in.
3. To help pupil in the other parts of the world have utilized their natural resource for their progress - on their experiences, we Indians can develop our resources. Not even that but with the help of modern science and technology, we can increase the natural resources.

4. To develop an ability to use the tools of geography such as maps, globes, atlases, charts and photographs.
5. To encourage and help pupil by arranging excursion for the observation of nature, manmade farms, industries, means of transportation. For the enhancement of fruitful experiences, there should be programmes like establishing a school museum and visits to the other museums may be encouraged.
6. To motivate pupils to use their received knowledge to understand the casual relationship in geography.
7. To introduce in brief to the pupils the geographical tools and methods used by the geographers in the beginning.

### Geography : Integrated Chart of Proposed Syllabus

Geography (Unit)	Std. IIIrd	Std. IVth	Std. Vth.
Regional	Introduction to the geography of the district.	Geographical Introduction to the State of Maharashtra.	India: a Geographical introduction.
Physical	Introduction and information of nature of climate and physical features of the district.	Earth-Lithosphere, Hydrosphere, Atmosphere elementary introduction. Continents and oceans earth-its shape	Physical environment of the earth - Lithosphere, Hydrosphere, Atmosphere - additional information.
Astrological	Eight directions-Moon-Sun Intercalation elementary information.	Earth and solar system. Planets-size, orbit and revolution-Moon-satelite of the earth.	Earth - Daily rotation and its effects.
Human life	District-Natural wealth, occupation, life of the people.	Maharashtra - Natural wealth occupation, life of the people.	India - Natural wealth, occupation life of the people.
Practical, Observation and Map Reading	Local excursions mountains, dams, sea-shores, hills, rivers etc. Reading of district map sketch of house with directions.	Local excursions harbour, docks, fields, railway-stations, bus stands etc. Conventions of map making and map reading, maps of Maharashtra, Sketch of a village.	Local excursions factories, mines, communication centres, dams etc. Observation and reading of map of India, Reading of raised maps. A general sketch of a river basin surroundings.

**Std. IIIrd - Subject : Environmental Studies Geography**

Sr. No.	Unit	Learning outcome
1.	1. Observation	The pupil recognises the directions and sub-directions.
	1.1 Introduction to directions.	
2.	2. Our District	Gets acquainted with geographical setting of the district. Recognises mountains, plateaus, hills, rivers, ponds and lakes of the district. Understands the climate of the district (hot, cold, dry, wet, extreme, equable, rainy, winter, summer seasons).
	2.1 An introduction to geographical setting of the district low and high regions, mountains, hills, plateaus, plains, rivers, lakes, climate.	
	2.2 Dams-bunds-canals vegetation and its protection, minerals resources of the district.	Can differentiate between river and canal, pond and dam.
	2.3 Main occupations of the district. Agriculture and agricultural work.	Knows the main occupations of the district.
	2.4 Major crops of the district. Food crops and fruits.	Knows major crops of the district can differentiate between food crops and cash crops.
	2.5 Local occupations and industries (big and small) in the district supply of raw materials process, distribution and exchange of commodities.	Shows the main industries of districts on the map. Knows the various kinds of trade in the district.
	2.6 Means of transportation in the district : Road ways, Railways, Waterways.	Shows main roadways and railways on the district map.
	2.7 Life of people in district (secularism urban and rural). Food, clothing, shelter, occupation.	Knows the effect of geographical condition on the occupation and the living style of people.
	2.8 Martyr's monuments, historical places,	Shows the Martyr's monuments and sightseeing places on the district map.

industrial centres, holy places, hill stations (entertainment in the district).

- |      |  |   |
|------|--|---|
| 2.9  | Tourist places in the district.                                      | Knows that human being uses available local resources to the maximum extent.  |
| 2.10 | Main festivals and fairs in the district.                            | <p>Acquires the knowledge of main festivals and fairs of the district.</p> <p>Knows that the people work in various occupations to meet their needs.</p> <p>Knows that the human life has become more complicated according to the changing ages so there is variation in basic living.</p> <p>Knows that people living in district have same views in various aspects though they have different ways of living.</p> |
| 3.   | 3. Universe-Introduction   | Knows by the observation of the sky, the difference between planets and stars.  |
|      | 3.1 Description of sun, moon, planets and stars.                     | Knows concepts of time.   |
|      | 3.2 Information of the sun and the moon.                             |   |
|      | 3.3 Intercalation-Elementary-information- day, week, month, year.    |   |
| 4.   | 4. Practical observation and map reading.                            | Observes land forms like hills, valleys, rivers and streams, bunds and dams, banks and shores in the excursion arranged in the vicinity. District Map-reading. Draws a house sketch with direction.   |
|      | 4.1 Demonstration to observation and map reading through self-study. |   |

## STANDARD IV

Sr. No.	Unit	Learning outcome
1.	1. Our Maharashtra State.	The pupil shows the location of Maharashtra and its neighbouring states in the map of India.
	1.1 Geographical location of Maharashtra in India.	
	1.2 Physical configuration of Maharashtra.	Shows mountains, plateaus, rivers and plains in the map of Maharashtra.
	1.3 Mountains, rivers, river valleys, plains and plateaus in Maharashtra.	
	1.4 Climate of Maharashtra, water supply according to natural divisions of Maharashtra.	Can tell the climate in various parts of Maharashtra. Differentiates between climate and weather.
	1.5 Natural vegetation and wild animal life of Maharashtra.	
	1.6 Main occupations in Maharashtra — Agriculture.	Can tell and show the main crops in various part of Maharashtra.
	1.7 Main crops of Maharashtra.	
	1.8 Maharashtra-minerals and power resources.	Can show and tell the distribution of minerals and industries in the map of Maharashtra State.
	1.9 Maharashtra-Industries and occupations.	
	1.10 Maharashtra - important ways of transport and means of communication.	Can show occupations and means of transport and communication in the map of Maharashtra.
	1.11 Maharashtra - differences in life style of people, language, culture, important festivals and fair according to regional variations.	Acquaints with the various ways of human life in the state of Maharashtra.



	1.12	Maharashtra - major monuments and holy places, centres of tourism and cities.	Locates the important places in the map of Maharashtra.
	1.13	The State of Maharashtra is an important part of our country (from the social as well as economic point of view).	Compares the various parts of Maharashtra on the basis of fertility. Knows suitability of the climate for different crops. Tells the names of wild animals. Acquires the information of the effect of climate on human life and occupations. Knows how to plan and cooperate for the better use of natural resources. Knows the effect of modern agriculture, industries, means of transport and communication on human life. Gets introduced to the great culture of our state and knows the contribution of various persons to it by the monuments in the state. Knows the interdependence of various parts of the State on each other to fulfill their needs. Knows that our State is the indivisible part of India.
2.	2.	Our world.	Shows land and water on the globe.
	2.1	The Earth - Human Habit.	
	2.2	Introduction to globe: Lithosphere, Hydrosphere, Atmosphere (general introduction)	Compares the shapes of continents and oceans.
	2.3	Distribution of land and water on the earth.	Realises the idea of the diversity of the earth's surface and atmosphere.
	2.4	Major continents and oceans on the earth.	Knows the shape of the earth.
	2.5	Shape of the earth (earth's photograph taken by Neil Armstrong)	Knows the relationship between the earth and the solar system.

- 3            3            The earth and the Solar System.
- 3.1        Description of the Solar System - names of the planets, shape, orbit, revolution.
- 3.2        The earth is one of it. Moon - satellite of the earth.
- 4.           4.           Map
- 4.1        General conventions of map drawing and map reading.
- 5.           5.           Practical observation and map reading.      Visits and observes nearby markets, railway station, bus-stand, harbour, farm. Observes and reads the map of Maharashtra. Draws rough sketch of a village.

## STANDARD V

1. 1. India
- 1.1 General geographical introduction of India. Location, extension & boundaries of India in the map of Asia and the World. Shows the location of India in the map of the continent of Asia and World.
- 1.2 Natural divisions of India. Shows natural divisions in the map of India.
1. Northern mountainous region Differentiates between plains, plateaus and mountains.
  2. North - Indian Plains India has been divided into four parts on the basis of physiography.
  - 3 Southern plateau region
  - 4 East and West coastal region Knows that India's progress is balanced due to diversity of the physical features in these four divisions.
  - 5 Andaman, Nicobar, Lakshadweep and Minicoy Islands
- 1.3 Introduction to the chief features of India (large country, large population). Tells the effect of physical features on India's climate.
- 1.4 Climate of India, features of climate, tropical region, monsoon climate. Knows the Himalayas is the highest and the biggest mountains in the world. It has proved a boon through various ways to India.
- 1.5 Distribution of rainfall—irregularity and its effects, floods and droughts. Knows that agriculturally the North Indian plains are one of the major plains of the world.
- Indian's plateau is a stable land because it is ancient.
- Knows that Deccan plateau provides black soil (regur) for agriculture, useful building material for construction and various minerals.
- Knows that though the coastal region of India is long and narrow, it is agriculturally rich because of Deccan plateau and natural harbours

are formed due to its peculiar physical features.

Knows that India's natural diversity are interlinked and are complementary to each other.

Knows man's response towards nature is different in various regions, and so this has brought diversity and prosperity in our life.

Knows that though there is diversity in living style in different parts there is similarity in them.

Understands variation in the climate of various regions.

2.

2. India - Natural resources and their development.

2.1 Natural resources of India - minerals, vegetation, oceans.

Tries to know the concept of natural resources.

2.2 Power resource — thermal, hydro and others.

Shows the locations of dams and other projects in the map. Tells the kinds of soils in the different parts of the country.

Knows the availability of natural resources like forest grasslands — agriculture in various parts of India.

India is endowed with land forest wealth, water wealth, mineral wealth.

Knows that if these resources are used properly, the whole of India can progress by all means.

Knows that long term planning of natural resources is essential as it profits the people in long run.

