Ministry of Education
Government of India

# PARAKH

## RASHTRIYA SARVEKSHAN 2024

### DISTRICT REPORT

Varanasi, Uttar Pradesh



धर्मेन्द्र प्रधान
ଧର୍ମେନ୍ଦ୍ର ପ୍ରଧାନ
Dharmendra Pradhan

शिक्षा मंत्री
भारत सरकार
Minister of Education
Government of India

सत्यमेव जयते

आज़ादी का अमृत महोत्सव



# MESSAGE

Education is at the heart of an equitable and inclusive society. The need for an objective assessment of quality education in schools can hardly be over emphasized. PARAKH Rashtriya Sarvekshan 2024 is a significant step in this direction. Unlike the earlier traditional assessments, this survey offers a more detailed picture of what students are learning and how teaching in school systems are supporting the learning process across the country.

The survey provides meaningful insights into classroom practices, teacher's professionalism, and the curriculum implementation by focusing on students' competencies in core subjects and essential skills. With data collected from over 21 lakh students in 74,229 schools, it gives us an opportunity to identify learning gaps, spot regional trends, and highlight practices that are working well.

This initiative aligns with the goals of the National Education Policy (NEP) 2020, which encourages schools to promote creativity, critical thinking, and a more student-centred approach to education. PARAKH Rashtriya Sarvekshan 2024 is a step in that direction-helping us assess and improve what we do in our classrooms every day.

All the teachers, students, school leaders, and officials involved in this exercise deserved to be commended. Their participation and commitment to quality education are truly praiseworthy. I hope this survey findings are used widely and thoughtfully to help build a more equitable, effective, and responsive education system.

**(Dharmendra Pradhan)**



MOE - Room No. 301, 'C' Wing, 3rd Floor, Shastri Bhavan, New Delhi-110 001, Phone : 91-11-23782387, Fax : 91-11-23382365
E-mail : minister.sm@gov.in

जयन्त चौधरी
JAYANT CHAUDHARY

सत्यमेव जयते

कौशल विकास और उद्यमशीलता
राज्य मंत्री (स्वतंत्र प्रभार) एवं
शिक्षा राज्य मंत्री
भारत सरकार
Minister of State (Independent Charge) for
Skill Development and Entrepreneurship
and Minister of State for Education
Government Of India



School education lies at the heart of a nation's progress—it is where foundational values, skills, and aspirations are shaped. The PARAKH Rashtriya Sarvekshan 2024 represents a major step forward in our national journey to strengthen school education through a more informed, inclusive, and responsive approach.

This pioneering initiative goes beyond conventional assessments. It seeks to understand not just what students know, but how schools, teachers, and the broader education system are enabling meaningful learning. By doing so, it reflects a deep commitment to equity, quality, and continuous improvement across all layers of our school education landscape.

What sets PARAKH apart is its ability to empower every stakeholder—from classroom teachers who refine their methods based on feedback, to policymakers who draw on robust data to guide reforms, to community members who advocate for better learning environments. The emphasis on real-world competencies and systemic understanding ensures that assessments are not endpoints, but starting points for responsive and relevant educational action.

The insights from this nationwide survey provide an opportunity to deepen local engagement, design district-specific action plans, and address context-specific challenges. It invites us to move beyond scores and averages and instead pursue holistic, evidence-based solutions that uplift every learner and every region.

PARAKH Rashtriya Sarvekshan 2024 is more than a survey—it is a shared vision for a stronger, more equitable education system. As we move forward, let this effort serve as a foundation for collaboration, innovation, and unwavering commitment to nurturing the potential of every child through high-quality school education.

**(Jayant Chaudhary)**

Office: Room No. 104-A, 'C' Wing, Shastri Bhavan, New Delhi-110 001
Phone : +91-11-23384327 23381302 E-mail: mosedu-jc@gov.in

**Shri Sanjay Kumar**
*Secretary*




Department of School
Education & Literacy,
**Ministry of Education**
Government of India



# MESSAGE

PARAKH Rashtriya Sarvekshan 2024 is a significant step forward in our ongoing efforts to assess and enhance the quality of education in India. This national survey marks a significant milestone in our journey towards educational excellence, reflecting our unwavering commitment to the transformative goals set forth by the National Education Policy (NEP) 2020.

The NEP 2020 envisions an education system that is holistic, flexible, multidisciplinary, and aligned with the needs of the 21st century, aiming to bring out the unique capabilities of each student. Central to this vision is the emphasis on competency-based learning and assessment, ensuring that our students not only acquire knowledge but also develop critical thinking, problem-solving abilities, and a love for lifelong learning. PARAKH Rashtriya Sarvekshan 2024 assessed these competencies across diverse stages of schooling, providing us with invaluable insights into the effectiveness of our educational interventions.

The findings from PARAKH Rashtriya Sarvekshan 2024 help identify both our achievements and the challenges that lie ahead. They provide a clear roadmap for targeted interventions, enabling us to channel our resources and efforts where they are most needed. Moreover, this survey fosters a culture of accountability and continuous improvement, encouraging educators, administrators, and policymakers to collaborate effectively in enhancing the competencies of our students.

Moving beyond the assessment itself, the next phase of this initiative is focused on enabling systemic action. To facilitate this, a comprehensive multi-level strategy has been planned to translate the findings of the PARAKH Rashtriya Sarvekshan 2024 into meaningful actions. This includes a phased dissemination of data through workshops at the national, regional, state, and district levels. These workshops will focus not only on understanding the survey results but also on preparing district-specific roadmaps, where roles and responsibilities are clearly defined. A layered set of interventions—short-, mid-, and long-term—will support this process. These range from teacher training and community engagement to the development of intervention handbooks, digital learning materials, and a Management Information System for continued data use. The integration of survey insights into Annual Work Plans and Budgets (AWPBs) will help embed these efforts into ongoing planning cycles, ensuring that the survey serves as a lever for sustained system strengthening.

Let us celebrate our successes, learn from our shortcomings, and renew our commitment to providing an education that equips our students to navigate and contribute positively to an ever-evolving world.

**Shri Anandrao V Patil**
*Additional Secretary*




Department of School
Education & Literacy,
**Ministry of Education**
Government of India



# MESSAGE

Education is not just about imparting knowledge; it is about nurturing minds, shaping perspectives, and equipping students with the skills to navigate an ever-changing world. The PARAKH Rashtriya Sarvekshan 2024 serves as a critical initiative that helps us understand how well we are achieving these objectives. By assessing students' competencies across various educational stages, this survey enables us to measure learning outcomes, evaluate educational policies, and enhance the teaching-learning process in schools across the country.

One of the most significant contributions of this initiative is its role in bridging the gap between assessment and action. The findings from the PARAKH Rashtriya Sarvekshan provide an accurate reflection of student performance, allowing for targeted interventions that cater to the diverse learning needs of children across geographies, socio-economic backgrounds, and linguistic diversities. Furthermore, the survey brings into focus the importance of teacher training, curriculum refinement, and pedagogical innovations in improving learning outcomes.

