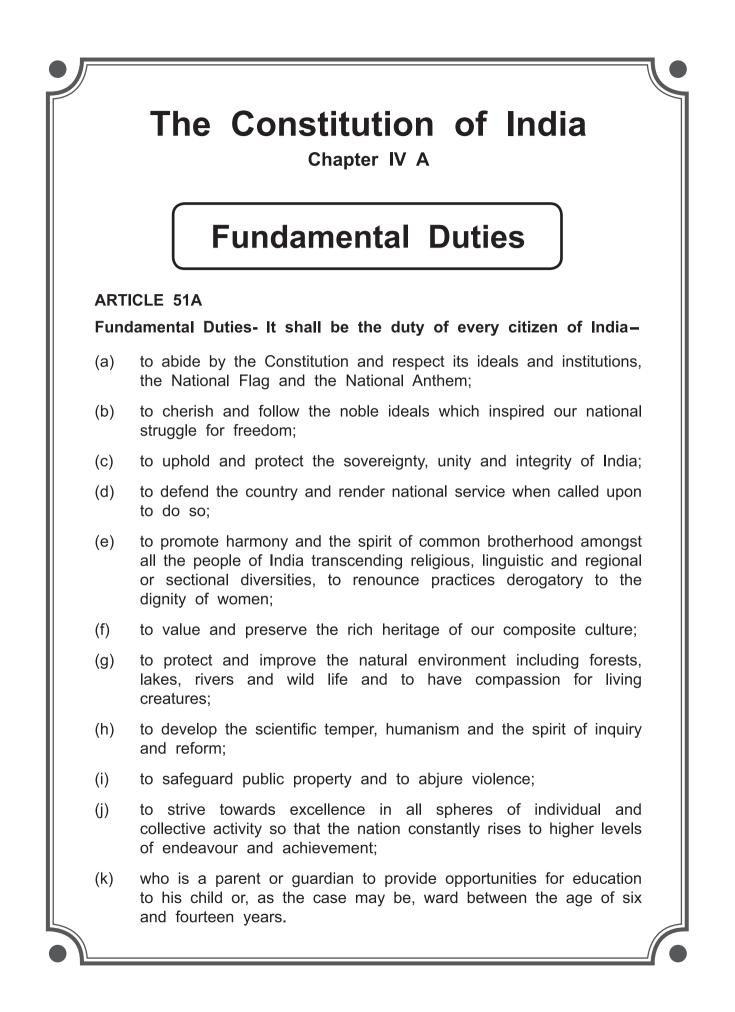
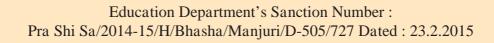
ENVIRONMENTAL STUDIES

(Part One) STANDARD FIVE









Maharashtra State Bureau of Textbook Production and Curriculum Research, Pune.



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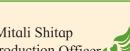
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Science Subject Committee : • Dr Ranjan Kelkar, Chairman	Cartographer	: Shri. Ravikiran Jadhav					
• Smt. Mrinalini Desai, Member	Cover	: Smt. Anuradha Dangare					
• Dr Dilip R. Patil, Member	Illustrations	: Shri. Nilesh Jadhav, Shri. Deepak Sankpal,					
• Shri. Atul Deulgaonkar,		Shri. Mukim Tamboli, Shri. Sanjay Shitole,					
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Member - Secretary		Shri. Sameer Dhurade (Space related photographs)					
Geography Subject Committee :	Typesetting	: DTP Section, Textbook Bureau, Pune					
• Dr N. J. Pawar, Chairman	Paper	: 70 GSM Creamwove					
• Dr Medha Khole, Member							
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• Shri. Abhijit Ghorpade, Member	Printer : M/s Shree Printers, Pune						
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• Smt Kalpana Mane Member	C1 ' D '' A	D. (1)					
Smt. Kalpana Mane, Member Shri Rayikiran Jadhay	Shri. Rajiv Arun		Translation :				
• Shri. Ravikiran Jadhav,	Special Officer fo	or Science	Smt. Mrinalini Desai				
Shri. Ravikiran Jadhav, Member-Secretary	Special Officer for Smt. Vinita Tam	or Science ne					
 Shri. Ravikiran Jadhav, Member-Secretary Civics Subject Committee : 	Special Officer fo	or Science ne	Smt. Mrinalini Desai				
 Shri. Ravikiran Jadhav, Member-Secretary Civics Subject Committee : Dr Yashwant Sumant, 	Special Officer for Smt. Vinita Tami Assistant Special Science	or Science ne I Officer,	Smt. Mrinalini Desai Ms. Neena Abhyankar				
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Shri. Sachchitanand Aphale Chief Production Officer Shri. Vinod Gawde Production Officer Mrs. Mitali Shitap Assistant Production Officer