- 2.3 Human resources — efficiency, population, food, health, education. So improving standard of living with the limited resources like food, health and education. Knows that water, vegetation and animal wealth are perishable whereas resources like minerals are imperishable.
- 2.4 India - main occupations- Agriculture major crops - kharif rabi, irrigated - distribution efforts for increase in production, green - revolution — domestic animals — bullocks, cows, buffaloes, goats, sheeps, poultry. Knows that the fast expansion of population exerts high pressure on other resources and hence it needs planning in population and production.
- 2.5 Modern industry, importance of machines, factories and small industries. Agro-based industries and their distribution (sugar, milk, jute, tea, coffee, cotton) and other major industries.
- 2.6 Communication and trade (internal and international trade), distribution. Knows roadways, and railways on land and seaways linking with various parts in our country shown in the map of India.
- 2.7 India - transport and communication and transport-roadways National Highways, railways,seaways- canals, coastbound waterways, Airways. Knows the advantages of means of speedy transport and communication. Knows that the modern means of transport and communication bring the interdependent parts of the country together.

- |     |   |  |
|-----|---|--|
| 2.8 | Means of communication. Primary introduction to posts and telegraphs, telephone, broadcasting, television, news papers.   | Understands that means of speedy transport and communications have tremendously increased the trade.<br><br>Knows that exchanging ideas and problems of different people in various parts to grow integrity. |
| 3.  | 3. India : Life of the people (in the context of human resources).  |  |
| 3.1 | India -Life of the people in various parts (urban and rural, progressive and non-progressive regions, population engaged in agricultural occupation etc.<br><br>Flood - clothing - shelter occupation - language festivals and fairs, important places, capitals, main cities, tourist centres, places of pilgrimage and martyre's monuments. | Knows the diversity in the life of the people living in different parts of the country.<br><br>Knows the mutual effects of various ways in folk life. Living in different parts of the country.              |
| 3.2 | Contacts between the various parts of the country. Integration through diversity.   |  |
| 4.  | 4 Physical environment of the earth.  |  |
| 4.1 | Additional information of Lithosphere, Hydrosphere, Atmosphere — distribution of mountains, plateaus, plains, Lithosphere,  | Knows that the earth has three envelops.   |
| 4.2 | Atmosphere — Structure  |  |

		of atmosphere and its importance.	
	4.3	Hydrosphere - names of oceans, estuary, gulf, bay, ocean, strait.	
5.	5.	Our earth.	
	5.1	Movement of the earth, daily rotation and its effects.	Acquires the knowledge of the concepts of rotation and its effects.
6.	6.	Practical observation and map reading.	<p><b>Notes</b></p> <ol style="list-style-type: none"> <li>1. The pupils will visit dams, factories, communication centres in their vicinity.</li> <li>2. Observes and read the map of India.</li> <li>3. Draw rough sketch of surrounding and river valley.</li> <li>4. Read the raised map of India.</li> </ol>

# ART

## Introduction

This curriculum in creative Art has been made flexible. There is nothing extra-ordinary in it. In fact, all such activities which the child inherits and which are performed in his natural environment have been included in this programme. We find that there are many tribes which are still performing their traditional art in society. These arts are the hereditaries of those tribes, and hence proper weightage has been given to their art in this curriculum.

Visual, Plastic, Applied, and performing arts have been included in the curriculum. The programmes in all these fields have been arranged in accordance with the growing capacity of the child to handle the media and the equipments. The scope of the programmes in the curriculum will be widened, at the creative thinking, self-expression, skill to handle the equipments and minute observation power of the child develops.

While organising these programmes and activities, the teacher should take into account the child centred approach, and the child's development stages. To encourage the enthusiasm and creative participation of the child, the teacher should implement many motives. He is expected to employ a method or create an atmosphere which would give way to free expression through creative activity.

Through the learning outcomes and the activities suggested on the basis of the N.C.E.R.T.'s NCPSE publication (Ref. 1-3-4/2-3-1/2-5-6) the teacher is at full liberty to choose any activity he thinks fit according to the child's need at a given time. The programmes and activities in all fields of arts need to be organised frequently and also on an optional basis. It is suggested that ten percent of the total time available of educational hours should be utilised for giving the creative learning experiences. This amounts to 20 full days, if the number of working days is 200 in an academic year. In other words, 5 periods of 40 minutes each a week should be allotted to each class. It is expected that these 5 periods for "Creative Arts" should be utilised in a well organised and well planned manner. Taking into consideration the established fact that the students study only those subjects which affects their whole performance and results at the final examination due weightage should be given to the Art subject. It is suggested for this purpose that this subject should be kept at par with other core subjects like Science, Maths., Language etc. In Standards V to VIII. examinations in this subject should be organised with all other school subjects and the marks obtained in it should be considered as an integral part of their performance. This subject should be taken into consideration while declaring the results. In short, this subject should be treated as a "Subject for Examination" like Science, Maths., Languages and it should lose its identity as "Certifying Subject". Hence, after this it has become inevitable according to the National Policy.

For child's overall development "Art" have been given a very important place in the new curriculum. The term "Art" includes drawing and painting, sculpture, music, dance, and drama. All these arts should be viewed, as an integral whole and should be taught with the same view at the primary stage, i.e. (1st to 8th classes).



They have been divided into following 3 broad categories at the primary level taking into consideration the intellectual, emotional, physical and social development of the child. The curriculum, has also been framed accordingly.

Group 1 : Standard 1 to 2 (Age group - 6-7 years).  
(Primary)

Group 2 : Standard 3 to 5 (Age group - 8-10 years).  
(Primary)

Group 3 : Standard 6 to 8 (Age group - 11-13 years).  
(Higher primary)

The objectives to be taken into consideration at this level are :-

1. To increase and develop interest among the children in "Creative Art".
2. To provide opportunity to the children to express and enjoy themselves freely.
3. To develop the sensitivity of the child.
4. To provide opportunity to express the innate qualities of the child and to develop self-confidence.
5. To provide opportunity for creative imagination and scientific attitude.
6. To arouse the attitude of community living in the child.
7. To help the child to acquire mental fitness for individual development through self-expression.

## ART

### Group 1 : Stds 1 and 2 Primary

**Specific objectives :**

1. To provide opportunities to handle various media and allied equipments.
2. To arouse and develop experimental and research attitude.
3. To help the child to develop creative imagination and aesthetic sense.
4. To develop independent thinking.
5. To enable child to express himself more freely.

### "Curriculum" - A-1

#### (Two Dimensional Design Decoration)

**Activity :** To decorate the ground, walls, corners, boards and big sheets of papers.

**Units for Decoration :-** (The figures should match the size of the paper sheet). For individual activity a drawing paper sheet of 1/4 28 CM. x 38 CM., may be used which could be decorated by means of big and small points (dots) various kinds of lines, freehand designs, leaves, flowers, butterflies and birds. Students should be divided in small groups and the activity should be performed as a group activity and individual activity also.

**Material :** Rangoli (white and coloured) sand (coloured with poster colour as ink), white and

coloured chalks, posters, crayons, coloured clay, flat and circled brushes, brushes made from soft cotton and waste cloth, bamboo pens, nibs, felt pens and sketch pens.

## **A-2 (Print-making and Collage)**

### **Print-making**

**Activity :** Decoration should be drawn on a paper sheet or dard paper of 1/2 imperial size. Different shapes obtained by making use of print - making medias (adequate area of the paper should be utilized for print - making).

**Material :** Leaves, flowers, twines, Threads, Scrambled papers, Cut pieces of Potatoes, Onions and Lady-fingers, Simla Mirch (Capsicums), Gunny bags, Plywood pieces, Corks, Ink, Water colours, Poster colours, Stamp pad etc.

**Activity Collage :** Decoration should be done on 1/4 imperial size paper, cardsheet or card board.

Paper tearing to be introduced. Paper to be torn into long, short, thin strips etc. Also, paper to be torn to form geometrical shapes, (Square, Triangle, Circle, etc.) leaves, flowers, butterflies, birds, etc. This to be done groupwise and on individual basis for group work. The equipment should be bigger in size, (56 cms. x 76 cms. of imperial paper). Adequate size of paper to be given for the required figures.

**Material :** Paper sheet of different texture golden and silver coloured paper sheets, printed coloured paper sheets available in magazines, news papers, and packing papers, straw, used match sticks, string, thread, cotton coloured strips of waste cloth. Gelatine paper, kite paper, paste, gum or fevicol, etc. should come after 'Activity' for collage previous page.

**Means of Decoration :** Various figures available out of scrap paper, big and small strips, geometrical figures, (triangle, square and circles etc.) leaves, flowers, butterflies, small birds etc. This activity should be performed as an individual or group activity. For group work imperial paper of 56 cms. x 76 cms. size should be used for decoration, handmade paper sheet, figures of adequate size according to the paper sheet be used).

### **AA-1 (Two Dimension Pictorial Composition)**

**Activity :** To draw pictures of given subjects.

**Subject suggested :**

1. **Myself and my movements :** i.e. eating chapatis or laddus, drinking milk, running, going to school, playing the flute or beating 'Dholak', laughing etc.
2. **My family and myself :** i.e. going to market with my brother, grand mother telling me a story. All members of the family watching T.V., mother feeding me etc.
3. **Myself and the nature :** Wandering in the garden with my sister, wandering the rain, walking in the sun with an umbrella, watching the full moon on a full moon night, frightened by the thunder etc.

4. **Myself and Games** : i.e. playing marbles, flying kite, playing carrom with sister, playing cricket etc.
5. **Myself and animals** : i.e. catching the kitten, playing with a calf, feeding the parrot etc.

**Material** : Any material suitable for drawing picture from the list given under A.1.

#### **AA-2 - Collage**

**Activity** : Prepare a collage picture on given subjects.

**Subjects** : As per AA-1 above.

**Material** : As given under A-2.

#### **E-1 : Three Dimensional Design Decoration**

- Activity** :
- (1) Decoration on the clay slab or any similar other material.
  - (2) Decoration by pasting other readymade figures on the clay slab.
  - (3) To compose with other waste material.

**Means** : Decorate original clay slab with the help of big and small clay balls, clay strips, different figures made by pressing the clay, clay rolls.

- Material** :
- (1) Clay or plasticine and waste materials.
  - (2) Grains of different colours, seeds, match sticks, straw, broken pieces of glass or any other kinds of coloured beads etc.

**Activity 3 : Other media** : To decorate anything, pasting other waste materials on it.

**Means**: As under A-1.

**Material** : Clay (earthen) pots, small boxes, card paper, boxes and all other materials given under E-2 for decoration.