The National Education Policy 2020 advocates for a shift toward competency-based education, where learning is not just about memorization but about understanding, application, and problem-solving. This survey plays a key role in evaluating this transition, ensuring that students are not only absorbing knowledge but also developing critical skills that will prepare them for future academic and professional challenges.

As we move into the implementation phase, the focus shifts to helping states and districts make effective use of the findings through structured and responsive planning. The post-survey interventions are being designed to support this shift, beginning with detailed workshops that bring together local education officials, academic experts, and practitioners to examine their district-level data in depth. These workshops will inform the creation of action-oriented district plans, tailored to address specific learning needs. Alongside these efforts, practical tools are being developed, such as subject- and stage-specific handbooks, orientation guides for training functionaries, and digital resources, to assist teachers and school leaders in translating insights into instructional practices. The emphasis is on usability, clarity, and adaptability, so that those at the frontlines of education have what they need to respond effectively. These initiatives are not isolated but are being integrated with broader administrative cycles, such as state academic planning and budgeting, to ensure coherence and long-term continuity in interventions.

I would like to express my sincere gratitude to the Secretary (Department of School Education & Literacy), the State Project Directors (SPDs), Directors of SCERTs, and the Principals of State Institutes of Education (SIEs) for their tireless efforts in facilitating the successful execution of this nationwide assessment. Their leadership, commitment, and coordination have been invaluable in ensuring that this initiative reaches schools across the country.

I also extend my gratitude to Central Board of Secondary Education (CBSE) for their valuable support in facilitating the administration of the PARAKH Rashtriya Sarvekshan 2024. Their cooperation in ensuring smooth coordination and execution has contributed to the successful completion of this large-scale assessment.

**Prof. Dinesh Prasad Saklani**
*Director*

विद्यया ऽमृतमश्नुते
एन सी ई आर टी
NCERT

National Council of Educational
Research and Training



# FOREWORD

Education serves as the foundation for a nation's progress, and ensuring its quality, accessibility, and relevance is a continuous endeavour. PARAKH Rashtriya Sarvekshan 2024 is a significant step in this direction, offering a comprehensive, data-driven insight into student learning outcomes, school environments, and educational effectiveness across India. This initiative reflects our commitment to evidence-based reforms, providing key findings that will guide future educational strategies and help bridge gaps in learning.

In an era of rapid socio-economic and technological transformation, education must equip students with competencies that go beyond rote learning. The focus should be on critical thinking, creativity, problem-solving, and adaptability, ensuring that learners are prepared for a dynamic future. The findings from this survey enable schools, teachers, and policymakers to assess how effectively these competencies are being nurtured at different stages of schooling. By analyzing student performance in language, mathematics, science, and social sciences, alongside teacher training, infrastructure, and pedagogical approaches, the survey provides a holistic overview of the current education landscape.

One of the most valuable aspects of PARAKH Rashtriya Sarvekshan 2024 is its role in facilitating targeted interventions. The data collected does not merely identify learning gaps—it serves as a catalyst for informed decision-making, curricular improvements, and teaching innovations. This approach is essential in ensuring that our education system is inclusive, equitable, and aligned with the principles of competency-based learning as envisioned in NEP 2020.

As we analyze and act upon these findings, our collective goal should be to create an education system that is responsive, forward-thinking, and centered on student development. This requires collaboration among educators, policymakers, and communities to implement meaningful changes that enhance both teaching and learning experiences.

# Preface

PARAKH Rashtriya Sarvekshan 2024 is a significant step toward understanding and improving student learning outcomes and overall school effectiveness across India. This nationwide survey serves as a comprehensive reflection of the education system, offering valuable insights into how students at different stages of schooling develop competencies and how various factors contribute to their learning experiences. Designed as a large-scale competency-based assessment, the survey provides a structured analysis of student achievement, teacher preparedness, school infrastructure, and pedagogical practices. Through this initiative, we aim to bridge the gap between policy and classroom realities, ensuring that education remains dynamic, inclusive, and aligned with contemporary learning needs.

At the core of this survey is the principle that education should not only focus on content mastery but also on the development of critical thinking, problem-solving, and application-based skills. By examining student performance in language, mathematics, science, and social sciences, the study highlights both areas of progress and challenges that require targeted interventions. The findings provide a deeper understanding of learning trends across different regions and socio-economic backgrounds, emphasizing the need for a more equitable and responsive education system. The survey also explores how teachers are equipped to facilitate meaningful learning, assessing their engagement with professional development programs, use of technology in teaching, and implementation of innovative classroom strategies. The role of school infrastructure and access to digital learning tools is also examined, underscoring the importance of creating an environment that supports holistic education.

One of the key takeaways from this study is the need to transform data into action. The insights gained from the survey must serve as a foundation for informed decision-making, guiding improvements in curriculum design, teacher training, and resource allocation. The assessment is not merely a measurement of where we stand today but a tool to shape the future of education in the country. Strengthening foundational skills, ensuring inclusive learning opportunities, and fostering an adaptive and innovative approach to teaching will be critical in achieving the objectives envisioned under the National Education Policy (NEP) 2020. The findings also emphasize the importance of integrating technology into

learning processes, addressing regional disparities in student performance, and enhancing social-emotional learning to create a more supportive educational framework.

To ensure that the findings of PARAKH Rashtriya Sarvekshan 2024 lead to meaningful interventions, a multi-level post-survey intervention strategy has been planned. Workshops at the national, regional, state, and district levels will be organized to disseminate results, analyze key insights, and develop targeted action plans. These workshops will bring together education department officials, SCERTs, school leaders, and teachers to collectively interpret the survey results, identify learning gaps, and formulate strategies to strengthen the teaching-learning process. The district-level workshops, in particular, will play a crucial role in enabling local functionaries, including teachers, principals, and community stakeholders, to engage with the findings and develop district-specific interventions. These efforts will help in formulating short-, mid-, and long-term strategies aimed at addressing gaps in student learning and enhancing the overall quality of education.

As we look ahead, PARAKH Rashtriya Sarvekshan 2024 stands as a cornerstone for shaping the future of assessment-driven education in India. The journey toward an inclusive, competency-based, and future-ready education system requires sustained commitment and continuous reflection. Through collaboration and innovation, we can ensure that every learner, regardless of background or location, has access to meaningful learning experiences that empower them for life. It is my hope that this report will serve as a catalyst for positive change, fostering an education system that is both forward-looking and deeply rooted in the principles of equity and excellence.

