

Guideline Manual

National Achievement Survey Class X (Cycle 2)

2017-18







Government of India MHRD

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING Sri Aurobindo Marg, New Delhi-110 016 The National Achievement Survey (NAS) are representative sample of schools from all districts in India aimed at understanding the health of the education system in government, government-aided and private schools. Findings from the NAS are used as inputs in policy, planning and pedagogical interventions to improve student learning outcomes.

> Assessment of Class X on **February 5, 2018** nation wide

For the first time

Pedagogical interventions at district level

Auto-generation of report

Acronyms

ADC	:	Assistant District Coordinator	NCERT	:	National Council of Educational Research and Training
CWSN	:	Children with Special Needs	OMR	:	Optical Mark Recognition
DC	:	District Coordinator	OthD	:	Other Disabilities
DEO	:	District Education Officer	PMU	:	Project Management Unit
DIET	:	District Institute of Education and Training	PQ	:	Pupil Questionnaire
DRC	:	District Report Card	RS	:	Random Start
DMU	:	District Monitoring Unit	RMSA	:	Rashtriya Madhyamik Shiksha Abhiyan
DPC	:	District Project Coordinator	SCERT	:	State Council of Educational Research and Training
ESD	:	Educational Survey Division	SI	:	Sample Interval
FI	:	Field Investigator	SIE	:	State Institute of Education
FN	:	Field Notes	SLMT	:	State Level Master Trainer
н	:	Hearing Impairment	SPD	:	State Project Director
IC	:	Institutional Coordinator	SQ	:	School Questionnaire
ID	:	Intellectual Disability	S&LD	:	Speech & Language Disability
LD	:	Locomotor Disability	TQ	:	Teacher Questionnaire
MIL	:	Modern Indian Language	UDISE	:	Unified District Information System for Education
MIS	:	Management Information System	UT	:	Union Territories
NAS	:	National Achievement Survey	VI	:	Visual Impairment

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Introduction:

The *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) is a programme to carry further the SSA programme so that the students after secondary have higher level of knowledge and skills. Therefore, it is desirable that assessment of learning levels of children at secondary stage must be carried out periodically. There are about 30 National and State Education Boards conducting Public examination at Class X in a very routine manner with emphasis on pass-fail dichotomy. A national level assessment of learning levels across states' boards will be very useful study for introspection and enhancing educational standards.

National Achievement Survey (NAS) Class X (Cycle-2)

In this direction, NCERT has completed the first cycle of National Achievement Survey (NAS) Class X in the year 2015. The findings of the Survey have been shared at various forums with the concerned boards/States/UTs functionaries. To observe the improvement in the learning of the students, the MHRD has decided to conduct the second cycle of the Survey.

The Educational Survey Division of NCERT has initiated the NAS Class X (Cycle 2) in the year 2017. In previous cycle of NAS Class X, the reporting unit was State however, in Cycle 2 the reporting unit is District.

The main objectives of National Achievement Survey Class X (Cycle-2) are:

- To study the achievement levels of students of Class X from government, government-aided and private schools in the subjects–English, Mathematics, Science, Social Science and Modern Indian Language (MIL).
- To study the difference in achievement levels with regards to area, gender, social group, board and management of schools.
- To study the effect of intervening variables like students' home background, school and teacher on achievement levels of students.
- To compare the performance of students in all subject from Cycle-1 to Cycle-2.

The scope of the NAS Class X (Cycle 2) is:

- It includes all the districts of 36 States and Union Territories in the country.
- Random sample will be taken from all the schools in the country having secondary classes (ClassX) and recognized by State Education Boards or National Boards of Education [Central Board of Secondary Education (CBSE) and The Indian Certificate of Secondary Education (ICSE)] in this study.
- Assessment of achievement levels of Class X students has to be done within these five main curricular/subjects areas namely; English, Mathematics, Science, Social Science and one Modern Indian Language (MIL).
- A sample of **80 schools per district** from each State/Board and maximum **45 students from** each sampled school have to be included in main survey.