#### **E-2 : Three Dimensional Construction**

**Activity** : To prepare a suggestive sculpture with the help of clay.

**Subject** : Birds, human beings, animals, fruits, of various kinds etc.

**Material** : Clay or plasticine.

#### **E-3 : Construction from other media**

**Activity** : As per E-2.

**Subject** : As per E-2.

**Material** : Any such waste material which is useful in drawing out of the given subject, i.e. paper boxes, strings, straw, dried trees branches, leaves, beads, feathers etc.

**Notes** : The suggested curriculum and material is of general nature. The teacher should take into consideration the child's capacity, availability of material. Age, factor without disturbing

the basic theme behind the curriculum and then organise the programmes of the curriculum. For Std. 1st teacher should give chances to handle the material before using it actually, while teaching drawing the teacher should also incorporate in other art-media accordingly.

### **Group 2 - Stds. III-V - Primary**

**Specific objectives :** The following in addition to the objectives 1 to 5 laid down under Group-1.

- (6) Continuous development of child memory and power of observation.
- (7) Fixation of emotional, conceptual and figurative symbols while expressing.

#### **Curriculum : A-1 (Two Dimensional Design Decoration).**

All the group activities suggested for Stds. 1 and 2 and the following activities in addition in individual form. Free hand decoration of suggested things like bags, handkerchief, kits etc.

**Means for Decoration :** Free geometrical figures such as square, triangles, circles etc. and in addition those suggested under Stds. 1-2 (figures drawn without using the compass box equipment).

**Material :** As suggested for Stds. 1 and 2. Suitable material for particulars subject should be used.

#### **A-2 : Print - making and collage.**

##### **Print - making :**

**Activity :** As suggested under A-1 but in a more polished manner having fine finishing.

**Units for Decoration :** Any suitable units may be chosen from those suggested for Stds. 1 and 2.

**Material :** As suggested for Stds. 1 and 2.

##### **Collage :**

**Activity :** As suggested under A-1 above in a more polished manner having fine finishing. Getting different figures after cutting the folded paper, with fine network cutting.

**Unit for Decoration :** All units suggested for Stds. 1 and 2 should be cut with help of a pair of scissors.

**Material :** As suggested for Std. 1 and 2.

#### **AA-1 (Two Dimensional Pictorial Composition)**

**Activity :** To draw pictures on any suitable subject which falls within the child's experience, emotion, local and social environment.

**Suggested list of the subjects :**

- 1) Buying balloons from balloonseller,
- 2) Playing "Langdi" ,

- 3) Flying kites on the eve of "Sankranti",
- 4) Picnic (community lunch),
- 5) Doctor examining a patient,
- 6) Decorating house for 'Diwali' ,
- 7) Class cleaning,
- 8) Planting of trees,
- 9) Catching the thief,
- 10) Scenes of sunrise, sunset and the night,
- 11) Bringing bundles of hay home,
- 12) Fetching water in utensils on head.

**Material :** Choose any suitable material from the list suggested for Stds. 1 and 2.

#### **A A -2 Collage :**

**Activity :** To prepare picture on given topics,

**Subject/Topics :** As per AA-1 any figure picture from the magazine and newspapers could be pasted and the background should be painted and mix media also should be used.

**Material :** Any material suggested for Std. 1 and 2 under "Collage method".

#### **E-1 : (Three Dimensional Design Decoration)**

**Activity :** As suggested for Stds. 1 and 2, and to some extent simple earnings should be introduced.

**Units for Decoration :** As suggested for Stds. 1 and 2.

**Material :** As suggested for Stds. 1 and 2.

#### **E-2 : Activity : (Three Dimentional Construction)**

As suggested for Stds. 1 and 2.

**Subject/Topics :** As suggested under Stds. 1 and 2 and pictures of human being depicting their personal peculiarities (women preparing chappatties, women cleaning the grains, toyseller, fisher women, vegetable seller etc.)

**Material :** As suggested for Stds. 1 and 2.

#### **E-3 : Construction from other media.**

**Activity :** As suggested for Stds. 1 and 2nd.

**Subject/Topic :** As suggested for Stds. 1st and 2nd and marks.

### **DRAMA**

Drama is regarded as one of the important and self explanatory means of expressing human civilisation right from its inception. Historians exploring history of the aboriginals residing in far of corners of the world have to take note of this important means. For this reason the child needs this media for his learning. Being an important means of self-expression, dramatis supposed

to be very effective media of learning. This expression is manifested in two ways : 1) Group : (community) expression, (2) Individual expression : balance is expected through this media. All round development to be made through this media.

In drama, the process is more important than the plays and therefore the participants assume importance and not the audience and so in a drama child's imagination, understanding and expression should assure more importance than any other external factor.

### Primary : Standards I and II

- Objectives :**
- 1) Experiencing the dramatic situation,
  - 2) To increase the capacity to impart this experience to other through expression and imagination.
  - 3) To provide opportunity to the child to transform himself into a 'Balanced Personality' by relating himself to his environment and nature around him.

- Activity :**
- 1) To perform (act) following activities rhythmically through free movements :
    - (A) Sweeping, cleaning utensils, cooking and other house work.
    - (B) Gardening, drawing water from the well.
    - (C) Swinging on a swing, skipping a rope, playing on a slide etc.
  - 2) To mime the following characters rhythmically :
    - (A) Soldier, Motor Car, Driver, Wood Cutter, Farmer, Blacksmith etc.
    - (B) Dog, Cat, Mouse, Horse, Monkey, Hare, Birds and Other Creatures.
    - (C) Hot, Cold, Sour, Sweet, Chilli Pungent (to act these reactions).
  - 3) Action Songs.
  - 4) Recognising games through acting.
  - 5) Presenting situations using different material.
  - 6) Lecture with gestures (expressions).

**Notes :** Any suitable sound producing instrument from the following may be used in the above activities rhythm sticks, drums, tambourine, cymbals, harmonium and other instruments which produce sound and also clapping,

### Primary : Standards III, IV and V

During this age group the child develops interest in doing strange and fantastic things. The programmes and activities at this stage should be prepared and organized on this basis and on the strength of previous experience, incorporating suitable changes as shown below :-

**Objectives :** As shown under primary.

**Activities :** To present (perform) the following activities through miming, rhythmically :

- (1) (A) **From day to day life:** Dancing, Swimming, Running, Playing on any musical instrument.

(B) **Imaginary** : (1) Building a house, entering a den in the forest, drive in a motor car, flight in an aeroplane journey, by boat.

- (2) Mime rhythmic movements to theme of a poem.
- (3) Language riddles.
- (4) To act day to day life situations.
- (5) Expressing oneself through story-telling.
- (6) Improvisation.

The child likes to present himself before the audience in this age group hence he should be allowed to do. But however, care should be taken that this presentation should be done groupwise i.e. folk dancing, community singing and all round exercises in groups. Callis-themes etc.

### DANCE

In urban civilisation of Maharashtra, today the art of dancing is not regarded respectfully. But this art is an integral part of the rural civilisation and particularly the aboriginals civilisation. History tells us that the aboriginals have shaped their emotions through this art only. The only powerful means, which could bring the whole humanity together today is Dance and Music.

It is observed that in urban areas only girls take part in dancing while the boys keep themselves away from it. It is suggested for this reason that these performing art should be taught as an "integral whole" and drama, folk singing should be the base of this teaching process so that these may be made popular in the student community. The fact being known that dancing helps one to make his movements graceful, the stalwarts in the sports field have started using this to their benefits.

- Objectives** :
- (1) To create interest in graceful (harmonic movements).
  - (2) To learn to have control over one's body and its different parts.
  - (3) To inculcate habits for suitable body position and movements.
  - (4) To provide opportunity to develop creative talent.
  - (5) To learn to use the surrounding atmosphere for one's entertainment.
  - (6) To develop the feeling of unity and of "National Integration" by using the other dance systems in the nation.

**Primary** : Standards Ist and IInd. To use the action songs for rhythmic movements and to act some stories rhythmically.

**Primary** : 3rd, 4th and 5th

- (1) Action songs and songs based on stories as per above.
- (2) Stepping to the tunes of "Ghoongru" and Kathi (stick) and Lezim.

### SINGING

These arts are interlinked to each other as well as with the other school subjects. Of these art music is connected to language and Physical Education. It should be taught as an integrated part of these subjects also at the same time the teaching of music should supplement these subject. With this view various songs have been included in the curriculum. While framing the curriculum

the standards are divided as following at the primary levels.

Group 1 : Standard 1 and 2, primary.

Group 2 : Standard 3 to 5, primary.

Group 3 : Standard 6 to 8, upper primary.

The general objectives of art have been given previously.

### **Groups : Standards : I to II Primary**

- Specific objectives :**
- (1) To provide opportunity to the child to listen and sing various songs.
  - (2) To provide opportunity to participate in community singing.
  - (3) To help in developing and fostering the sensitivity.
  - (4) To develop the child's ability to listen, ability to memorise and ability to observe.
  - (5) To help him to keep the movements in tune and more natural.

### **Curriculum**

- (1) Prayer and National Anthem.
- (2) Nursary rhymes.
- (3) Poems and "Abhangas" from the reader.
- (4) Action songs.
- (5) Nature poems.
- (6) Folk songs and other songs, (songs also from surrounding environments).
- (7) Introduction to the various sounds in the surroundings and sounds of birds.

- Activities :**
- (1) To expose and to make the child listen to as many songs as the teacher can. While doing this, the teacher should pay attention to words, rhythm, action etc.
  - (2) For 'rhythm' the teacher can use the following movement of legs (flicks), clapping, tin metal plates, utensils, "Ghoongru" triangle, dandia sticks etc.
  - (3) The teacher should act while he sings.
  - (4) To give opportunities for singing individuals and in groups.
  - (5) To provide opportunity for expression by organising "Balsabhas".

### **Group 2 : Standards : III, IV and V : Primary**

**Specific objectives :** As per group 1 (1 to 5)

- (1) To help the child to increase the level of his abilities.
- (2) To help him develop individual and community skills.
- (3) To develop child's ability to lead.
- (4) To develop the capacity of rhythm, catching in the child by means of (Tikmi, Cymbal, Ghoongru,) Triangle tipries, etc.