**Prof. Indrani Bhaduri**
*Programme Co-ordinator*
*CEO* and *Head* PARAKH, NCERT

## PARTICIPATION

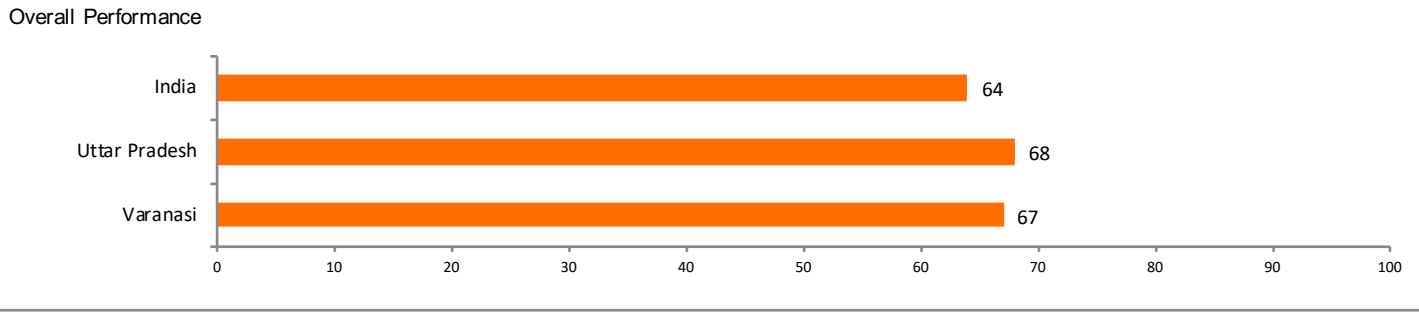
| Schools | Foundation | Preparatory | Middle |
|---|---|---|---|
| 127 | 46 | 45 | 56 |

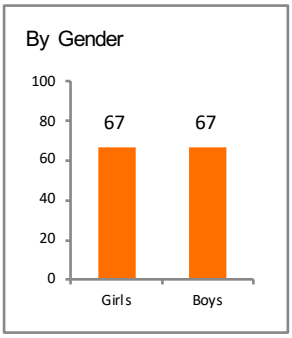
| Teachers | Foundation | Preparatory | Middle |
|---|---|---|---|
| 490 | 135 | 135 | 220 |

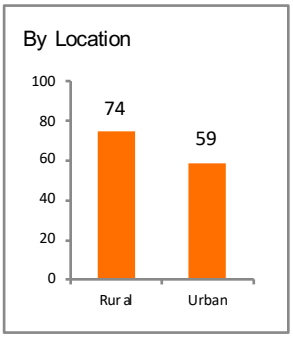
| Students | Foundation | Preparatory | Middle |
|---|---|---|---|
| 4013 | 1152 | 1266 | 1595 |

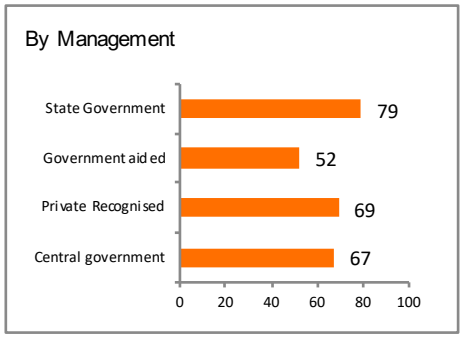
## FOUNDATION STAGE

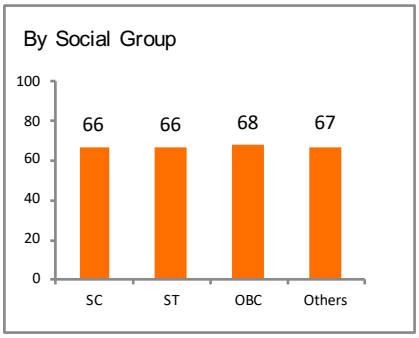
### AVERAGE PERFORMANCE IN LANGUAGE (%)