NATIONAL LEVEL

1. SURVEY TEAM

The National Level Team is comprised of:

- (a) The Department of School Education and Literacy, MHRD
- (**b**) The National Council of Educational Research and Training (NCERT). The Education Survey Division (ESD) of the NCERT shall be responsible for coordinating activities of the NAS.

2. ROLE AND RESPONSIBILITIES

(a) The Department of School Education and Literacy, MHRD

- **i.** Facilitating survey activities at National and State level.
- **ii.** Monitoring the progress of NAS from time-to-time.
- **iii.** Providing financial support through grant-in-aid as approved by PAB-RMSA.
- iv. Ensuring coordination between various stakeholders in conducting of NAS.

(b) The National Council of Education Research and Training (NCERT)

The Educational Survey Division (ESD) of NCERT shall be carrying out all activities of the survey. Role and responsibilities are:

- i. Plan and coordinate all major activities related to the survey.
- **ii.** Appraise State/Board officers and Institutional Coordinators (IC) for monitoring and facilitating all survey activities from time-to-time.
- **iii.** Develop, share and disseminate various survey documents such as– Technical Standards, Assessment Framework, Sampling Framework, Translation guidelines, tools, Financial Norms and Web Application etc.
- iv. Preparing Guidelines for Survey activities at different levels.
- **v.** Time to time organizing training programmes for ICs and State Level Master Trainers (SLMTs) for better understanding and appreciating the various activities of survey.
- vi. Providing soft copy of Survey material– achievement tests, questionnaires, OMR Sheets etc. to States/ UTs / Boards.
- vii. Prepare data entry plan, data analysis plan and framework for raising reports of the survey.
- viii. Development of NAS Class X Web Application for tracking survey activities, data uploading and generating automated District Report Card (DRC)
- **ix.** Allot funds for conducting of survey activities in the State/UT as per norms approved by NCERT.
- **x.** Monitoring, supervising, and facilitating the activities of survey.
- **xi.** Ensure availability of ESD expertise to State Level (ICs) for consultation and resolving issues during the survey.
- xii. Prepare schedule for the main survey activities for State/UT.
- **xiii.** Guidance for collection of the filled-in Survey material.
- **xiv.** Development of National and State Reports.

STATE LEVEL

SURVEY TEAMS

The State Level Team is comprised of:

- (a) The Chairperson of State/National School Education Board/Director SCERT, Senior Officer from State Education Office will act as a **State Coordinator**.
- (b) The Institutional Coordinator (IC) and Associate IC nominated by the State Coordinator.
- (c) The State Project Director (SPD)-RMSA, and one Monitoring Assistant at SPD-RMSA office.

ROLE AND RESPONSIBILITIES

(a) State Coordinator

- **i.** Implementation of survey activities in all the districts of State/UT in coordination with the State Project Director (SPD)-RMSA.
- **ii.** Provide guidance and support with basic office facilities to Institutional Coordinator in conducting the survey and acting as a liaison officer between the NCERT and Institutional Coordinator.
- **iii.** Facilitate Institutional Coordinator for attending meetings/ programmes associated with the survey and for smooth functioning of survey activities.
- **iv.** Nominate District Education Officer (DEO) as **District Coordinator (DC)** in all the districts of State/UT for implementing survey activities at school level and carry out scanning, verification of data, uploading of data on NAS Class X Web Application and generating District Report Cards (DRC) from NAS Class X Web Application.
- v. Nominate one Assistant District Coordinator (ADC) at district level for assisting DC.
- vi. Nominate one MIS Coordinator to carry out data scanning, verification, uploading CSV files on NAS Class X Web Application and generation of District Report Cards at district level.