## Curriculum

- (1) Prayer Jan Gan Man, Vandemataram.
- (2) Poem from Reader and 1 and 2 Abhangas.
- (3) Folk songs, (with dance) action song etc.
- (4) Folk songs, community songs, National songs.
- (5) Two songs of one's own interest.
- (6) Some compulsory songs :-
  - (1) Balsagar Bharat Hovo
  - (2) Khara to ekachi dharma
  - (3) Maharashtra Geet

These songs are taken from the book "SFURTI GEETE" published by M.S.Bureau of Textbook Production and Curriculum Research, Pune.

- Activities :**
- (1) The teacher should recite (sing) every type of song to the children.
  - (2) To use all available instruments for rhythm.
  - (3) To provide opportunity to lead concerts.
  - (4) The teacher should always be on the lookout for singing the songs with rhythm. He should always try that the "National Anthem" is recited in its true spirit.
  - (5) To use Audio-Visual aids where necessary.
  - (6) To ask the child to listen to different sounds, observe different musical instrument, and to try to understand the difference between them and explain it to the child.
  - (7) To motivate the child to participate in cultural programmes and to prepare him for such dance, drama, mimicry, singing etc.

### Some special Activities for Stds. I to V

An order to create interest and feeling about the performing arts in the students and in their parents as well, it is suggested that the school should organise, apart from the daily teaching, the following programme during the academic year.

#### Art Exhibition :

- (1) At the time of annual gathering of the school exhibition of picture, sculptures prepared and drawn by students should be arranged. The school should arrange cultural programmes organised by the pupils. The programmes should be arranged during the day time, it should be noted that majority of parents attend these programmes for this the time should be conveniently fixed.
- (2) Exhibition of pictures drawn by the pupils should be arranged continuous (through out the year). The picture should be displayed on the classroom walls, in Head Masters chamber and in a Varandah and it should be kept there for a fixed period. Pictures drawn by the teachers, famous painters, sculpters should also be displayed. Cuttings from magazines and news papers should

also find place in this exhibition. Exchange of pictures with neighbouring schools may also form a part of such exhibitions.

(3) Mural (Group painting) : This activity should be organised under the art teacher's supervision, students should organise. It could be arranged either on the day of annual gathering or during the art week or on a particular day. Varandahs, classroom, walls may be allotted to the different groups of students and these walls should be decorated with wall pictures drawn using different medias.

(4) Some festivals of traditional importance should also be celebrated in the schools. Cultural programmes of persons of repute in the following fields should also be arranged. Painting, Sculpturing, Music, Instrumental, Dance etc.

# PHYSICAL EDUCATION & HEALTH EDUCATION

## 1. Introduction

Physical education includes activities such as informal movements, imitations, action songs, story plays, recreative games, gymnastics and the like which are appealing to children. These activities have been emphasised in the lower primary stage of education, viz. , classes I to V. Physical education at the primary stage should ensure balanced coordination of various body movements and should develop skills in movements. With this end in view movements such as running, throwing, jumping and simple gymnastics have been included in the syllabus.

This book highlights activities prescribed for standards I to V. However in order to give an idea of the total programme for school children up to standard VIII, some of the additional activities are listed below.

Gymnastics, vaulting and combatives help to develop agility in the children, hence they find a place in the syllabus. Gymnastics such as beam work, vaulting box and combatives such as Jambia, Lathi, Archery, Judo have been specially included for classes VII and VIII.

Alongwith Indian games, Western games such as Cricket, Football, Volley - ball and the like have been given a due place in the syllabus so that children may be well acquainted with them.

Movement is essential for growth, development and healthful living. The W.H.O. has defined health as the physical, mental and social development of an individual as well as healthful living. For optimum health there should be a balanced coordination of the body and mind that is why health education has been included under physical education.

With the object of helping an individual to lead an optimum healthy life, it is necessary that the standard of health of an individual, his family, society and environment is raised. Therefore, health education includes units such as personal hygiene, food, water, climatic condition, personal and social health, environment and its relation to hygiene, growth and development, digestion, control over diseases, safety, first-aid, home nursing, civil defence, vitamins and diseases arising out of its deficiencies. Many of the topics under these units can be covered in the theory under subjects like Science and Environmental Education. Including the theoretical aspects, the practices of health education and physical education are included in the syllabus.

The time allotted to physical education and health education is 1/10th of the total time provided in the time table.

This syllabus includes simple activities which can be taught by teachers proficient in games and sports. Since pupils generally like games, the syllabus gives ample scope for these activities.

## **General Objectives of Physical Education and Health Education (Standards I to V)**

### **Physical Education - Objectives :**

Physical education aims at developing a child physically, mentally and emotionally. It further aims to develop pupil's personal and social qualities which may help him to lead a healthy, joyful and complete life and become a worthy citizen of the society.

### **Health Education - Objectives :**

Health education aims at

- i) helping the child to be aware of the concept of health and
- ii) to inculcate in him the desired habits and attitude towards health so that he may be a healthy citizen.

### **Objectives of Physical Education (Standards I to V)**

1. To develop a liking for games and recreation.
2. To provide opportunities for developing physical fitness and good health.
3. To develop a sense for correct postures and to provide means for remedial physical defects through corrective physical education.
4. To inculcate qualities such as discipline, leadership, co-operation, sportsmanship, honesty, team spirit and the like..
5. To make them aware of their responsibilities for service and to develop in them the habits of good postures and co-ordinated movements.
6. To develop fundamental skills such as walking, running, jumping, throwing, catching, balancing.
7. To develop creative thinking.

### **Objectives of Health Education (Standards. I to V)**

1. To develop awareness for personal as well as environmental cleanliness
2. To realise the need of exercise, rest, sleep, good posture and proper diet for maintaining good health and develop in them healthy habits.

### **Unit : Physical Education : (Standards. I to V)**

Imitative movements, gymnastics, rhythmic, action songs, story-plays, combatives, recreation games, free movements, developmental exercises, lead up games, athletics, sprints, throws, jumps, yogic exercises, lezim, major games, drill and marching, calisthenics, lathi and archery.

**Unit : Health Education**  
**(Standards. I to VIII)**

Human body, food, water, air, rest, personal and social hygiene; environment and its relation to health, growth and development, diet, control over diseases. safety, first-aid, home- nursing, civil defence, vitamins and their deficiencies.

**Learning Outcomes through the Units under Physical Education**

**1. Free movements :**

1. Facilitates free exploration.
2. Contributes poise and co-ordination
3. Provides fun and enjoyment...

**2. Rhythmics :**

1. Develops an agile body.
2. Helps develop balance and physical poise.
3. Develops graceful movements.
4. Develops a sense of rhythm.
5. Gives joy and satisfaction...

**3. Imitation, story-play and mimetics :**

1. Helps in development, creative, self expression...
2. Helps in the formation of concepts regarding size, form etc.
3. Develops the ability of language expressions...
4. Affords fun and enjoyment...

**4. Small-area games :**

1. Affords exercise to various muscles.
2. Develops physical strength and neuro-muscular coordination.
3. Fosters a sense of co-operation.
4. Affords fun and enjoyment.

**5. Gymnastics :**

1. Helps in having control over body movements.
2. Develops neuro-muscular coordination.
3. Helps in co-ordination of complex movements.

## **6. Combative:**

1. Helps the child to assess its own strength.
2. Develops courage and self confidence.
3. Develops fun and enjoyment.

## **7. Calisthenics :**

1. Develops coordination of bodily movements.
2. Contribution to growth and development of body.
3. Leads to better postures.

## **8. Athletics :**

1. Develops fundamental motor skills.
2. Contributes to physical fitness.
3. Opens up an avenue for competition.

## **9. Games :**

1. Develops ability to participate in vigorous activities.
2. Develops learning of new skills.
3. Cultivates interest in games.
4. Contributes to fun and enjoyment.

## **10. Yogic Practices :**

1. Develops ability to concentrate.
2. Has a carry over value for later life.
3. Contributes to physical fitness.

## **11. Drill and Marching :**

1. Helps to develop a sense of discipline and orderliness.
2. Forms habit of maintaining good posture.
3. Leads to proper and effective control of groups.

## **12. Swimming :**

1. Helps to create water confidence.
2. Develops self confidence.
3. Gives fun and enjoyment.

### 13. Health Education :

1. Develops habits for personal cleanliness and health.
2. Develops habits for social health.
3. Provides knowledge for achieving the balance in environment.

#### Classwise Distribution of Units under Physical Education Standards of the Elementary schools for all (I to VIII)

Sr. No.	Unit	Primary & Upper Primary							
		I	II	III	IV	V	VI	VII	VIII

1. Free movements (Cl. I to IV)
2. Imitation, mimetics and story plays  
(Cl. I. to III)
3. Small area recreative games  
(Cl. I. to IV)
4. Gymnastics (Cl. I to VIII)
5. Combatives (Cl. I to VIII)
6. Health Education  
(Cl. I to VIII)
7. Calisthenics (Cl. V to VII)
8. Athletics (Cl. V to VIII)
9. Major games (Cl.V to VIII)
10. Yogasanas (Cl.V to VIII)
11. Drill Marching (Cl. V to VIII)
12. Swimming  
(wherever facilities are available) (All Classes)
13. Archery (Cl. VII + VIII)

## LOWER PRIMARY STAGE - STDS. I - V

### *Group A : Physical Education - Compulsory Programmes*

<i>Sr. No.</i>	<i>Items</i>	<i>Standard</i>
1.	Free movements	Classes I - IV
2.	Rhythmics	Classes I - V
3.	Imitations, storyplays & mimetics	Classes I - III
4.	Recreative games	Classes I - IV
5.	Gymnastics	Classes I - V
6.	Combatives	Classes I - V
7.	Health education	Classes I - V
8.	Calisthenics	Class V
9.	Athletics	Class V
10.	Small area games and lead up games	Class V
11.	Rhythmic movements and dances	Class V
12.	Yogic exercises	Class V
13.	Fundamentals of drill and marching	Class V

### STANDARDS - I - V

#### *Group B : Physical Education - Voluntary Programmes*

- a) Swimming - Where facilities are available.
- b) Recreative games - With the help of balls - Classes I-IV
- c) Major games - Std. V. Football, Hockey, Cricket, Ring Tennis, Kabaddi.