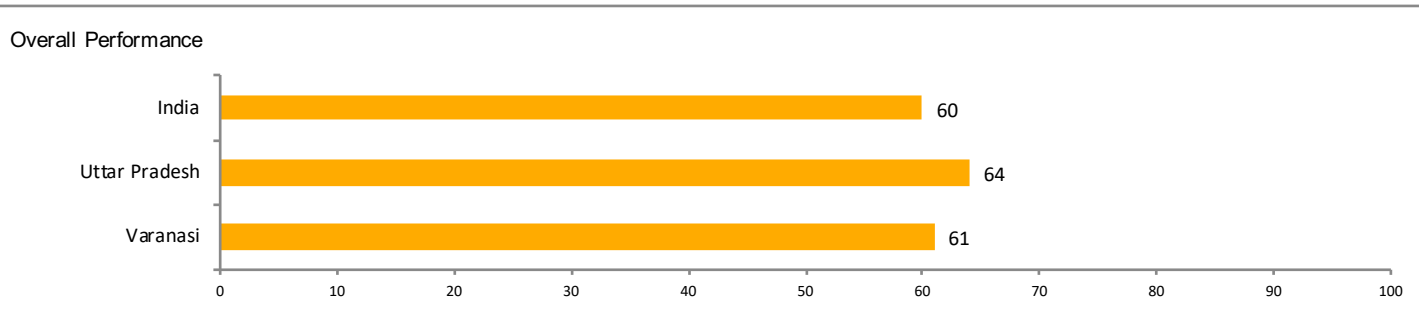



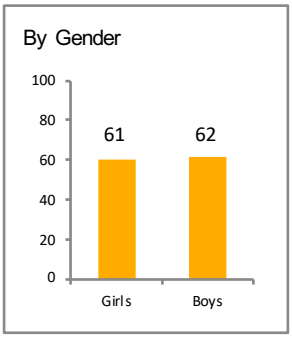



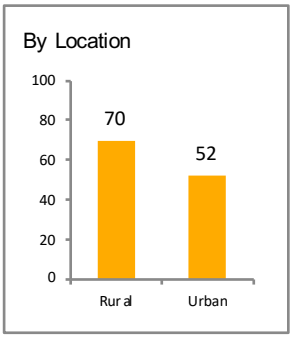



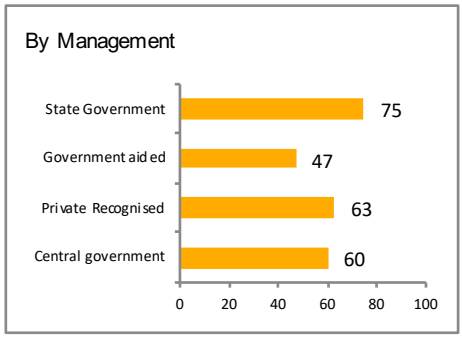



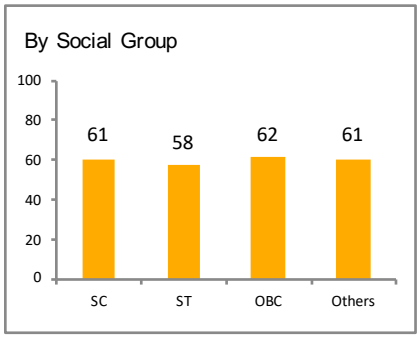

### AVERAGE PERFORMANCE IN MATHEMATICS (%)



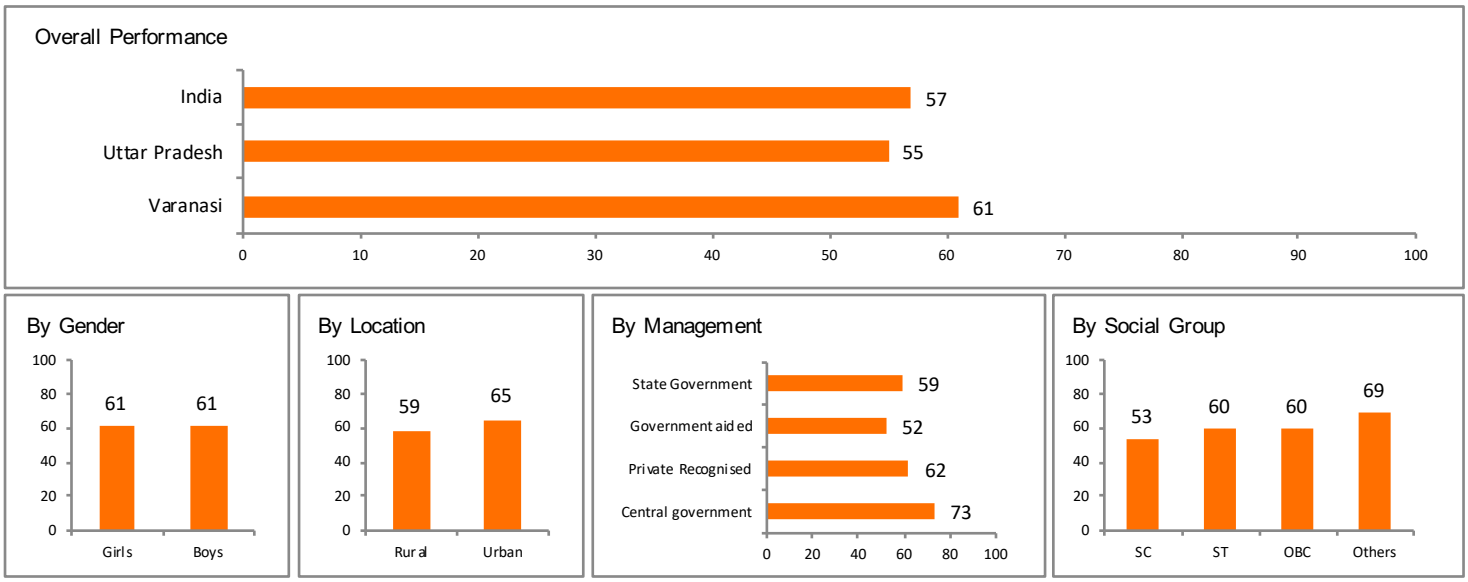



# PREPARATORY STAGE

## AVERAGE PERFORMANCE IN LANGUAGE (%)







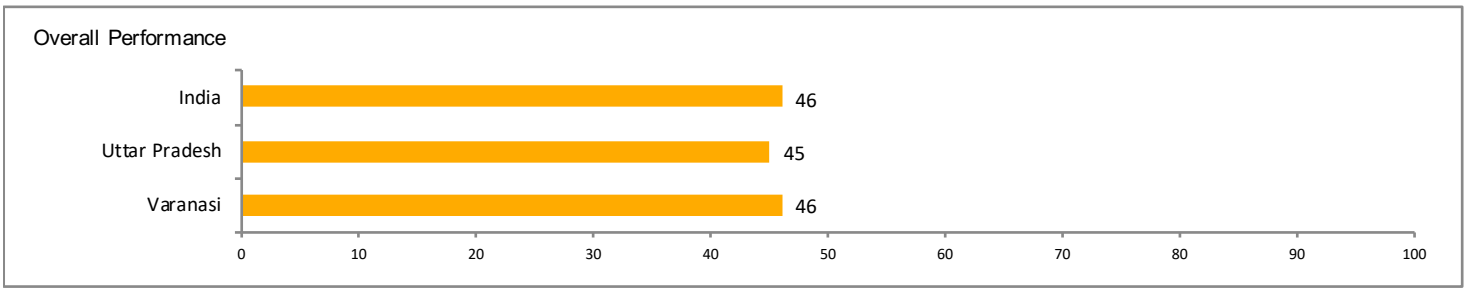


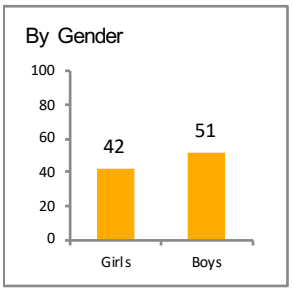


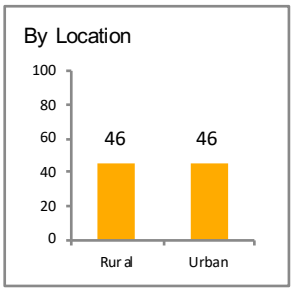


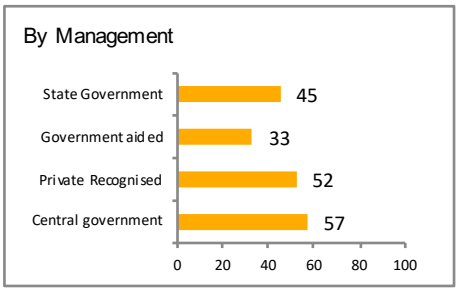


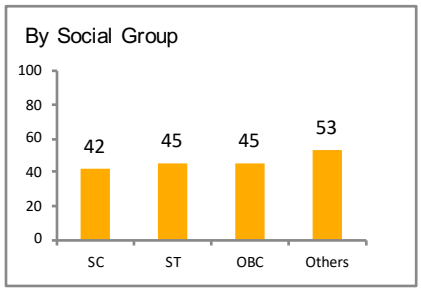