(b) Institutional Coordinator (IC) and Associate IC

- **i.** Provide a list (**name, mobile, email, address**) of State Project Director-RMSA, State Coordinator, Institutional Coordinator, District Coordinators, Assistant District Coordinators and MIS Coordinators to NCERT.
- **ii.** Provide a list of all schools having Class X in the State/UT recognized by the Board in the given format (provided by NCERT) to NCERT.
- iii. Facilitate districts in procurement/setup of scanning device and software for capturing data from OMR sheets with the help of MIS Coordinators (If the State/UT have already setup the devices for scanning of OMR sheets in NAS Classes III, V and VIII under SSA then States/UTs have to use the same setup for NAS Class X (Cycle 2).
- iv. Organize a workshop of Translation, vetting and Finalization of achievement tests from source language English/Hindi in to regional language(s) for main survey with the help of subject experts and send the soft copies with fonts and relevant links-images to NCERT, New Delhi at: ncertnas10@gmail.com
- v. Provide list of sampled schools to District Coordinators for verifying the Class X medium(s) of instruction and the number of students in Class X/Sections.

vi. Ensure that the verified lists of sampled schools are received from the District Coordinators within 7 days of receipt at district level and the same are emailed to the NCERT at: ncertnas10@gmail.com

Criterial for Selection of Replacement School

- 1. Every sampled school in the list is supplemented with two replacement schools (replacement 1 and replacement 2).
- 2. If original sample school is not in a situation (i.e. school has collapsed due to natural disasters) to conduct the assessment, then the District Coordinator proceed to conduct the assessment in replacement school 1 and if the replacement school 1 is also in similar situation then the replacement school 2 may be selected and the same is to be documented to NCERT.
- 3. However, the replacement should not exceed more than 15% in a district.
- **4.** At the time of verification of list of sampled schools by the District Coordinator, if a sampled school is found to have enrolment of less than 15 students in Class X, then the DC should consider replacement school as per procedure mentioned in point number-2. Such situations have to be documented and permission to do the same, needs to be sought from the NCERT.
- 5. Although the desired student sample size per school is 45, if the number of students in the sampled section is less than 45, the FI should test all the students.
- 6. If FI found zero presence in a sampled school on the day of test administration then FI should record the information in Field Notes and same is to be submitted to District Coordinator with proper reason.
- 7. No replacement of schools will be permitted on the day of test administration.
- 8. Combining of sections for administration of test is not permitted.
- vii. Printing and packaging (OMR should be packed separately in a poly-pack then in corrugated box) of survey material as per sampled list (medium wise) and same is to be distributed to District Coordinators on the day of training of District Coordinators in sealed packets. A packet of one school contains following survey material:

S.No.	Quantity of Survey Material for one Medium One School							
1.	English	Test Form-	11	Test Form-12		Test Form-13		
1.	English	3	3		3		3	
2.	Mathematics	Test Form-21		Test Form-22		Test Form-23		
2.	Mathematics	3		3	3		3	
3.	Science	Test Form-	31	Test Form-32		Te	st Form-33	
5.	Science	3		3			3	
4.	Social Science	Test Form-41		Test Form-42		Test Form-43		
4.	Social Science	3		3		3		
5.	MIL	Test Form-51		Test Form-52		Test Form-53		
5.		3		3	3		3	
6.	Questionnaires	PQ		Т	Q		SQ	
0.	Questionnaires	45		4	5	1		
7.	OMR	Test		PQ	TQ		SQ	
7.	UNIK	45		45	5		1	
8.	Other	Guideline Manual fo Field Investigators			F	ield	Notes	
		1				1	1	

Note: (i) Add EXTRA copies: Test OMRs - 5; PQ-OMRs - 5

(ii) While planning for printing of tests, ensure that only one medium for one school is to be considered (consider medium, which has maximum enrollment in Class X of sampled school).

- viii. Organize training programme with the help of SLMTs for district Coordinators in conduct of survey activities.
 - **ix.** Disburse funds (as per NCERT norms) to District Coordinator for conducting main survey activities in sampled schools.
 - **x.** Update the status of NAS activities on trackers provided by NCERT.
 - **xi.** Monitoring of survey activities and same is to be uploaded on NAS Class X Web Application.