**Note :** There will be forty working weeks in a year for classes I - V. Five periods per week will be available for health and physical education. Thus there will be two hundred periods in a year out of which fifteen periods should be set aside for health education and the remaining one hundred and eighty five for physical education.

### STANDARDS I and II

#### *Group A : Physical Education - Compulsory Programme*

##### **1. Free movements :**

Simple exercises for -

- i) Head and neck.
- ii) Arm and shoulder.
- iii) Trunk and leg.



Walk/Run -        in a line  
                      in a circle  
                      zigzag  
                      sideward  
                      backward

- Walking - on toes, on heels, forward, backward and sideward.  
Ascending and descending steps - Ascending and descending a mount.  
Jumping over obstacles - bricks, bones, stools, etc.

## 2. Rhythmics :

### A) Fundamental Movements :

#### *Stationary*

Swinging - Bending  
Stretching - Pushing  
Pulling — Twisting

#### *Locomotor*

Walking - Hopping  
Jumping, Running  
Heaping and moving forward.

### B) The following movements should be done by Rhythm.

#### *Coordinate free movement*

Walk and hop  
Walk and leap  
Hop and slide walk  
Gallop and walk

#### *Body coordination*

Bend and stretch  
Swing and push  
Push and pull  
Strike and dodge

### C) Action Song :

e.g. - Train, Circus, Acrobat, Milkmaid, Harvesting, Regional songs, etc.

## 3. Imitations, Mimetics & Story Plays :

### A) Imitations -

1. Elephant walk
  2. Frog leap
  3. Hare
  4. Tiger
  5. Whistle of an engine (train)
  6. Running like a train
  7. Pulling a hand cart
- Cycling  
Duck  
Cat

### B) Mimetics -

1. Horse gallop
2. Jumping like a dog and cat
3. Duck

4. Bear
5. Elephant
6. Tonga
7. Bell ringing
8. Hawker
9. Train
10. Aeroplane

C) *Story-Plays* — 1. Fox and the Grapes, A Thirsty Crow, Monkey and the Cap Seller, Visit to a Jungle, Visit to a Circus, Acrobatic Show.

#### 4. Small Area Recreative Games:

Cat-rat, Statues, ...Snatching the tail, ... In the pond on the bank - What is the time "Mr. tiger? - Come along with me. - King of the Circle, - Blindmans buff - Ram - Raja says.

#### 5. Gymnastics :

Arm circling - Becoming as tall or as short as possible, waving the body like the branches of a tree, balancing on one leg - frog leap - forward roll - free hopping - in line and in a circle - Action like an aeroplane, turning and landing - swinging arms - Action of riding a bicycle - Trotting like a horse.

#### 6. Combatives:

Hand push - Hand pull - Line pull - Back to back push - Back to back lift - Take off the tail - Pushing into a pit.

*Group B : Physical Education - Voluntary Items:*

- a) Swimming - Where facilities are available.
- b) Small area games - with a tennis ball  
throwing and catching - bouncing - dodging the tennis ball (hitting with a ball).

#### 7. Health Education:

##### 1. *Personal Hygiene:*

A) Combing, cleaning teeth, washing hands, trimming nails, such actions can be practised with the help of songs.

##### B) *Group Activities:*

Personal inspection of general cleanliness - teeth, hair, hands, nails.

##### 2. *Environmental hygiene:*

a) Cleanliness of the class room by the children.

b) Preventing children from throwing refuse/garbage in the classroom, playground and school premises.

c) Encouraging children to avoid indiscriminate urination, defecation and spitting.

### 3. Food Sanitation and Hygiene:

- A) Advising children not to eat foodstuffs that are exposed or fallen on the floor.
- B) Dissuading children from buying eatables or cutfruits from street hawkers.
- C) Encouraging children to wash their hands and clean their mouth before and after eating.

### 4. Exercise, Rest and Sleep:

Developing habits of taking rest after playing and going to bed each night regularly.

### 5. Body Posture:

Encouraging children to maintain correct postures for sitting, standing, walking, reading and carrying loads.

## Standard - III

### Group - A

#### Group : Physical Education - Compulsory Programme

#### 1. Free Movements:

Repeat the previous class work.

Exercises for - Trunk bending - Twisting

Throwing and catching - kicking and lifting.

#### 2. Rhythmics:

a) Group dance, regional folk dances

b) Regional action songs.

#### 3. Imitations, Mimetics and Story Plays:

A) *Imitations*: Repeat the previous class work. Beggar, old man, soldier, doctor, buffalo, monkey, boatsman, ferryman.

B) *Mimetics*: Repeat the previous class work. birds, fly, bear, camel, lamb, lion, floor grinding mill, bus.

Story Plays - Repeat the previous class work. Boat trip to sea, fox and the crocodile, travelling circus.

#### 4. Small Area Games:

Repeat the previous class work.

Lion and the cage, find out the leader, Raja Rani.

#### 5. Gymnastics:

Repeat the previous class work.

Rabbit jumping, developing the correct postures of sitting, standing, lifting, bending and stretching.

Straddle jump and crouch sitting on signal, forward/ backward roll, monkey walk, cart wheel.

## 6. Combatives:

Repeat the previous class work. Drake fight, cock fight, duck fight, stork wrestle, knock over the club.

### Group B

**Physical Education: Voluntary Programme.**

Swimming: (Where facilities are available).

Games : With the help of a ball.

## 7. Health Education :

### 1. Personal Hygiene:

- a) Using a clean comb, towel/clean piece of cloth for maintenance of personal cleanliness.
- b) Practising habits of regular bowel movement.

### Environmental Hygiene:

Adequate coverage has already been given in the previous class, and hence has not been repeated here.

### Food Sanitation and Hygiene:

Adequate coverage has already been given in the previous class and hence has not been repeated here.

### 2. Immunization and Safety:

- a) Participating in immunization programme against communicable diseases in general and with special reference to typhus.
- b) Practising safety rules in the home, school, roads and playfields.
- c) Reporting injuries/accidents to teachers/adults, without any delay and taking further action as per their advice.

### 3. Consumer Education:

Demonstration of the presence of nicotine in tobacco which is injurious to health.

## STANDARD IV

### Group A

### Physical Education - Compulsory Programme:

#### I. Free movements :

Swinging of : arms/legs.

Various movements like walk, run, jump, throw. These should be linked up in a creative pattern.

#### II. Rhythmics:

Repeat the previous class work.

- a) Group Dance
- b) Action song
- c) Flag drill/wands/dumb-bells/ pole drill.

### III. Lead up Games:

- a) Kho-Kho -Circle Kho-Kho, Line Kho-Kho.
- b) Foot ball - Pin foot-ball, Circle foot-ball.
- c) Cricket - Tennis Ball Cricket.
- d) Tenicoit.

### IV. Small Area Games:

- Repeat the previous class work.
- Crows and Cranes, fire on the mountains.
- Gaurd the fort, squirrel and the nest;
- Find your partner; Good morning, come with me, Pagalwallah.

### V. Gymnastics:

- Repeat the previous class work.
- Shoulder roll, cart-wheel, balance walk,
- double roll, wheel barrow.

### VI Combatives:

- Repeat the previous class work.
- Hand wrestle, push off the bench, push off the stool, step on toes, knee slap.

## GROUP B

### *Physical Education - Voluntary Programme :*

- A) Swimming : Where facilities are available.
- B) Ball games.

### VII. Health Education :

#### 1. *Personal Hygiene :*

Developing habits of :

- a) Washing hands after every visit to the toilet.
- b) Not walking barefooted especially while going for urination and defecation to avoid worm infection.
- c) Taking a bath daily or as often as possible to have a feeling of freshness.
- d) Cleaning teeth every morning and immediately after food, and also before going to bed.
- e) Covering the mouth and nose with a handkerchief while sneezing and coughing.
- f) Keeping dirty fingers and other objects out of the mouth.
- g) Wearing clean clothes. Demonstration of washing clothes may be arranged in the class under the supervision of the teacher.
- h) Washing undergarments everyday and always wearing clean undergarments.

## 2. Environmental Hygiene :

- a) Drinking only safe water and helping to keep the drinking water clean and safe.
- b) Developing the habit of not taking a bath or washing clothes and utensils in or near drinking water sources.
- c) Always using urinals and latrines for calls of nature.
- d) Not defecating or passing urine near the water source if latrines and urinals are not available.
- e) Making water safe for drinking by boiling.
- f) Participating in cleanliness campaigns and washing hands, face, feet, after work and not accepting food or drink until it is done.

## III. Food Sanitation and Hygiene:

- a) Practices of correct hygienic eating habits at i) regular hours, ii) without hurry or worry, iii) cheerful disposition, iv) limited eating between meals, v) no over eating.
- b) Eating food suitable to the needs of different seasons.
- c) Eating locally available foods which are good for health.
- d) Eating fresh vegetables, fruits after proper washing.
- e) Discouraging waste of food and cleaning utensils properly.

## IV. Exercise - Rest and Sleep:

- a) Taking part in games allotted to his age group and maintaining a balance between work study and play.
- b) Selecting safe places to play with a view to avoiding injuries.
- c) Taking rest when tired and fatigued.
- d) Taking care to sleep in a place of good ventilation and to wear loose garments while sleeping. Avoiding the covering of face while sleeping.

## V. Immunization:

- a) Willingly accepting the immunization arranged in the school.
- b) Following simple, desirable, health habits to prevent infection from communicable diseases.

## VI. Safety and First-aid :

Observing the following safety rules, while playing and working.

- i) Avoiding playing with harmful animals.
- ii) Staying at safe distances from fire, river, wells, ponds and other water sources.
- iii) Walking on the safer side of the road, street or lane.
- iv) Avoiding playing on or near roads and water sources.
- v) Not playing with electrical gadgets of any kind.
- vi) Not playing with sharp instruments like knife, scissors, blades and broken glass pieces.
- vii) Following desirable safety practices in running, jumping and throwing.
- viii) Observing basic principles of first-aid like notifying accidents to the nearby adult and giving a helping hand to the injured.

## VII. Consumer Education

- a) Strengthening the anti-smoking attitude.
- b) Dramatization of the theme that self-medication is dangerous.
- c) Reporting any ailments immediately to the teacher and parents, and taking medicine under proper guidance.
- d) Not touching the medicines lying about in the home.