## AVERAGE PERFORMANCE IN MATHEMATICS (%)



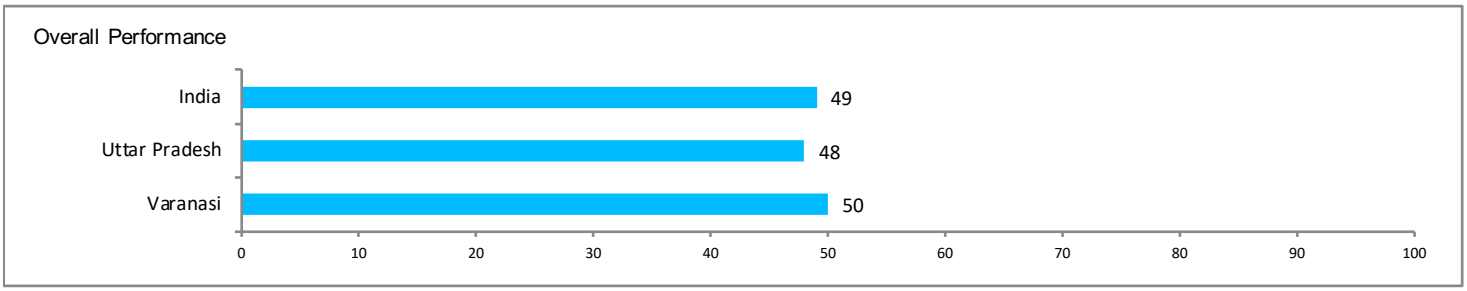



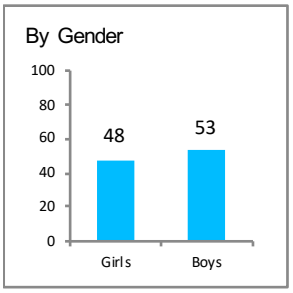



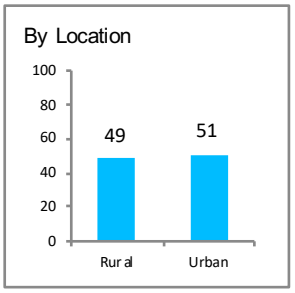



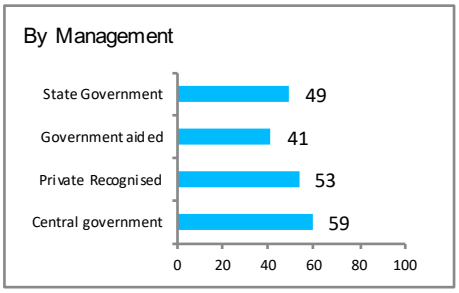



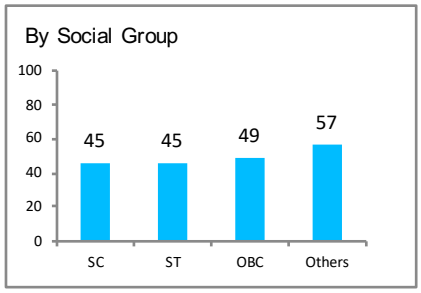

## AVERAGE PERFORMANCE IN THE WORLD AROUND US (%)



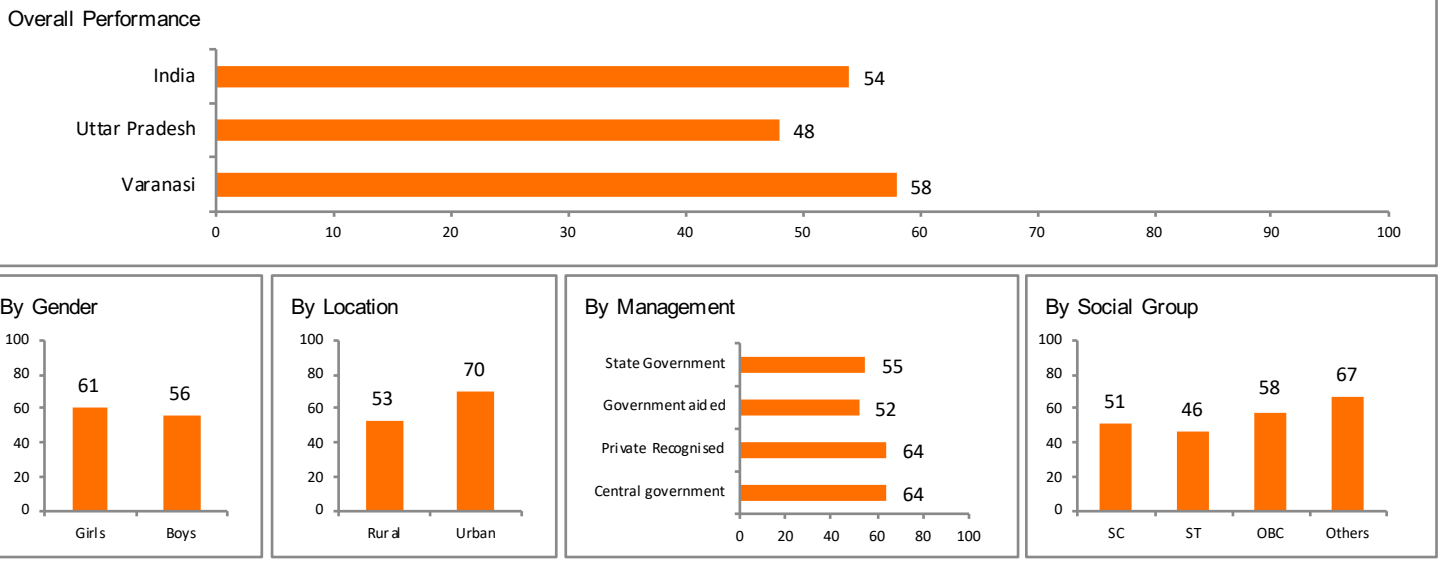



# MIDDLE STAGE

## AVERAGE PERFORMANCE IN LANGUAGE (%)







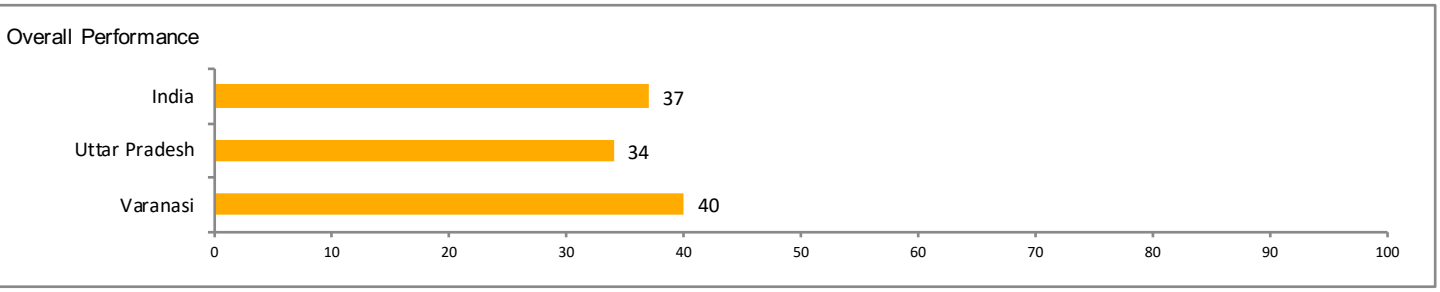


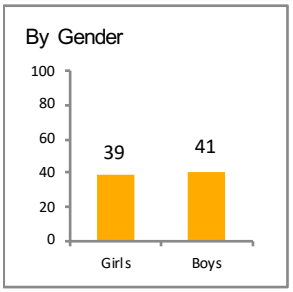


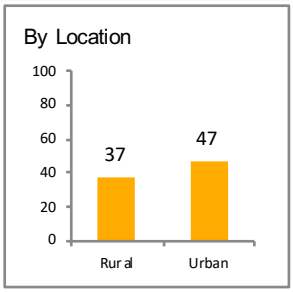


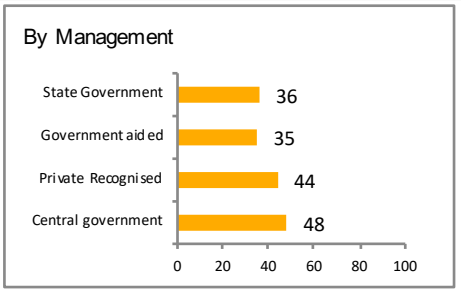