Key points for training of District Coordinators

- **i.** Explain the roles and functions for relevant teams, especially for District coordinator and Field Investigator at school level.
- **ii.** Explain the different procedures–list of different codes, tests forms, instructions for administering the tests, list of sampled/replacement schools, selection process of section & students (as mentioned in Annexure-I).
- **iii.** Share the training schedule of Field Investigators (FIs) with District Coordinators and day of tools administration, required quantity of survey material and its distribution for conduct of main survey in sampled schools.
- iv. Update the status of NAS activities in Progress Module menu of NAS X Web Application.
- v. Ensure that all students of Class X should be present on the day of test administration.
- vi. Coordinate with District Coordinators in reference to different procedures of Survey activities, confidentiality of test material at different stages, submission of bills & vouchers in original and statement of expenditure with unspent balance (if any).
- vii. Check with the district coordinators that the FI have returned used and unused survey material in all respect after the administration of tools, and the same has been duly counted and scrutinized by the District Coordinator.
- viii. Write UDISE code of the sampled school with name and address and also mention number of students appeared on the packet. Explain collection procedure of used and unused survey material from each sampled school as below:

	Packing List	
Packet-1 (Used Material)	 Arrange Test-OMR sheets as per Student ID Arrange PQ-OMR as per Student ID Then pack one combined packet of used material, i.e., Test-OMR, PQ-OMR, TQ-OMR, SQ-OMR and Field Notes. Seal the Packet-1 (used material) in the presence of Head teacher and get stamp of school with signature of head teacher. 	To be submitted to District Coordinator immediately after completing tools
Packet-2 (Unused Material)	 Test booklets (Used and unused) PQ, TQ and SQ (Used and unused) OMR Sheets of Test, PQ, TQ and SQ Field Notes and Guideline Manual for FIs 	administration in the sampled school.

* All activities of test administration should be completed within a day.

(c) The State Project Director (SPD)-RMSA

- **i.** Nominate one Monitoring Assistant at SPD-RMSA office for day-to-day NAS X (Cycle 2) activities in the State/UT in coordination with State Coordinator.
- **ii.** Provide detailed contact list of RMSA-District Coordinators.
- iii. Constitute a team of observers for monitoring the test administration in 10-15 sampled schools in each district.

DISTRICT LEVEL

ROLE AND RESPONSIBILITIES

(a) District Coordinator and Assistant District Coordinator

- **i.** Attend training programme at State/UT level conducted by IC for administration of main survey activities in sampled schools.
- **ii.** Verify the existence of sampled schools, medium(s) of instruction in Class X in the school and number of students in the sampled school with the school's UDISE code and report discrepancy, if any, within 7 days, to IC (in the format provided by IC). Apart from this verify the list of CBSE & ICSE sampled schools in your district.
- **iii.** Identify number of FIs (Two for each sampled school) required for all sampled schools in the district and convey the same to Institutional Coordinator.

Who can be a Field Investigator (FI)

The Field Investigator should preferably be a primary school teacher from any recognized schools at district level. If the states have less number of primary teachers as per requirement in the district, then the remaining FIs can be obtained from elementary schools. **FIs must be identified other than sampled schools.** (In case of non-availability of primary and upper primary teachers, State/UT may engage B.Ed./D.Ed. students.)

- iv. Provide list (name, mobile, email, address) of Field Investigators (FIs) to IC.
- v. Coordinate with IC and MIS Coordinator in set up of Scanning devices and software for capturing data from OMR sheets at district level (refer 'Data Capturing Manual').
- vi. Communicate the day of test administration in all sampled schools to the School Head one week before the test date so that all the students should be present on the day of test administration and instruct them to collect the survey material from the DC three working days prior to the conduction of the test.
- vii. Collect NCERT norms from IC for conducting main survey activities.
- viii. Organise training workshop for the Field Investigators (FIs) one week before the test administration at the district level for conducting survey activities in the schools.
- **ix.** Provide one **Guideline Manual for Field Investigators** to each team of two FIs per sampled school to carry out survey activities as per procedure.
- **x.** Provide hands on experience (live demonstration of filling various dummy tools) to Field Investigators during the training programme.
- xi. The SPD-RMSA team will monitor at least 10-15 schools in each district.
- **xii.** Ensure that school wise sealed bundle prepared at state level containing the required NAS test material is safely handed over to Head of the sampled schools before 3 working days of the day of the test administration.
- **xiii.** Receiving back filled-in survey material from Field Investigator of sampled school as per Packing List shown in Guideline Manual.