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Preamble

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

NATIONAL ANTHEM

Jana-gana-mana-adhināyaka jaya hē Bhārata-bhāgya-vidhātā,

Panjāba-Sindhu-Gujarāta-Marāthā Drāvida-Utkala-Banga

Vindhya-Himāchala-Yamunā-Gangā uchchala-jaladhi-taranga

Tava subha nāmē jāgē, tava subha āsisa māgē, gāhē tava jaya-gāthā,

Jana-gana-mangala-dāyaka jaya hē Bhārata-bhāgya-vidhātā,

Jaya hē, Jaya hē, Jaya hē, Jaya jaya jaya, jaya hē.

PLEDGE

India is my country. All Indians are my brothers and sisters.

I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give my parents, teachers and all elders respect, and treat everyone with courtesy.

To my country and my people, I pledge my devotion. In their well-being and prosperity alone lies my happiness.

Preface

The 'Primary Education Curriculum 2012' was prepared in the State of Maharashtra following the 'Right of Children to Free and Compulsory Education Act, 2009', the 'National Curriculum Framework 2005' and the 'Maharashtra State Curriculum Framework 2010'. The Textbook Bureau has launched a new series of textbooks based on this syllabus approved by the State Government from the academic year 2013-2014. We are happy to place this textbook 'Environmental Studies (Part One)' Standard Five in this series in your hands.

Our approach while designing this textbook was that the entire teaching-learning process should be child-centred, emphasis should be given on active learning and constructivism and at the end of Primary Education the students should have attained the desired competencies and that the process of education should become enjoyable and interesting.

There are many colourful illustrations and maps in this textbook. Some activities have been included in this textbook under the titles 'Can you tell?', 'Try this.', 'Use your brain power!'. They will help the students to understand the concepts introduced in the lossons and will also reinforce them. The textbook will motivate the children to observe their environment. Conscious efforts have been made to impart values which are relevant today in the context of this textbook.

Variety in the exercises will help the children to revise and retain the concepts in the lessons and will motivate them to study on their own. They will also help the teacher with continuous, comprehensive evaluation.

This textbook introduces the children to their natural, social and cultural environment. It attempts to develop the students' skills of problem solving and application and a healthy attitude towards the environment.

The language of presentation used in this book is simple. The topics have been presented in an inter-disciplinary manner without forming compartments of science, geography and civics. It may lead to an approach that looks at several dimensions of an issue or topic simultaneously. We have tried to keep in mind the diverse experiences of all the children in Maharashtra while writing the book.

This book was scrutinized by teachers from all parts of the State, by educationists, experts and members of the syllabus committee to make it as flawless and useful as possible. Their comments and suggestions have been duly considered by the Subject Committees while finalising the book.

The members of Science, Geography and Civics Subject Committees, Panel members, quality reviewers and artists have taken great pains to prepare this book. The Bureau is thankful to all of them.

We hope that this book will receive a warm welcome from students, teachers and parents.



(C. R. Borkar) Director Maharashtra State Bureau of Textbook Production and Curriculum Research, Pune.

Pune Date : March 5, 2015 Science Panel: • Smt. Sucheta Phadke • Shri. V. D. Lale • Smt. Sandhya Lahare • Shri. Shailesh Gandhe
• Shri. Abhay Yavalkar • Shri. Rajabhau Dhepe • Dr Shamin Padalkar • Shri. Vinod Tembe
• Dr Jaysingrao Deshmukh • Dr Lalit Kshirsagar • Dr Jayashri Ramdas • Dr Manasi Rajadhyaksh
• Shri. Sadashiv Shinde • Shri. Baba Sutar • Shri. Arvind Gupta

