





# DISTRICT REPORT CARD NATIONAL ACHIEVEMENT SURVEY CLASS X

CYCLE-2: 2017-18

#### **JHARKHAND**

Ranchi



The District Report Card (DRC) presents the academic achievement of secondary school students at the District Level along with the participation rate of students and schools in the National Achievement Survey (NAS). The DRC communicates the findings of the NAS Class X - Cycle 2, conducted on a representative sample of all types of schools in a district (max. of 80 schools) in five subjects i.e. Mathematics, Science, Social Science, English and Modern Indian Languages (MIL).

#### PERFORMANCE OF STUDENTS: SUBJECT WISE

Subjects	District Average (% correct)	State Average (% correct)	Significant Difference
Mathematics	29.35	32.56	•
Science	30.13	31.37	
Social Science	38.16	38.82	<b>\( \)</b>
English	30.58	31.67	
MIL (Read. Comp.)	47.70	45.11	•

- No significant difference between District and State average score.
- District average score is significantly ABOVE the State average score.
- District average score is significantly BELOW the State average score.

#### DISTRIBUTION OF STUDENTS BY RANGE (PERCENT CORRECT)

Subjects	Level	0-35 (%)	36-50 (%)	51-75 (%)	76-100 (%)
Mathematics	District	78.18	16.86	4.79	0.17
Mathematics	State	69.11	19.97	9.56	1.37
Science	District	74.45	20.95	4.60	_
Science	State	70.07	22.64	7.05	0.25
Coolal Colones	District	45.91	34.96	18.96	0.17
Social Science	State	47.84	30.64	20.30	1.21
English	District	76.81	15.13	7.23	0.84
English	State	71.57	17.64	9.67	1.11
MII (Dood Cores)	District	31.39	22.98	35.33	10.29
MIL (Read. Comp.)	State	35.01	27.82	29.43	7.75