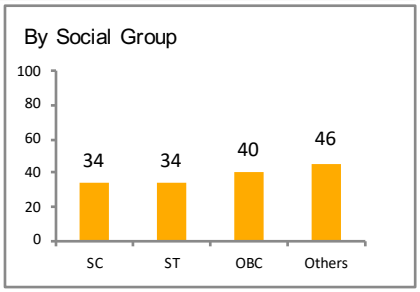

## AVERAGE PERFORMANCE IN MATHEMATICS (%)



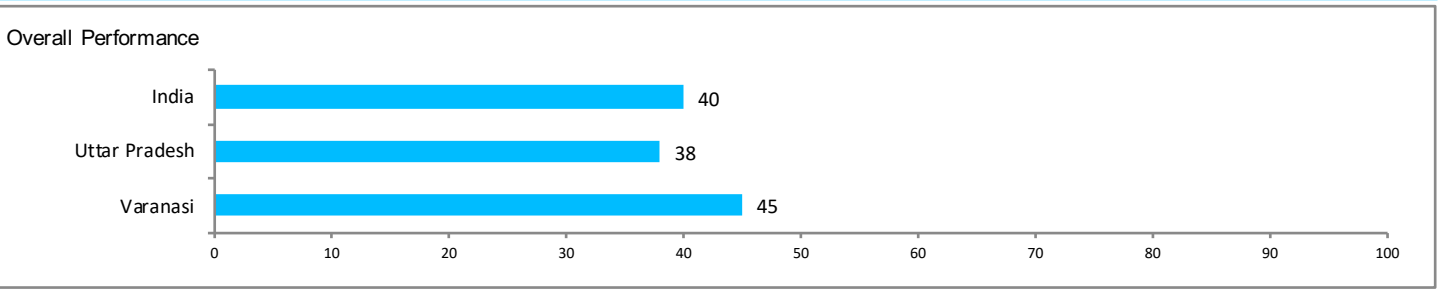



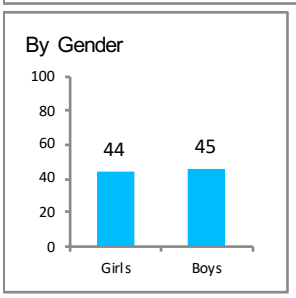



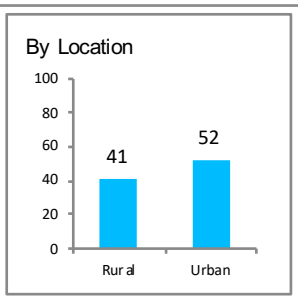



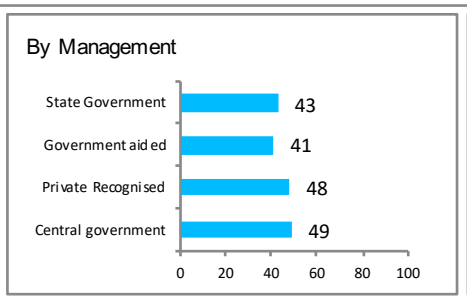



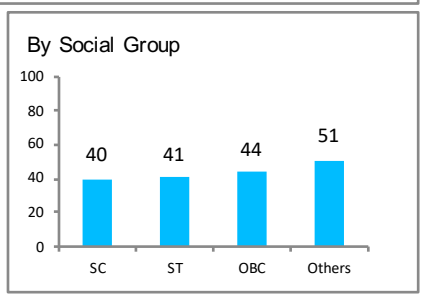

## AVERAGE PERFORMANCE IN SCIENCE (%)



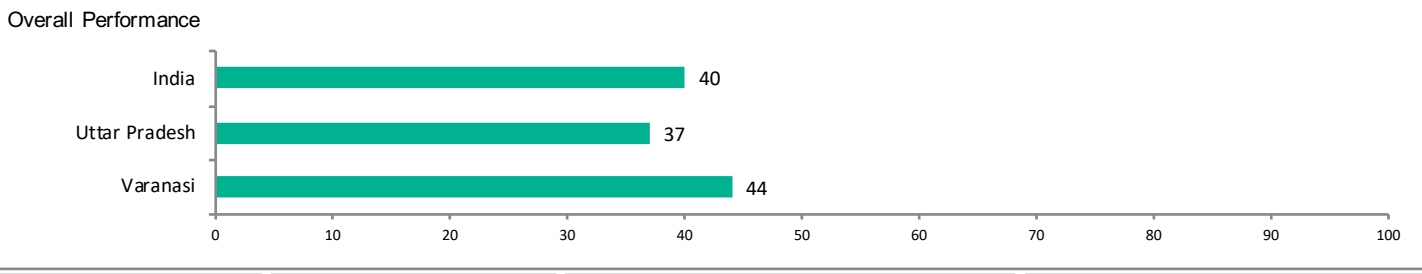



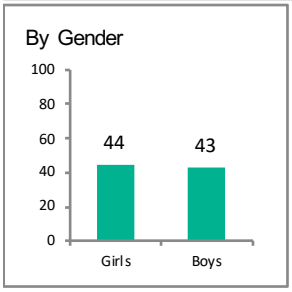



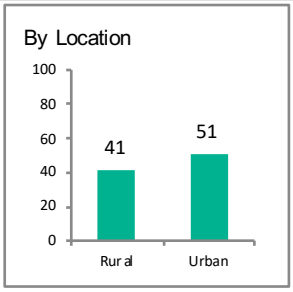



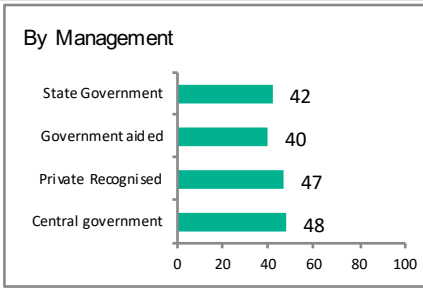



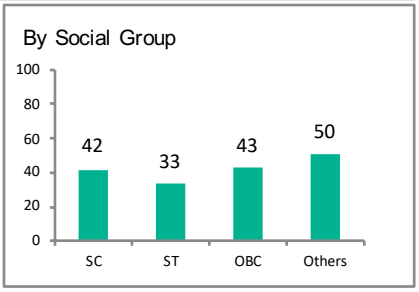
## AVERAGE PERFORMANCE IN SOCIAL SCIENCE (%)