Geography Panel : • Shri. Bhaidas Somvanshi • Shri. Vikas Jhade • Shri. Tikaram Sangrame • Shri. Gajanan Suryavanshi • Shri. Padmakar P. Kulkarni • Shri. Samansing Bhil • Shri. Vishal Andhalkar

- Smt. Rafat Sayyad Shri. Gajanan Mankar Shri. Vilas Jamdhade Shri. Gourishankar Khobre
- Shri. Pundalik Nalawade Shri. Prakash Shinde Shri. Sunil More Smt. Aparna Phadke
- Dr Shrikrishna Gaikwad Shri. Abhijit Dod Dr Vijay Bhagat Smt. Ranjana Shinde Dr Smita Gandhi

Civics Panel : • Prof. Sadhana Kulkarni • Dr Chaitra Redkar • Dr Shrikant Paranjape • Dr Bal Kamble • Prof. Fakruddin Bennur • Prof. Nagesh Kadam • Shri. Madhukar Narde • Shri. Vijaychandra Thatte

Environmental Studies-Part 1-Standard V-Learning Outcomes				
Suggested Pedagogical Processes	Learning Outcomes			
 The learner may be provided opportunities in pail groups/individually and encouraged to: observe and explore the animals for the unique a unusual sense of sight, smell, hear, sleep and the response to light, heat, sound etc. explore the sources of water in their nearby surroundid and how fruits, vegetables, grains, water reach the home and kind of processes/techniques employed convert grain to flour and flour to <i>roti</i>, purification water etc. share experiences and discuss about the informatic collected or places visited with peers, teachers an elders. prepare guide routes to reach from one place to anoth collect information from pictures/elders/boo newspapers/magazines/web resources/museums et about animals which have very sharp sense of hearin smell and vision, different landforms such as pla area, hilly area, deserts, etc., and the varieties of flot and fauna, lives of people in such places. discuss with elders and use pictures, visit museums a collect information related to the lives for food, shelt availability of water, means of livelihood, practic customs, techniques of different regions and different time periods. visit petrol pumps, nature centres, science par water treatment plant, bank, health centre, wild sanctuaries, cooperative, monument, museum an if possible, far off places with different landforr lifestyles and livelihoods, etc. to observe and interwith people living there and share experiences different substances under different conditions, a how food gets spoilt, how seeds germinate and the rest of the same. 	 05.95A.01 explains the super senses and unusual features (sight, smell, hear, sleep, sound, etc.) of animals and their responses to light, sound, food etc. 05.95A.02 explains the use of technology and the process of accessing basic needs (food, water etc.) in our daily life. Explains the role and functions of different institutions in daily life. (Bank, Panchayat, Cooperatives, Police Station, etc.) 05.95A.03 describes the interdependence among animals, plants and humans (for example, communities earning livelihood from animals, dispersal of seeds etc.) 05.95A.04 establishes linkages among terrain, climate resources (food, water, shelter, livelihood) and cultural life. (for example, life in distant/difficult areas like hot/cold deserts) 05.95A.05 makes the activity groups to understand features and properties of objects and materials such as shape, taste, colour, texture, sound, traits etc. 			

Environmental Studies-Part 1-Standard V-Learning Outcomes

- conduct activities and simple experiments to check the properties/ features of different objects/ seeds/ water/ waste materials, etc.
- observe, explore surroundings and critically think how seeds reach from one place to another, how the plants and trees grow at places where no one plants them, for example forests, who waters them and who possesses them.
- visit the night shelters, people living in camps, old age homes, homes for orphanage/orphans' asylum in surroundings and interact with old and/handicap and who change their means of earning to find out where do people belong to and why they left their places, where their ancestors had been living for ages, migration of people and debate on various such issues in the surroundings.
- enquire from parents, teachers, peers and elders at home/ community to critically think and discuss to reflect on experiences of children related to situations at home, school, neighbourhood.
- discuss freely with peers, teachers and elders about the biases, prejudices, and stereotypes by providing counter examples to one another.
- visit departments/ institutes in the surroundings for example, Bank, Water Board, and Hospital and Disaster management centre and interact with related people and interpret different documents related to them.
- watch videos on different types of landforms and the variety of life forms found in such places, different institutions which cater to the need of societies, behaviour of animals, water scarcity, etc., followed by meaningful discussions and debates on occupations that derive from the peculiar geographical characteristics of different regions.
- perform simple activities, record the observations in the form of table/ sketch/ bar graph/ pie chart/ oral/ written form, etc., interpret and present their findings.
- discuss issues of living beings (plants and animals) as rightful inhabitants of earth, animal rights and ethical treatment to animals.
- share experiences of people who work selflessly for common good/welfare and motivates them.
- participate actively and undertake initiatives of care, share empathy, leadership by working together in groups e.g., in different indoor/outdoor/local/contemporary activities, games, dance, fine art, carry out projects/role play for taking care of a plant(s), feed birds/animals, things/elderly/handicap around them.
- conduct mock drills for emergency and disaster preparedness.
- understanding the processes of rotation and revolution.
- identifying landforms from maps and drawing them. For example, contours, tint method, and understanding the differences between signs and symbols.
- understanding the physical set-up of India.
- collecting information regarding various languages, costumes, festivals and celebrations in India.
- understanding the change in the means of transport and communication with time.