Students at risk	
Students need improvement	

# PERFORMANCE OF STUDENTS: CONTENT WISE

Mathematics         29.35         32.56         ■           Algebra         31.51         34.30         ■           Coordinate Geometry         23.58         28.20         ■           Mensuration         29.47         33.32         ■           Geometry         29.58         31.47         ■           Statistics         25.62         30.49         ■           Trigonometry         32.19         37.31         ■           Number System         26.20         29.20         ■           Probability         27.36         31.55         ■           SCIENCE         30.13         31.37         ■           SCIENCE         30.13         31.37         ■           Materials         28.29         30.12         ■           Moving things, people and ideas         31.89         32.84         ■           Moving things, people and ideas         31.32         30.66         ■           Natural phenomena         25.38         26.68         ■           Natural resources         37.39         38.06         ■           SOCIAL SCIENCE         38.16         38.82         ■           Political Science	erence	Significant Difference	State Average (% correct)	District Average (% correct)	Subjects
Coordinate Geometry         23.58         28.20           Mensuration         29.47         33.32           Geometry         29.58         31.47           Statistics         25.62         30.49           Trigonometry         32.19         37.31           Number System         26.20         29.20           Probability         27.36         31.55           SCIENCE         30.13         31.37           Food         28.01         29.75           Materials         28.29         30.12           The world of living         32.31         33.65           Moving things, people and ideas         31.89         32.84           How things work         31.32         30.66           Natural phenomena         25.38         26.68           Natural resources         37.39         38.06           SOCIAL SCIENCE         38.16         38.82           Political Science         41.95         42.20           History         34.42         36.97           Economics         38.34         37.98           Geography         37.92         38.15           ENGLISH         30.58         31.67           Reading Compr			32.56	29.35	Mathematics
Mensuration       29.47       33.32       ↓         Geometry       29.58       31.47       ↓         Statistics       25.62       30.49       ↓         Trigonometry       32.19       37.31       ↓         Number System       26.20       29.20       ↓         Probability       27.36       31.55       ↓         SCIENCE       30.13       31.37       ↓         Food       28.01       29.75       ↓         Materials       28.29       30.12       ↓         The world of living       32.31       33.65       ↓         Moving things,people and ideas       31.89       32.84       ↓         How things work       31.32       30.66       ↓         Natural phenomena       25.38       26.68       ↓         Natural resources       37.39       38.06       ↓         SOCIAL SCIENCE       38.16       38.82       ↓         Political Science       41.95       42.20       ↓         History       34.42       36.97       ↓         Economics       38.34       37.98       ↓         Enolish       30.58       31.67       ↓ <td></td> <th></th> <td>34.30</td> <td>31.51</td> <td>Algebra</td>			34.30	31.51	Algebra
Geometry       29.58       31.47       Image: Company of the property       32.19       37.31       Image: Company of the property       32.19       37.31       Image: Company of the property       Image: Company of the property       32.19       37.31       Image: Company of the property       Image: Company of the property       32.20       Image: Company of the property       Image:			28.20	23.58	Coordinate Geometry
Statistics       25.62       30.49       →         Trigonometry       32.19       37.31       →         Number System       26.20       29.20       →         Probability       27.36       31.55       →         SCIENCE       30.13       31.37       →         Food       28.01       29.75       →         Materials       28.29       30.12       →         The world of living       32.31       33.65       →         Moving things,people and ideas       31.89       32.84       →         How things work       31.32       30.66       →         Natural phenomena       25.38       26.68       →         Natural resources       37.39       38.06       →         SOCIAL SCIENCE       38.16       38.82       →         Political Science       41.95       42.20       →         History       34.42       36.97       →         Economics       38.34       37.98       →         Geography       37.92       38.15       →         ENGLISH       30.58       31.67       →         English       30.08       31.87       →			33.32	29.47	Mensuration
Trigonometry       32.19       37.31       →         Number System       26.20       29.20       →         Probability       27.36       31.55       →         SCIENCE       30.13       31.37       →         Food       28.01       29.75       →         Materials       28.29       30.12       →         The world of living       32.31       33.65       →         Moving things,people and ideas       31.89       32.84       →         How things work       31.32       30.66       →         Natural phenomena       25.38       26.68       →         Natural resources       37.39       38.06       →         SOCIAL SCIENCE       38.16       38.82       →         Political Science       41.95       42.20       →         History       34.42       36.97       →         Economics       38.34       37.98       →         Geography       37.92       38.15       →         ENGLISH       30.58       31.67       →         Reading Comprehension       31.01       31.38       →         Language Element       30.08       31.87       →			31.47	29.58	Geometry
Number System         26.20         29.20           Probability         27.36         31.55           SCIENCE         30.13         31.37           Food         28.01         29.75           Materials         28.29         30.12           The world of living         32.31         33.65           Moving things,people and ideas         31.89         32.84           How things work         31.32         30.66           Natural phenomena         25.38         26.68           Natural resources         37.39         38.06           SOCIAL SCIENCE         38.16         38.82           Political Science         41.95         42.20           History         34.42         36.97           Economics         38.34         37.98           Geography         37.92         38.15           ENGLISH         30.58         31.67           Reading Comprehension         31.01         31.38           Language Element         30.08         31.87			30.49	25.62	Statistics