## STANDARD V

### GROUP A

#### Physical Education - Compulsory Programme

#### I. Calisthenics:

##### *Exercises without apparatus:*

Head, arm, trunk - each exercise should involve continuous movement without any rigid positions.

##### *Exercises with apparatus:*

Flag drill, dumb-bells, and wands drill.

#### II. Athletics:

Short Sprints	-	50 to 100 M.
Hopping	-	25 to 50 M.
Endurance	-	200 mts.
Throwing	-	Cricket ball, foot ball.
Jumping	-	For distance and height

#### III. Small Area Games and Lead up Games:

A) Raja says, Dodge ball, Dog and the bone, Luggage Van, Four corners.

B) Relays:

Zigzag relay, Hop and run, Potato race, Tunnel Ball relay, Arch ball relay, Jump over the stick.

C) Lead up games:

Foot Ball - small field - 5 Vs 5 foot ball  
small field - 6 Vs 6 foot ball.  
Crab foot ball.

Hockey - small field 5 Vs 5 Hockey  
small field 6 Vs 6 Hockey  
Circle Hockey.

Cricket - Tennis ball, cricket, Tenicoit.

Kabaddi - Whip tag kabaddi, knock down the club.

#### **IV. Rhythmic Activity:**

Folk dance of the region.

#### **V. Gymnastics:**

Repeat the previous class work.

Frog balance, hand stand, dive and roll, camel walk, rope climbing using hands and legs.

#### **VI. Yogasanas:**

Swastikasana, Ardhapadmasana (Veerasana), Bhujangasana, Ardhashalabhasana, Utkatasana, Tadasana, Vrikshasana, Naukasana, Padahastasana, Shavasana.

#### **VII. Fundamentals in Drills and Marching:**

Savadhan, Vishram, Aram se, Jaise the, Line ban, Dahine dekh, Bac dekh, Ginti kar, Dahine mud, Bac mud, Kadam tal, thamb, Pecche mud, Adha dahine mud, Adha bac mud, Swasthan, Visarjan.

### **GROUP B**

#### *Physical Education - Voluntary Programme:*

- A) Swimming - Where facilities are available.
- B) Major Games - Foot ball, Hockey, Cricket, Tenicoit, Kabaddi, etc.

#### **VIII. Health Education:**

##### *1. Personal Hygiene:*

The practices suggested for classes I-IV may be strengthened.

##### *2. Environmental Hygiene:*

- a) Encouraging the proper use of spittoons and dustbins.
- b) Where latrines are not available the practice of defecating in pits may be encouraged as below:
  - 1. digging a trench
  - 2. using an isolated place,
  - 3. covering the defecated material with earth.
- c) Avoiding the practice of defecating -
  - 1. on the banks of rivers or streams.
  - 2. in rivers or streams.
  - 3. near a tank or any other water source.
  - 4. in streets, roads or lanes.
  - 5. near inhabited places like schools, playgrounds, houses, parks, etc.

##### *B) Food, Sanitation and Hygiene:*

To strengthen the practices suggested in the earlier classes.



*4. Exercise, Rest and Sleep:*

- a) Developing the habit of sleeping for about 9 hours at night.
- b) Developing the habit of using leisure time in worthwhile activities like games, sports, music and hobbies.
- c) Strengthening the practices suggested in the earlier classes.

*5. Immunization:*

- a) Gathering information about immunization available from local health authorities with the help of teacher and actively participating in the immunization programme arranged in the school and community.
- b) Motivating fellow children to accept immunization,

*6. Safety and first-aid:*

- a) Strengthening the practices suggested in the earlier classes.
- b) Developing an improvised first aid kit for the class, and using the same in need.
- c) Demonstrating in the class on the care to be taken for the sick at home, e.g. (i) preparation of bed, (ii) keeping the medicines labelled, (iii) disposing washes, (iv) keeping the room clean and tidy.

*7. Consumer Education:*

- a) To strengthen the practices in the earlier classes.
- b) Buying medicines only from authorised medical shops on proper medical prescription.
- c) On the basis of learning experiences gained in Science, students will examine different types of foodstuffs like milk, ghee, etc. with regard to adulteration in order to avoid the use of such adulterated foods.

## Work Experience

The activities of the work experience programme are expected to help in bringing about a balanced development of the personality of the child — i.e. in developing its affective and psychomotor aspects as well as the intellectual aspects. These activities will create in him an awareness of his potential for productive activity, will develop this potential and will awake in him the desire to be of service to society.

The provisions of the New Educational Policy (1986), the recommendations of the Schools Reform Committee, the National Curriculum prepared by the N.C.E.R.T. and the Plan of Action have been considered in their totality and kept in mind while reconstructing this curriculum.

The salient features of the curriculum are as follows

### *1. Making a habit of manual work*

Some activities involving manual work have been included in this curriculum in order that pupils may form a habit of working with their own hands and in order to develop in them a positive attitude towards manual work.

### *2. Usefulness to society*

The needs and problems of society have been considered and such activities have been included in the curriculum as are relevant to these needs and problems.

### *3. Limited productivity orientation;*

Some productive activities have been included in order that while practising these activities the pupils will develop the basic skills necessary for production and wherever possible also their capacity to earn, at least to a certain extent.

### *4. Common compulsory programme*

This is the special feature of this curriculum. Such selected activities have been included in this programme as all schools will find possible to implement and which will help develop in pupils the desire to be useful to society. This compulsory programme will be common to all schools.

### *5. Industry based area of the curriculum*

Activities in this area should be in touch with real life and relevant to man's primary and secondary needs. Each of these activities have been selected from one of the following 6 sectors: (1) Health and Hygiene, (2) Food, (3) Clothing, (4) Shelter, (5) Culture and Recreation Activities, (6) Social Work and Social Service.

### *6. Nature of the programme*

Activities of this subject of work experience have been classified into three categories :

1. The common compulsory programme - common and compulsory for all schools.
2. Simple incidental programmes - pupils have to complete any two from the given list of activities in this category.

3. Productive programmes. Pupils are expected to complete any one activity from each area, namely, food, clothing and shelter. The choice of the particular activity will depend upon the needs of and facilities available in the neighbourhood. These activities will, it is hoped, form a "Foundation Course" for further vocational training.

#### Time — table

Nine periods per week in Stds. I-V and five per week in Stds. VI to VIII have been allotted for this subject. Assuming that there are 32 working weeks in one school year, we have 288 periods in each year from Stds. I-V and 160 per year in Stds. VI to VIII. These periods may be divided as follows:

<i>Category</i>	<i>Stds I-V</i>
1. Common compulsory programme	108
2. Simple incidental programmes	36
3. Productive programmes	144
Total periods per year	288

The time - table is flexible. Changes necessitated by local conditions may be made in the allotment of periods to each of the three categories so long as the total number of periods allotted to this subject are not diminished.

#### Work experience

##### General objectives

1. Helping children to recognise the need of their family and of society for food, health, clothing and shelter entertainment and social service.
2. To acquaint the children with the productive activity in society.
3. To help pupils to understand facts and scientific principles involved in various kinds of work.
4. To help pupils to understand where raw materials and means of manufacture come from; and what their relationship is with production and with the provision of services to society.
5. To understand the usefulness of productive activity and social service.
6. To understand the production process and skills required in a technically advanced society.
7. To understand the planning and organisation of productive work.
8. To understand one's own role in the process of production.
9. To create an awareness of social problems.
10. To inculcate in the pupils an attitude of respect towards manual work and manual workers.
11. To impress upon the pupils the importance of socially beneficial values such as self sufficiency, helpfulness, co-operation, team-work, perserverence, tolerance.

- 12.. To develop work ethics i.e. habits of regularity, punctuality, honesty, dedication and discipline etc.
- 13.. To help children to understand the close relationship between human society and environment and to develop feelings of closeness, responsibility and commitment towards them.

**Primary level  
Stds. I - V**

**Objectives**

1. To concentrate on health and hygiene clean environment and well-decorated surroundings.
2. To create an awareness of the world of work by visiting places of work centres of service or production.
3. Developing positive attitudes and values such as a liking for manual work, respect for manual workers, co-operative attitude, team-work, regularity, punctuality, discipline, honesty, creativity, perseverance etc.

No.	Activity Stds. I & II	Activity Stds. III to V	Learning Outcome
1.	Observing the work of people in various trades on visits to their places of work egs. the work of the peasant, the carpenter, the tailor, the potter, the cobbler, the blacksmith, the goldsmith, the milkman etc.	Creating a sense of gratitude towards the people in these trades by understanding and appreciating how our welfare and the satisfaction of our needs is dependent upon the work done by them.	Pupil can tell how the people in the various trades are of use to society.
2.	To assist elders and brothers and sisters in doing the household chores. To help children of higher classes with their manual work.	Doing household chores involving physical work such as cleaning, looking after younger siblings Doing these chores on one's own initiative. Helping the physically handicapped people or other needy members of society.	Helps with others chores involving physical exertion.
3.	While doing the chores to follow instructions given, aimed at avoiding misuse and wastage of raw materials.	To make proper use of time, facilities available and own efforts. To analyse and understand the steps in each process and so to do one's own work economically.	Makes proper use of means and materials while working.

4. To follow instructions regarding cleanliness and tidiness.

To take part eagerly and happily in keeping the environment clean.

To understand the need for keeping the environment clean and tidy.

Keeps his surroundings clean, while at work.

### **Details of the programmes**

#### **1. The Common Compulsory Programme**

##### **1. Daily Activities**

###### *A- Area - Health*

- i. Cleaning of classroom, school and the surroundings of the school.
- ii. Individual inspection of teeth, nails, hair, use of handkerchief.
- iii. Arrangements for drinking water.
- iv. Cleanliness and care of school equipment.
- v. Care and inspection of the school uniform.
- vi. Use of the mirror for personal cleanliness.

###### *B —Area-Culture and Recreation*

- i. Decorating the classroom, school and its surroundings.
- ii. Memorising and reciting the prayers, poems, prose, passages, proverbs, quotations etc.
- iii. News, stories with a moral, play-reading.
- iv. Action songs and nursery rhymes, observation of special days.

*Note* : The above mentioned activities should be conducted during the Assembly.