- 05.95A.06 records observations, experience, information with planning. (for example, chart/plotting/histogram/ pie chart) and predicts the patterns in activities and incidences. Establishes the relation between reasoning and effects. (for example, floating / sinking /mixing / evaporation /germination / spoilage / breathing / taste.)
- 05.95A.07 identifies signs, directions, location of different objects/landmarks of a locality/place visited in maps and predicts directions in context of positions of different places for a location.
- 05.95A.08 creates posters, designs, models, set ups, local dishes, sketches, maps (of neighbourhood/different places visited) using a variety of local/waste material and writes poems/slogans/ travelogue etc.
- 05.95A.09 gives opinions on observed/ experienced issues and relates practices/happenings to larger issues of society. (for example, discrimination for access/ownership of resources, migration/displacement/ exclusion, child rights).
- 05.95A.10 suggests ways for hygiene, health, managing waste, disaster/emergency situations and protecting/saving resources (land, fuels, forests etc.) and shows sensitivity for the disadvantaged/deprived.
- 05.95A.11 reads maps with the signs and symbols in a map.
- 05.95A.12 explains/describes the physical set up of India with the help of map.
- 05.95A.13 keeping in mind the political boundries of India explains the geographical, social and cultural characteristics.
- 05.95A.14 explains the effects on living organisms and the environment because of the excessive use of means of transport and communication.

CONTENTS

く	No.	Chapters	Page No.
Γ	1.	Our Earth and Our Solar System	1
	2.	Motions of the Earth	б
	3.	The Earth and its Living World	11
	4.	Environmental Balance	18
	5.	Family Values	24
	6.	Rules Are for Everyone.	28
	7.	Let us Solve our own Problems	32
	8.	Public Facilities and My School	35
	9.	Maps – our Companions	
	10.	Getting to Know India	44
	11.	Our Home and Environment	51
	12.	Food for All	58
	13.	Methods of Preserving Food	64
	14.	Transport	68
	15.	Communication and Mass Media	73
	16.	Water	77
	17.	Clothes – our Necessity	82
	18.	The Environment and Us	
	19.	Constituents of Food	96
	20.	Our Emotional World	103
	21.	Busy at Work – our Internal Organs	107
	22.	Growth and Personality Development	115
	23.	Infectious Diseases and how to Prevent them	121
	24.	Substances, Objects and Energy	127
L	25.	Community Health and Hygiene	133

The following foot notes are applicable :-

- 1. © Government of India, Copyright 2015.
- 2. The responsibility for the correctness of internal details rests with the publisher.
- 3. The territorial waters of India extend into sea to a distance of twelve nautical miles measured from the appropriate base line.
- 4. The administrative headquarters of Chandigarh, Haryana and Punjab are at Chandigarh.
- 5. The interstate boundaries amongst Arunachal Pradesh, Assam and Meghalaya shown on this map are as interpreted from the "North-Eastern Areas (Reorganisation) Act.1971," but have yet to be verified.
- 6. The external boundaries and coastlines of India agree wih the Record/Master Copy certified by Survey of India.
- 7. The state boundaries between Uttarakhand and Uttar Pradesh, Bihar and Jharkhand and Chhattisgarh and Madhya Pradesh have not been verified by the Governments concerned.
- 8. The spellings of names in this map, have been taken from various sources.