Probability         27.36         31.55           SCIENCE         30.13         31.37           Food         28.01         29.75           Materials         28.29         30.12           The world of living         32.31         33.65           Moving things,people and ideas         31.89         32.84           How things work         31.32         30.66           Natural phenomena         25.38         26.68           Natural resources         37.39         38.06           SOCIAL SCIENCE         38.16         38.82           Political Science         41.95         42.20           History         34.42         36.97           Economics         38.34         37.98           Geography         37.92         38.15           ENGLISH         30.58         31.67           Reading Comprehension         31.01         31.38           Language Element         30.08         31.87			37.31	32.19	Trigonometry
SCIENCE         30.13         31.37           Food         28.01         29.75           Materials         28.29         30.12           The world of living         32.31         33.65           Moving things, people and ideas         31.89         32.84           How things work         31.32         30.66           Natural phenomena         25.38         26.68           Natural resources         37.39         38.06           SOCIAL SCIENCE         38.16         38.82           Political Science         41.95         42.20           History         34.42         36.97           Economics         38.34         37.98           Geography         37.92         38.15           ENGLISH         30.58         31.67           Reading Comprehension         31.01         31.38           Language Element         30.08         31.87			29.20	26.20	Number System
Food 28.01 29.75			31.55	27.36	Probability
Materials       28.29       30.12         The world of living       32.31       33.65         Moving things,people and ideas       31.89       32.84         How things work       31.32       30.66         Natural phenomena       25.38       26.68         Natural resources       37.39       38.06         SOCIAL SCIENCE       38.16       38.82         Political Science       41.95       42.20         History       34.42       36.97         Economics       38.34       37.98         Geography       37.92       38.15         ENGLISH       30.58       31.67         Reading Comprehension       31.01       31.38         Language Element       30.08       31.87			31.37	30.13	SCIENCE
The world of living       32.31       33.65         Moving things,people and ideas       31.89       32.84         How things work       31.32       30.66         Natural phenomena       25.38       26.68         Natural resources       37.39       38.06         SOCIAL SCIENCE       38.16       38.82         Political Science       41.95       42.20         History       34.42       36.97         Economics       38.34       37.98         Geography       37.92       38.15         ENGLISH       30.58       31.67         Reading Comprehension       31.01       31.38         Language Element       30.08       31.87		<b>\</b>	29.75	28.01	Food
Moving things,people and ideas       31.89       32.84         How things work       31.32       30.66         Natural phenomena       25.38       26.68         Natural resources       37.39       38.06         SOCIAL SCIENCE       38.16       38.82         Political Science       41.95       42.20         History       34.42       36.97         Economics       38.34       37.98         Geography       37.92       38.15         ENGLISH       30.58       31.67         Reading Comprehension       31.01       31.38         Language Element       30.08       31.87			30.12	28.29	Materials
ideas       31.09       32.04         How things work       31.32       30.66         Natural phenomena       25.38       26.68         Natural resources       37.39       38.06         SOCIAL SCIENCE       38.16       38.82         Political Science       41.95       42.20         History       34.42       36.97         Economics       38.34       37.98         Geography       37.92       38.15         ENGLISH       30.58       31.67         Reading Comprehension       31.01       31.38         Language Element       30.08       31.87		<b>⇔</b>	33.65	32.31	The world of living
Natural phenomena       25.38       26.68         Natural resources       37.39       38.06         SOCIAL SCIENCE       38.16       38.82         Political Science       41.95       42.20         History       34.42       36.97         Economics       38.34       37.98         Geography       37.92       38.15         ENGLISH       30.58       31.67         Reading Comprehension       31.01       31.38         Language Element       30.08       31.87		<b>⇔</b>	32.84	31.89	
Natural resources       37.39       38.06         SOCIAL SCIENCE       38.16       38.82         Political Science       41.95       42.20         History       34.42       36.97         Economics       38.34       37.98         Geography       37.92       38.15         ENGLISH       30.58       31.67         Reading Comprehension       31.01       31.38         Language Element       30.08       31.87		<b>⇔</b>	30.66	31.32	How things work
SOCIAL SCIENCE         38.16         38.82           Political Science         41.95         42.20           History         34.42         36.97           Economics         38.34         37.98           Geography         37.92         38.15           ENGLISH         30.58         31.67           Reading Comprehension         31.01         31.38           Language Element         30.08         31.87		<b>\</b>	26.68	25.38	Natural phenomena
Political Science       41.95       42.20       →         History       34.42       36.97       →         Economics       38.34       37.98       →         Geography       37.92       38.15       →         ENGLISH       30.58       31.67       →         Reading Comprehension       31.01       31.38       →         Language Element       30.08       31.87       →		<b>⇔</b>	38.06	37.39	Natural resources
History       34.42       36.97       ➡         Economics       38.34       37.98       ➡         Geography       37.92       38.15       ➡         ENGLISH       30.58       31.67       ➡         Reading Comprehension       31.01       31.38       ➡         Language Element       30.08       31.87       ➡		<b>⇔</b>	38.82	38.16	SOCIAL SCIENCE
Economics       38.34       37.98       →         Geography       37.92       38.15       →         ENGLISH       30.58       31.67       →         Reading Comprehension       31.01       31.38       →         Language Element       30.08       31.87       →		<b>⇔</b>	42.20	41.95	Political Science
Geography         37.92         38.15           ENGLISH         30.58         31.67           Reading Comprehension         31.01         31.38           Language Element         30.08         31.87			36.97	34.42	History
ENGLISH         30.58         31.67           Reading Comprehension         31.01         31.38           Language Element         30.08         31.87		<b>\( \)</b>	37.98	38.34	Economics
Reading Comprehension 31.01 31.38  Language Element 30.08 31.87		<b>⇔</b>	38.15	37.92	Geography
Language Element 30.08 31.87			31.67	30.58	ENGLISH
		<b>⇔</b>	31.38	31.01	Reading Comprehension
MODERNI HIDIANI			31.87	30.08	Language Element
MODERN INDIAN 47.70 45.11		•	45.11	47.70	MODERN INDIAN LANGUAGE (MIL)
Reading Comprehension 47.70 45.11		•	45.11	47.70	Reading Comprehension