- xiv. The FI must submit the Survey material immediately after tools administration to DC.
- **xv.** After receiving data, verification team in coordination with MIS Coordinator will perform a quality check by verifying entries in each and every OMR of Test, PQ, TQ and SQ with Field Notes of every sampled school.
- **xvi.** Collect bills & vouchers in original along with consolidated statement of expenditure duly signed by the Head of the sampled school.
- **xvii.** Reimburse travelling expenditure (TA) made (at actual as per NCERT norms) at school level to FI immediately after submission of filled in survey material at DC office and its verification.
- **xviii.** Send the detailed expenditure statement with original bills & vouchers and a brief report about conduct of survey activities to the IC.
 - xix. Update the status of NAS activities on NAS X Web Application.

Key points for training of Field Investigator (FI)

- **i.** Explain clearly, activities of FI as described in the section of School Level role & responsibilities of Field Investigator.
- **ii.** Explain procedure for selection of a section and students (if required) in the selected school.
- **iii.** Provide printed copy of duly signed letter of introduction to each FI.
- iv. Provide hands on experience on various activities (such as- Sitting plan, distribution of tests and administration, filling up of Field Notes, OMR sheets and Questionnaires- Pupil, Teacher and School etc).
- v. Explain about packaging as per packing list shown in Guideline Manual and forwarding of OMR sheets and other Survey material (not to be folded/torn) which is to be scanned at District level should be packed separately in a poly-pack then in corrugated box and same should be submitted safely to District Coordinator after completion of task in the sampled school by Field Investigators.
- vi. Provide one Guideline Manual for Field Investigators to each team of two FIs per sampled school for administration of tools and other task during the Survey.

(b) MIS Coordinator

The MIS Coordinator will be deputed by the State Coordinator and assist DC as ADC in all survey activities. Apart from this, s/he should have experience and knowledge of scanning OMRs and is expert in using computers and software. The main responsibilities of the MIS coordinator are to organize scrutiny of filled in survey material with the Field Notes, scanning, verification, uploading '.csv' files on NAS Class X Web Application and auto generation of DRC from NAS Class X Web Application. The detailed activities to be carried out by MIS Coordinator at district level are as under:

- i. S/he ensures attending training on the data capturing software and having an operational ADF OMR scanner in the office.
- **ii.** Ensure that only scanning method is used to scan and capture data from OMR sheets.
- iii. S/he to ensure that OMR sheets design (Achievement test and Questionnaires) provided by NCERT must adhered to original design.

- iv. S/he to follow the '.csv' template available on NAS Class X Web Application. Should ensure no changes are made to the format and the scanned data is submitted as per the format of '.csv' template.
- v. S/he to manage the scanning of achievement test and questionnaire OMR sheets separately.
- vi. MIS team to physically cross check each and every OMR sheet with the Field Notes after receiving filled in data from schools. In case if even one of the OMR data is found incorrect then inform immediately to DC and concerned FIs.