##### **2. Activities for Special Occassions**

1. Flag hoisting.
2. Observing the birth or death anniversaries of great men and women.
3. Celebrating the birthdays of school children.
4. Children's meetings (from Std. III onwards)
5. Arrangements for watching or listening to useful T.V. or radio programmes.
6. Taking care of the school play-ground.
7. Helping pupils of higher classes in the campaign for cleanliness of the village.
8. Conservation of trees.
9. Participating in the Bulbuls or Cubs activities (Std. III onwards).
10. Talent competitions or exhibitions.

##### **2. Simple Incidental Programmes**

*Note* : Each child must take part in at least 2 activities of his liking of those given below :

### Std. I

1. Making a kite (Material must be provided).
2. Making a house, a fan, a simple boat, a wind mill from paper. (origami)
3. Making a rattle, a table, a chair, a sofa, a cupboard, a stool, a motor-car, a train etc. from empty matchboxes.
4. Making a collection of various kinds of shells.
5. Sticking pulses, seeds etc. on paper and making an album of these sheets.
6. Making geometrical figures by pasting match sticks on sheets of paper, e.g. angles, acute angled, obtuse angled, right angled, triangles.
7. Origami making a dog's head, a table, a star, and a photo frame.

### Std. II

1. Making a bag, palanquin or a sofa from empty matchboxes.
2. Making birds, animals, aeroplanes, hats and various types of boats from paper. (origami)
3. Making streamers.
4. Making clay toys.
5. Making cotton wicks.
6. Origami - making a dog, a lotus, a flower, an aeroplane, a house, a fox, a fish, a tray, a star (any 4)
7. Paper cutting (making pictures, designs, bunting).

### Std. III

1. Painting and decorating earthen pots used for growing plants.
2. Making weighing scales using cardboard and ice-cream cups.
3. Making a bullock - cart using empty matchboxes.
4. Making mats of glazed paper and covering a book.
5. Collecting greeting and wedding invitation cards.
6. Making a collection of feathers, leaves, flowers
7. Make design in "rangoli" with the help of dots.
8. Making - rabbit, frog, churner, pot hanger (origami), a rabbit which can move its ears.

### Std. IV

1. To make garland from pieces of empty plastic bags.
2. To make a cardboard parrot entering a cage.
3. To make magic pictures by folding paper.
4. To make a cardboard model of a student doing physical exercise.
5. Making an attractive statue with the help of a mould.
6. To make decorative things from Jowar stalks.
7. Making things from empty cardboard boxes.
8. Collecting pictures of natural scenery.
9. Making a tray and a box from a card - sheet.
10. To make a fan from whatever materials are available in the surroundings.
11. To make up a story about a picture.
12. Origami - making paper flowers and pine trees.

## Std. V

1. To cut out portions of a card - board box and replace these portions with cellophane paper and thus to make an attractive sculpture.
2. To collect information about places of historical and tourist interest in one's locality. To collect and make a scrapbook of pictures of these places.
3. Making plates and cups out of certain large leaves.
4. Making decorative paper lanterns (Akash diva).
5. Making attractive chains of beads.
6. Making "Rakhis".
7. Making attractive designs using various kinds of shells.
8. Making greeting cards.
9. Making bags of towelling material and sack-cloth.
10. Origami - making Guraffe, Fox, Duck, Parrot and Owl.

### 3. Productive Programme

Some activities from the areas of food, clothing, shelter are given below:

Every pupil must choose one activity from each area.

#### Activities for Stds. I - V

##### *Food*

1. Kitchen Gardening or
2. Pot culture.

##### *Clothing*

1. Spinning
2. Basic tailoring
3. Coir work

##### *Shelter*

1. Clay-modelling
2. Bamboo work
3. Cane work
4. Gardening  
(flowering plants)

Area : Food

1. Kitchen Gardening

### Kitchen Gardening

#### Stds. I & II

1. To observe how soil is prepared for sowing.
2. To be able to recognise the different kinds of soil.
3. To water plants.
4. To observe how the crop grows.
5. To plant vegetables.
6. To grow plants in pots.
7. To do weeding in fields where the crop is growing.
8. To gather the dead foliage from the garden and put it into the compost pit.
9. To visit other fields and kitchen gardens in the neighbourhood.
10. To observe the pupils of higher classes at work.

### Std. III

1. To observe how the soil is prepared for sowing.
2. To plant each vegetable in a suitable bed.
3. To observe the growth of the plants.
4. To gather the dead foliage in the garden and to put it in the compost pit.
5. To participate in tree-planting activity during the monsoon season.

### Std. IV

1. Study of the soil (colour, texture, fertility).
2. To learn about different kinds of beds.
3. To plant each crop in a bed suitable for it.
4. To Weed the beds.
5. To gather the dead foliage in the garden and to put it in the compost pit.
6. To keep a record of the growth of the plants.
7. To protect the crops.
8. To make a collection of samples of the various kinds of weeds.
9. To participate in the tree-planting activity during the monsoon season.
10. To visit fields and kitchen gardens in the neighbourhood.

### Std. V

1. To study the soil (color, texture, fertility).
2. To Prepare the soil for planting : breaking up lumps of mud, adding manure, making beds.
3. To Plant vegetables.
4. To grow seedlings of vegetables and to transplant them to their beds.
5. To Water the plants.
6. To Weed the beds.
7. To Putt the dead foliage and other rubbish in the garden into the compost pit.
8. To Plan and mark out the beds in the kitchen garden.

### 4. Pot culture

#### Std. I

1. Observation of different types of earthen pots.
2. Observation of the pots placed in the verandahs of the school and its premises.
3. Labelling the samples of soils and manures.
4. Collection and disposal of the rubbish around the pots.
5. Recognition of 2 or 3 flowering plants.

#### Std. II

1. To Help pupils of higher classes to fill up the earthen pots with soil and manure.
2. To mix the soil and manure to prepare the medium for the pots.
3. To Fill up the small earthen pots with the mixture of soil and manure.
4. To Water the plants in the earthen pots.
5. To Use the different tools to water the plants.



### **Std. III**

1. To collect the different types of soils and manures.
2. To use different animal manures.
3. To water the plants and to observe their growth.
4. To show the different types of tools used in pot-culture and to recognise them by their names.
5. To visit the kitchen garden in which plants have been grown in pots.

### **Std. IV**

1. To mix 2 or 3 types of soils and manures.
2. To fill the earthen pot with soil and manure.
3. To Sow the seeds.
4. To observe the shape and size of the plant and to record it.
5. To acquaint pupils with the tools and implements used in pot culture.

### **Std. V**

1. To acquaint with the different mixtures for use in earthen pots.
2. To plant the flowering plants in earthen pots and to list their names.
3. To sow the seeds of vegetables in the earthen pots and to keep a record of them.
4. To pull out weeds from the earthen pots.
5. To make Flower arrangements at the time of school function.

## **Area — Clothing**

### **Activity 1 : Spinning**

#### **Stds. I and II**

1. To observe cotton-picking.
2. To observe cleaning and carding of cotton.

#### **Std. III**

1. Growing a cotton plant and keeping a record of its growth.
2. Picking cotton.
3. Cleaning the cotton.
4. Carding the cotton using a wooden board and iron rod.
5. Making balls of cotton from which to draw out yarn.
6. Spinning about 100 m. of cotton yarn on a 'takli'.

#### **Std. IV**

1. Cleaning cotton.
2. Carding cotton using the wooden board and iron rod.
3. Making cotton balls, from which to draw out yarn.
4. Spinning cotton yarn on the "takli". Each child should spin about 2 small hanks.
5. Keeping a record of the work done every day.

### Std. V

1. Spinning one hank of cotton yarn on the "takli"
2. To spin 4 hanks of cotton yarn on the spinning wheel.
3. To find out the percentage of wool and seed in the cotton.
4. To find out how the speed of spinning differs when spinning from a well or a badly made ball of cotton.
5. To keep of a record of the day to day work.
6. To observe how the hand looms or power looms work;.
7. To find out the count, of the yarn spun on a 'takli'.
8. To find out the count of the yarn spun on a 'charkha'.

### Activity 2 : Basic Tailoring

#### Stds. I & II

1. Threading a needle.
2. Learning about thread.
3. Learning about various kinds of needles.
4. Practising on a piece of card paper tacking and other stitches used for temporary stitching.
5. Visiting a tailor's shop, observing and making a list of the tools and materials he uses.

#### Std. III

1. Practising simple stitches on towelling material.
2. Making a bag using back-stitch.
3. Stitching on a button.
4. Making a ball from rags/left overs cloth.
5. Embroidering designs on the bag using coloured yarn.
6. Arranging an exhibition of the things made.

#### Std. IV

1. Stitching a button on a shirt or trousers.
2. Running stitch.
3. Buying cloth for a whole group, and making bags using running stitch.
4. Folding in the edges of a handkerchief, using the running stitch.

#### Std. V

1. Practising hemming and running stitch.
2. Making paper cuttings of a handkerchief or a child's knicker and stitching the paper cutting.
3. Hemming, back-stitch, and using these stitches to mend torn clothes.
4. Cutting and stitching baby dresses.

### Embroidery

1. Stem stitch, chain stitch and lazy-daisy.
2. Practising the lazy-daisy stitch.
3. Embroidering on towelling material.

## **Knitting**

Learning "Knit" and "Purl" stitches and lazy patterns and making a baby's cap using these stitches.

1. Knitting a doll's muffler.
2. Knitting a bonnet.
3. Learning crochet and making any one useful article : a length of lace, a purse, flowers etc.

## **Activity 3 : Coir Work**

### **Stds. I & II**

Pupils of Stds. I & II must observe and assist the pupils of higher classes in their work:

1. Observe the coconut and toddy palm trees.
2. Gathering palm-fronds which have been shed by the trees.
3. To separate the vein from the frond.
4. Collecting the peelings for making coir.
5. To soak the peelings in water and to process them and thus make coir.

### **Std. III**

1. To learn about the coconut and toddy palm.
2. To collect and select fronds.
3. To observe how the vein of the frond is separated.
4. Prepare coir from coconut peelings using an iron comb.
5. To make twists of coir.
6. Making a coir rope.
7. Practising 4 basic knots.
8. Making pot-hangers from coir rope.