# SUBJECT WISE PERFORMANCE: GENDER

Subjects	Boys (% correct)	Girls (% correct)	Significant Difference
Mathematics	30.87	28.43	•
Science	31.67	29.18	•
Social Science	39.34	37.43	<b>⇔</b>
English	31.70	29.99	<b>⇔</b>
MIL (Read. Comp.)	48.46	47.29	<b>⇔</b>

Participation	N	%
Boys	1136	38.57
Girls	1805	61.29
Others	4	0.14

# SUBJECT WISE PERFORMANCE: LOCATION

Subjects Rural (% correct)		Urban (% correct)	Significant Difference
Mathematics	28.93	30.37	<b>⇔</b>
Science	29.63	31.35	<b>⇔</b>
Social Science	37.06	40.66	
English	30.02	31.90	<b>\( \rightarrow \)</b>
MIL (Read. Comp.)	44.07	56.21	

Participation	N	%
Rural	2069	70.25
Urban	876	29.75

# SUBJECT WISE PERFORMANCE: SCHOOL MANAGEMENT

Subjects	Govt. (% correct)	GovtAided (% correct)	Sig. Diff.	Govt. (% correct)	Private (% correct)	Sig. Diff.
Mathematics	28.97	31.84	•	28.97	28.86	<b>(</b>
Science	29.14	32.06	•	29.14	30.58	<b>(</b>
Social Science	36.00	41.96	•	36.00	39.13	•
English	29.85	33.72	•	29.85	30.28	<b>+</b>
MIL (Read. Comp.)	43.27	60.49	•	43.27	48.33	•

Participation	N	%
Govt.	1340	45.50
Govtaided	426	14.47
Private	1179	40.03

### PARTICIPATION OF STUDENTS BY

Social Groups	N	%
Scheduled Caste (SC)	234	7.95
Scheduled Tribe (ST)	1212	41.15
Other Backward Classes (OBC)	1317	44.72
Others	182	6.18

CWSN	
N	16
%	0.54

#### HOW TO READ AND UNDERSTAND DRC

Performance of Students: Subject wise	Distribution of Students by Range
The table shows subject-wise average scores of students in the District and the State. The table also depicts whether the differences between the District and State average scores are significant or not.	The table shows subject-wise distribution of students, in different score ranges for the District and the State. The range values represent the percentage of students who have correctly responded to the questions.
Performance of Students: Content wise	Subject wise Performance: Gender, Location and School Management
The table shows content (sub-domain) wise average scores of students in the District and the State. The table also depicts whether the differences between the District and the State average scores are significant or not.	Tables show the sub group wise (Gender, Location and School Management) average scores of students in the District and the State. These tables also depict whether the differences between the sub groups are significant or not.

#### SUBJECT CONTENT COVERED IN NAS CLASS-X CYCLE 2

Mathematics	Science	Social Science	English
1. Algebra: patterns using variables, algebraic representation and functions 2. Geometry: shapes in two and three dimensions; relationships between shapes such as symmetry and transformations 3. Mensuration: measurement for attributes such as capacity, length, area, volume, time, angles, and rates 4. Trigonometry: trigonometric ratios; values of ratios and relationship between ratios; trigonometric ratios of complementary angles 5. Coordinate geometry: Cartesian plane; coordinates of a point; names and terms associated with the coordinate 6. Number system: ways to represent, calculate, and estimate numbers 7. Statistics: data representation; characteristics of data sets 8. Probability: experiments; samples and probability	1. Food: plant and animal breeding; selection for quality improvement; use of fertilizers and manures; protection from pests and diseases; organic farming  2. Materials: cooling by evaporation; absorption of heat, all things which occupy space and possess mass; definition of matter; elements, compounds and mixtures; heterogeneous and homogeneous mixtures; colloids and suspensions  3. The living world: diversity of plants and animals - basic structure and functions of animal and plant tissues; health and its failure; disease and its causes  4. Moving things, people and ideas: motion, force & Newton's Law; work and energy  5. How things work: electric circuits, electric motors, magnetic fields and field lines; relationship between P,V,I & R; current  6. Natural Phenomena: convergence and divergence of light; images formed by a concave mirror; centre of curvature and principal axis; optical centre, focus and focal length; Laws of Refraction  7. Natural Resources: conservation of natural resources and sources of energy	1. History: French Revolution; Nationalist Movement in Indo- China; Nationalism in India; Civil Disobedience Movement 2. Geography: India; climate; natural vegetation; population; natural resources; forest and wildlife resources; agriculture; water resources; mineral resources; power resources; manufacturing industries 3. Economics: economic story of Palampore; people as resource; poverty as a challenge facing India; food security; story of development; money & financial system; role of service sector in Indian economy; globalization; consumer awareness 4. Political Science: democracy in contemporary world; democracy: what & why; designing of democracy in India; electoral politics in democracy; institutions of parliamentary democracy; Citizens' Rights in democracy; working of Democracy; power sharing mechanisms in democracy; competition and contestations in democracy; outcomes of democracy; challenges to democracy	1. Reading comprehension: unseen passages covers different aspects of language; cognitive processes such as location of information, grasping of ideas, interpretation, inference and evaluation were assessed; (comprehension questions remained the same across states) 2. Language element: grammar was assessed  MODERN INDIAN LANGUAGE (MIL) 1. Reading comprehension: unseen passages covers different aspects of language; cognitive processes such as location of information, grasping of ideas, interpretation, inference and evaluation were assessed; (comprehension questions remained the same across states) 2. Language Element: grammar was assessed

**Note:** Average scores were computed by calculating the mean percentage of correct responses

For any information/query please mail us at: esdhead@gmail.com