# FOUNDATION STAGE

## Competencies in Language (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-9.7 | Knows and uses enough words to carry out day-to-day interactions effectively and can guess the meaning of new words by using existing Vocabulary | 71 | 72 | 67 |
| C-10.5 | Reads short stories and comprehends their meaning - by identifying characters, storyline and what the author wants to say - on their own | 63 | 65 | 60 |
| C-10.7 | Reads and comprehends the meaning of short news items, instructions and recipes, and publicity material | 64 | 66 | 61 |

## Competencies in Mathematics (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-8.1 | Sorts objects into groups and sub-groups based on more than one property | 71 | 71 | 68 |
| C-8.2 | Identifies and extends simple patterns in their surroundings, shapes, and numbers | 68 | 68 | 69 |
| C-8.4 | Arranges numbers up to 99 in ascending and descending order | 53 | 58 | 55 |
| C-8.5 | Recognises and uses numerals to represent quantities up to 99 with the understanding of decimal place value system | 66 | 64 | 61 |
| C-8.6 | Performs addition and subtraction of 2-digit numbers fluently using flexible strategies of composition and decomposition of both numerical and word problems | 61 | 64 | 58 |
| C-8.7 | Recognises multiplication as repeated addition and division as equal sharing | 56 | 62 | 54 |
| C-8.8 | Recognises, makes, and classifies basic geometric shapes and their observable properties, and understands and explains the relative relation of objects in space | 44 | 51 | 50 |
| C-8.9 | Selects appropriate tools and units to perform simple measurements of length, weight, and volume of objects in their immediate environment | 66 | 66 | 62 |
| C-8.10 | Performs simple measurements of time in minutes, hours, day, weeks, and months | 63 | 65 | 61 |
| C-8.11 | Performs simple transactions using money up to INR 100 | 53 | 57 | 50 |
| C-8.12 | Develops adequate and appropriate vocabulary for comprehending and expressing concepts and procedures related to quantities, shapes, space, and measurements | 56 | 61 | 55 |
| C-8.13 | Formulates and solves simple mathematical problems related to quantities, shapes, space, and measurements | 55 | 59 | 55 |

# PREPARATORY STAGE

## Competencies in Language (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-2.1 | Applies varied comprehension strategies (inferring, predicting, visualising) to understand different texts | 61 | 55 | 56 |
| C-2.2 | Understands main ideas and draws essential conclusions from the material read | 61 | 56 | 58 |

## Competencies in Mathematics (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-1.1 | Represents numbers using the place value structure of the Indian number system, compares whole numbers, and knows and can read the names of very large numbers | 56 | 53 | 54 |
| C-1.2 | Represents and compares commonly used fractions in daily life (such as ½, ¼) as parts of unit wholes, as locations on number lines and as divisions of whole numbers | 26 | 31 | 29 |
| C-1.3 | Understands and visualises arithmetic operations and the relationships among them, knows addition and multiplication tables at least up to 10x10 (pahade) and applies the four basic operations on whole numbers to solve daily life problems | 57 | 54 | 53 |
| C-1.4 | Recognises, describes, and extends simple number patterns such as odd numbers, even numbers, square numbers, cubes, powers of 2, powers of 10, and Virahanka–Fibonacci numbers. | 47 | 47 | 49 |
| C-2.2 | Describes location and movement using both common language and mathematical vocabulary; understands the notion of map (najri naksha) | 39 | 39 | 41 |
| C-2.4 | Discovers, recognises, describes, and extends patterns in 2D and 3D shapes | 45 | 43 | 48 |
| C-3.3 | Carries out simple unit conversions, such as from centimetres to metres, within a system of measurement | 36 | 40 | 38 |
| C-3.5 | Devises strategies for estimating the distance, length, time, perimeter (for regular and irregular shapes), area (for regular and irregular shapes), weight, and volume and verifies the same using standard units | 42 | 44 | 42 |
| C-4.1 | Solves puzzles and daily-life problems involving one or more operations on whole numbers (including word puzzles and puzzles from 'recreational' areas, such as the construction of magic squares) | 38 | 38 | 38 |
| C-4.3 | Selects appropriate methods and tools for computing with whole numbers, such as mental computation, estimation, or paper pencil calculation, in accordance with the context | 50 | 49 | 49 |

## Competencies in The World Around Us (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-1.1 | Observes and identifies the natural (insects, plants, birds, animals, geographical features, sun and moon, stars, planets, natural resources) and social (houses, relationships) components in their immediate environment | 42 | 41 | 44 |
| C-1.3 | Asks questions and makes predictions about simple patterns (season change, food chain, phases of the moon, movement of stars and planets, shapes of trees, plants, leaves, and flowers, rituals, celebrations) observed in the immediate environment | 36 | 38 | 38 |
| C-1.4 | Explains the functioning of local institutions (family, school, panchayat) bank/post office, market, and in different forms (story, drawing, tabulating data, reports), and analyses their roles | 59 | 55 | 56 |
| C-2.1 | Identifies natural and humanmade systems that support their lives (water supply, water cycle, river flow systems, seasons, life cycle of plants and animals, food, household items, transport, communication, electricity in the home) | 49 | 49 | 51 |
| C-2.2 | Describes the relationship between the natural environment and cultural practices in their immediate environment (nature of work, food, festivals, traditions) | 32 | 35 | 38 |
| C-3.1 | Describes the basic safety needs and protection (health and hygiene, food, water, shelter, precautions, awareness of emergency situations, abuse, and unsafe situations) of humans, birds, and animals | 62 | 57 | 57 |
| C-3.2 | Discusses how to prepare for emergency situations (smoke, fire, small injuries, burns, electrical safety, unseasonal rains, fallen trees) based on discussions with family and community, or personal experiences | 51 | 46 | 45 |
| C-4.1 | Observes and describes diversity among plants, and birds and animals in their immediate environment (shape, sounds, food habits, growth, habitat) | 55 | 52 | 54 |
| C-4.3 | Describes usage of natural resources in their immediate environment | 52 | 50 | 50 |
| C-4.7 | Learns about basic social and behavioural norms, values, and dispositions that benefit our social and natural environments and that help our society function smoothly | 52 | 51 | 51 |
| C-5.3 | Reads simple maps of city, state, and country to identify natural and humanmade features (well, lake, post office, school, hospital) with reference to symbols and directions | 46 | 44 | 46 |

# MIDDLE STAGE

## Competencies in Language (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-1.1 | Identifies main points and summarises from a careful listening or reading of the text (news articles, reports, editorials) | 58 | 48 | 54 |