### **Std. IV**

1. Practising how to make coir.
2. Learning what articles of daily use are made from coir.
3. Making a 4-5 m. length of rope.
4. Using the first 4 and two new types of knots.
5. Making a rope, muzzle and lashing out of coir rope.
6. Making a small mattress from waste coir.
7. Dyeing the articles made from coir.
8. To estimate the expenditure incurred in making these articles and to determine profit or loss.
9. Arranging an exhibition of these articles.
10. Making a round coir door mat.
11. Making a hut, house, trees, etc. from the waste coir or other parts of the coconut tree.

### **Std. V**

1. Find out what articles, made from coir, are needed by people in the village or in the neighbourhood.

2. Making a thick coir rope.
3. Making and twisting a rope.
4. Making one attractive article from coir waste, (a duster, a door mat, a cushion etc.)
5. Making coir scrubbers for bathing buffaloes.
6. Using one's hands to make about 5 m. of coir rope.
7. Making about 10 m. of coir rope on the machine.
8. Making square or round doormats.
9. Making a pot-hanger or bag from coir.
10. Making fans from fronds of toddy or coconut palms.
11. Dyeing the articles that have been made,
12. Grading the articles made in the classroom.
13. Estimating the expenditure incurred in making the articles.
14. Arranging an exhibition of these articles.

### Area — Shelter

#### Activity : 1 Clay Modelling

#### Stds. I & II

1. Going for a picnic in the neighbourhood to collect samples of various kinds of soil.
2. To make wet clay.
3. To make bricks using matchboxes as moulds.
4. Making a clay ball.
5. Making cylindrical rods of clay.
6. Making clay beads.
7. Making clay models of vegetables, lady-fingers, brinjals, carrots, etc.
8. Making clay models of birds and animals.

#### Std. III

1. Making clay utensils.
2. Making models of 4-5 kinds of fruits.
3. Making a model of a house using the clay bricks.
4. Colouring the articles that have been made.
5. Spray painting using a sieve a comb or a tooth brush.

#### Std. IV

1. Collecting and storing the right kind of soil.
2. Making clay models of 4-5 kinds of vegetables.
3. Making a model of a big house.
4. Colouring and exhibiting the models.

#### Std. V

1. To make models and statues with the help of moulds.
2. Colouring the statues.
3. Making models of animals and birds.
4. Learning how to prepare the mixture used for clay-modelling.

5. Learning what precautions to take while making clay models.
6. Learning to take care of moulds and learning the precautions to be taken while using moulds.

### **Activity 2 : Bamboo Work**

#### **Stds. I & II**

Pupils of these classes must observe and assist in the work of pupils of higher classes.

#### **Std. III**

1. Collecting tender palm fronds, grass and bamboo.
2. Observing how lids, mats, baskets are made.
3. Colouring the lids, mats, baskets.

#### **Std. IV**

1. Making bamboo strips.
2. Making a basket from these strips.
3. Making a fruit basket.
4. Colouring these articles.

#### **Std. V**

1. To collect broad information about the cultivation of bamboo in the surroundings.
2. To learn about the various types of bamboo and to collect samples of each type.
3. To make strips of bamboo for making bamboo-articles.
4. To make two specific kinds of baskets having card-board supports.
5. To make a fruit basket.
6. To colour the articles attractively.
7. To keep a record of the things, made and to make a note of the method used to make them.
8. To estimate the expenditure incurred in making the articles.
9. To sell the articles, if possible.

### **Activity 3 : Cane Work**

#### **Stds. I & II**

Pupils of these classes must observe and assist in the work of pupils of higher classes.

#### **Std. III**

1. To collect materials required for cane-work.
2. To collect general information about cane and to observe how it is cleaned.
3. To weave a small and simple cane-mat.
4. To colour these articles.
5. To estimate the expenditure incurred in making the articles.
6. To determine the price of the articles.
7. To arrange an exhibition of the articles.

#### Std. IV

1. To clean cane and to prepare it for making articles from it.
2. To make a scrap-book of samples of various kinds of cane.
3. To make a waste paper basket.
4. To weave a simple attractive mat.
5. To learn some useful knots and to practise tying them.
6. To colour articles made.
7. To determine the price of the articles made
8. To arrange an exhibition of these articles.

#### Std. V

1. To obtain information about cane-cultivation in the locality.
2. To obtain information all varieties of cane.
3. To collect samples of the varieties of cane.
4. To prepare cane for making articles from it.
5. To make two specific type of baskets having support of card-board.
6. To make a fruit basket.
7. To colour the articles attractively.
8. To make detailed notes of the method of making the articles.
9. To estimate the expenditure incurred.
10. To arrange an exhibition of the articles.
11. To sell the articles.

#### Activity 4 : Gardening

##### Stds. I & II

1. To observe the school garden.
2. To observe and to make a list of the flowering plants seen in the garden.
3. To help pupils of higher classes to fill pots with soil and manure.
4. To water the plants with a watering can.
5. To weed and break up lumps in the soil.
6. To pluck flowers when the occasion arises.
7. To make flower arrangements to decorate the school at the time of special functions.

##### Std. III

1. To inspect the seeds of various flowering plants.
2. To fill pots with soil and manure for gardening.
3. To sow seeds or plant seedlings of flowering plants.
4. To water the plants.
5. To add to the soil fertilizers.
6. To pluck flowers.
7. To make garlands, wreaths, bouquets of these flowers.

#### Std. IV

1. To learn about gardening tools and implements.
2. To grow seedlings of flowering plants.
3. To transplant seedling when they are ready.
4. To water the plants.
5. To observe the colour of the buds and flowers.
6. To add fertilizers.
7. To take steps to protect the plants from pests and disease.
8. To pluck flowers as and when occasion arises.
9. To make flower arrangements and to decorate the school at the time of special functions.

#### Std. V

1. To select soil for gardening.
2. To prepare the soil for sowing.
3. To make beds suitable for the different kinds of plants.
4. To grow seedlings.
5. To transplant the seedlings.
6. To do weeding and to loosen the soil around the plants regularly.
7. To water the plants.
8. To add fertilizers.
9. To pick flowers and to trim the plants.
10. To collect seeds for further planting.
11. To gather and put weeds and dead foliage into the compost pit.
12. To use different types of soil, seeds of flowering plants and manure.
13. To learn about use of pesticides and insecticides.

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**Annexure - 2**  
**Subject-wise list of the working group of**  
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१०) श्री. के. के. लुल्ला, पुणे	पाठ्यपुस्तक मंडळ
११) श्री. बी. जे. दवे, मुंबई	पाठ्यपुस्तक मंडळ
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**द्वितीय भाषा (हिंदी)**

१) श्री. गो. मा. दाभोळकर, मुंबई	अशासकीय सदस्य
२) श्री. इसरु भीमराव मडावी, नवरगाव	अशासकीय सदस्य
३) प्रा. ने. ब. गुंडे, सांगली	एस. एस. सी. बोर्ड
४) श्रीमती ज्योती गोसावी, पुणे	म. रा. शै. सं. प्र. प., पुणे
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९) डॉ. ग. ना. साठे, पुणे	स्वीकृत सदस्य
१०) श्री. ज. ग. फगरे, पुणे	स्वीकृत सदस्य

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३) श्री. एम. ए. खान, नागपूर	अशासकीय सदस्य
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६) श्री. डी. व्ही. बंडेगिरी, औरंगाबाद	स्वीकृत सदस्य
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११) श्रीमती अनिता राजगुरू, पुणे	स्वीकृत सदस्य
१२) श्रीमती सुलक्षणा पाठक, पुणे	स्वीकृत सदस्य
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- ७) प्रा. म. नं. कापगते, पुणे
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म. रा. शै. सं. प्र. प., पुणे  
म. रा. शै. सं. प्र. प., पुणे  
(निमंत्रक), म. रा. शै. सं. प्र. प.,  
पुणे ३०.

## इतिहास - नागरिकशास्त्र

- १) श्रीमती सरोजिनी गंगथडे, पुणे
- २) श्री. द. पां. तामोरे, आशागढ
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- ६) श्री. प्र. य. दातार, नागपूर
- ७) श्री. दे. म. सांबरे, औरंगाबाद
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अशासकीय सदस्य  
अशासकीय सदस्य  
स्वीकृत सदस्य  
एस. एस. सी. बोर्ड  
एस. एस. सी. बोर्ड  
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एस. एस. सी. बोर्ड  
स्वीकृत सदस्य  
स्वीकृत सदस्य  
पाठ्यपुस्तक मंडळ  
(निमंत्रक), म. रा. शै. सं. प्र. प., पुणे  
म. रा. शै. सं. प्र. प., पुणे

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- १) श्री. द. रा. मेढेकर, औरंगाबाद
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- ४) डॉ. सुरेश गरसोळे, पुणे
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- ६) श्री. वा. भ. ओतूरकर, पुणे
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- ८) श्री. दि. ग. अमृते, मुंबई
- ९) श्री. बी. डी. मोहिते, पुणे
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- १३) श्री. य. ल. महाजन, पुणे
- १४) श्री. भा. ल. जेऊरकर

अशासकीय सदस्य  
अशासकीय सदस्य  
एस. एस. सी. बोर्ड  
पाठ्यपुस्तक मंडळ  
स्वीकृत सदस्य  
स्वीकृत सदस्य  
स्वीकृत सदस्य  
स्वीकृत सदस्य  
म. रा. शै. सं. प्र. प., पुणे  
म. रा. शै. सं. प्र. प., पुणे  
म. रा. शै. सं. प्र. प., पुणे  
म. रा. शै. सं. प्र. प., पुणे  
निमंत्रक म. रा. शै. सं. प्र. प., पुणे  
एस. एस. सी. बोर्ड.

कला

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| १) श्री. नवगिरे, सहाय्यक निरीक्षक कला परीक्षा, मुंबई | अशासकीय सदस्य                             |
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| १२) श्री. भोईर                                       | एस. एस. सी. बोर्ड                         |

शारीरिक शिक्षण व आरोग्य

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| १) श्री. श्रीधर राजगुरू, पुणे          | अशासकीय सदस्य                          |
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| ७) श्री. रा. त्र्यं. अग्निहोत्री, पुणे | स्वीकृत सदस्य                          |
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कार्यानुभव

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