## Competencies in Mathematics (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-1.2 | Discovers, identifies, and explores patterns in numbers and describes rules for their formation (e.g., multiples of 7, powers of 3, prime numbers), and explains relations between different patterns | 45 | 38 | 39 |
| C-1.4 | Explores and understands sets of numbers, such as whole numbers, fractions, integers, rational numbers, and real numbers, and their properties, and visualises them on the number line | 31 | 30 | 31 |
| C-1.5 | Explores the idea of percentage and applies it to solve problems | 29 | 27 | 28 |
| C-1.6 | Explores and applies fractions (both as ratios and in decimal form) in daily-life situations | 35 | 30 | 31 |
| C-2.2 | Extends the representation of a number in the form of a variable or an algebraic expression using a variable | 47 | 40 | 44 |
| C-2.3 | Forms algebraic expressions using variables, coefficients, and constants and manipulates them through basic operations | 40 | 36 | 38 |
| C-2.5 | Develops own methods to solve puzzles and problems using algebraic thinking | 42 | 36 | 37 |
| C-3.2 | Outlines the properties of lines, angles, triangles, quadrilaterals, and polygons and applies them to solve related problems | 44 | 36 | 37 |
| C-3.5 | Understands congruence and similarity as it applies to geometric shapes and identifies similar and congruent triangles | 44 | 36 | 40 |
| C-4.1 | Discovers, understands, and uses formulae to determine the area of a square, triangle, parallelogram, and trapezium and develops strategies to find the areas of composite 2D shapes | 43 | 36 | 39 |
| C-5.1 | Collects, organises, and interprets the data using measures of central tendencies such as average/mean, mode, and median | 45 | 38 | 41 |
| C-6.1 | Applies both inductive and deductive logic to formulate definitions and conjectures, evaluate and produce convincing arguments/ proofs to turn these definitions and conjectures into theorems or correct statements | 31 | 27 | 29 |

## Competencies in Science (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-1.1 | Classifies matter based on observable physical (solid, liquid, gas, shape, volume, density, transparent, opaque, translucent, magnetic, non-magnetic, conducting, non-conducting) and chemical characteristics | 38 | 36 | 36 |
| C-1.2 | Describes changes in matter (physical and chemical) and uses particulate nature to represent the properties of matter and the changes | 44 | 37 | 38 |
| C-1.4 | Observes and explains the phenomena caused due to differences in pressure, temperature, and density (e.g., breathing, sinking-floating, water pumps in homes, cooling of things, formation of winds) | 46 | 35 | 37 |
| C-2.1 | Describes one-dimensional motion (uniform, nonuniform, horizontal, vertical) using physical measurements (position, speed, and changes in speed) through mathematical and diagrammatic representations | 46 | 38 | 41 |
| C-2.2 | Describes how electricity works through manipulating different elements in simple circuits and demonstrates the heating and magnetic effects of electricity | 33 | 28 | 33 |
| C-2.3 | Describes the properties of a magnet (natural and artificial; Earth as a magnet) | 42 | 38 | 41 |
| C-2.4 | Demonstrates rectilinear propagation of light from different sources (natural, artificial, reflecting surfaces), verifies the laws of reflection through manipulation of light sources and objects and the use of apparatus and artefacts. | 47 | 36 | 45 |
| C-3.1 | Describes the diversity of living things observed in the natural surroundings (insects, earthworms, snails, birds, mammals, reptiles, spiders, diverse plants, and fungi), including at a smaller scale (microscopic organisms) | 50 | 41 | 47 |
| C-3.2 | Distinguishes the characteristics of living organisms (need for nutrition, growth and development, need for respiration, response to stimuli, reproduction, excretion, cellular organisation) from non-living things | 37 | 30 | 34 |
| C-4.1 | Undertakes a nutrition-based analysis of food components with special reference to Indian culinary practices and modern understanding of nutrition, and explains the effect of nutrition on health | 63 | 54 | 53 |
| C-4.3 | Describes biological changes (growth, hormonal) during adolescence, and measures to ensure overall well-being | 44 | 36 | 37 |
| C-7.3 | Represents real world events and relationships through diagrams and simple mathematical representations | 39 | 36 | 38 |

## Competencies in Social Science (%)

| Competency Code | Competency Description | District | State | National |
|---|---|---|---|---|
| C-1.1 | Collects and interprets multiple sources of information (primary and secondary) to understand the historical, cultural, geographical, and socio-political aspects of human life | 32 | 31 | 32 |
| C-1.2 | Represents and analyses data related to various aspects of human life given in the form of text, tables, charts, diagrams, and maps | 55 | 47 | 53 |
| C-2.1 | Explains and analyses major changes in the past and their impact on society | 47 | 39 | 39 |
| C-2.2 | Recognises elements of the continued prevalence of certain beliefs, relationships, practices, and activities in human society, notwithstanding major changes in society | 41 | 35 | 38 |
| C-3.1 | Analyse the effect of various changes in early human society from nomadism to settled life, early civilisation and changes in human habitation, people's sociocultural beliefs and concepts over time that significantly impacted human societies. | 39 | 33 | 36 |
| C-4.2 | Assesses the influence of social, cultural, and political institutions on an individual/ group/ community/ society in general | 57 | 44 | 46 |
| C-6.1 | Explains key natural phenomena such as climate, weather, ocean cycles, soil formation, the flow of rivers, and how they are spatially distributed | 30 | 26 | 33 |
| C-6.2 | Identifies the distribution of resources such as water, agriculture, raw materials, and services across geographies | 40 | 32 | 38 |
| C-6.3 | Analyses Indian perspectives on and efforts towards conservation and sustainability in society, and advocates the importance of the same, and what more needs to be done in these directions including in the context of global climate change | 51 | 42 | 46 |
| C-6.4 | Correlates the existence of different patterns of livelihoods with different types of landforms, availability of resources, and climatic conditions and changes (in local, regional, national, and global contexts) | 47 | 39 | 39 |
| C-7.1 | Explains India's unity in diversity by recognising commonalities in its rich and diverse cultural elements. languages, art, philosophy, values, clothing, cuisines, traditions, festivals, trade and health practices including ayurveda and yoga | 40 | 33 | 36 |
| C-7.2 | Discovers the topographical diversity of the Indian landmass – from semi-arid zone in the west, areas of heavy rains in the north-east, to long coastal areas in the south, the snow-clad mountains in the north and the rich biodiversity. | 36 | 30 | 34 |
| C-8.2 | Explains the process of formation of the Indian Constitution and understands the ideas and ideals of the Indian national movement enshrined in it as well as those drawn from India's civilisational heritage | 46 | 41 | 45 |
| C-8.3 | Explains the working of the three tiers of local self-government and appreciates its significance in upholding democracy at the grassroot level | 47 | 38 | 39 |
| C-9.1 | Explains the key elements of trade and commerce (commodity, production, consumption, and capital) and its impact on individual life and society | 57 | 50 | 50 |