How to Perform Quality Check after receiving data from Field Investigator

- Receive data from Field Investigator.
- Arrange and make lots –School wise.
- Organize data in small batches, i.e., Test-OMR, PQ-OMR, TQ-OMR, SQ-OMR.
- Check that all codes are filled properly in Test-OMR, PQ-OMR, TQ-OMR and SQ-OMR, if not verify codes from Field Notes and fill up properly in consultation with MIS Coordinator (Please do not alter/fill/refill responses given by students, teachers, Head teacher for questions asked).
- Check that Test-OMR of a sampled school is in equal number to PQ-OMR and ensure that Student ID must be the same on Test-OMR and PQ-OMR for each student and must match with the Sheet-II of Field Notes.
- Provide data capturing plan to data capturing agency (provided by NCERT).
- vii. While scanning, s/he to ensure that information of students' enrollment, presence and participation should be available in Field Notes and same is to be uploaded on NAS Class X Web Application.
- viii. MIS team to ensure that the Codes (e.g. Student ID) must be the same in OMRs of Achievement Test and PQ as allotted in Field Notes for every sampled student.
 - ix. After verification of OMR sheets with physical sheets of achievement Tests and Field Notes (Hard copy), upload the '.csv' file pertaining to achievement tests on NAS Class X Web Application (Refer NAS Class X Web Application Manual for Uploading '.csv' file and Generating District Report Card).
 - **x.** Ensure that the final '.csv' files (in district and school wise folders) of Achievement tests, PQ, TQ and SQ of all sampled schools in DVDs/CDs (after completion of uploading process) are sent to the State Coordinator.
 - **xi.** Please follow instructions given in the Guideline Manual and Data Capturing Manual for the entire process from designing of OMR sheets to uploading the '.csv' files.
- xii. Cross check completion of all tasks as specified in Guideline Manual.
- xiii. Preserve scanned images of Achievement tests, PQ, TQ and SQ and Field Notes of all sampled schools in DVDs/CDs at district level for next six months for future reference (These images may be required at NCERT level for analysis purpose).

SCHOOL LEVEL

ROLE AND RESPONSIBILITIES OF FIELD INVESTIGATOR (FI)

PRE-survey Activities

- i. Attend training programme organized by the District Coordinator.
- **ii.** Collect one **Guideline Manual for Field Investigators** for a team of two FIs from District Coordinator,
- **iii.** Collect Letter of Introduction from DC for visiting sampled school.
- iv. Get UDISE code, contact details and address of sampled school to be visited.

Activities DURING survey

- **i.** Get ready (before assembly) with Survey material received from Head of the School on the day of test administration.
- Selection of Section (If required) : If there are more than one section in the selected school in Class X, then select only one section through random sampling as explained in Field Notes (Annexure-I). Combining of sections for test administration is not permissible.
- Selection of Students (If required) : If there are more than 45 students in the selected section, then note down their names serially in SHEET-I of Field Notes (Annexure-I of Guideline Manual). Select 45 students using the sampling procedure specified in Annexure-I of Guideline Manual for selection of the students. Allot Student ID serially in Sheet-I against each student.
- **iv.** After listing the students in **SHEET-I**, transfer the 45 selected students (including absent student, if any) as per their allotted ID serially in **SHEET-II** of Field Notes and fill the required entries against each student i.e., Children With Special Needs (CWSN), Attendance (Mark only Absent student(s) as 'A'), Gender, social category, and respective test form number in which the student is to be appeared.

Children With Special Needs (CWSN)

School to facilitate children with disabilities in following manner:

- 1) 30 minutes extra time will be given to complete the test.
- 2) Facility of scribe or amanuensis will be given to the students.
- 3) Resource teacher should be consulted for conducting the test.
- **4)** It should be ensured that suitable adaptations are made according to the child's needs.

Types of disabilities:

- 1. None No disability
- **2. LD** Locomotor Disability
- 3. VI Visual Impairment
- 4. HI Hearing Impairment
- 5. S&LD Speech & Language Disability
- 6. ID Intellectual Disability
- 7. OthD Other Disability

1

0 3

2

- v. All the relevant codes filled-in **SHEET-II** of Field Notes for each student should be transferred as it is on OMR sheet, e.g., Student ID, CWSN, Gender, Category of Student and Test Form Number.
- vi. Ensure that same Test Form should be distributed to students as allotted in Test Form Number column of SHEET-II of Field Notes for each student.
- vii. Please note that SHEET-I and SHEET-II of the Field Notes are given in this manual in Field Notes (Annexure-I) for your reference.
- viii. The total work is to be completed in the school on the same day i.e, on the day of test administration.

DAY OF TEST ADMINISTRATION						
SESSION-I (Administration of Tests and PQ)	SESSION-II (TQ, SQ & Remaining work)					
• Carryout survey activities as explained in Guideline Manual for FIs before administration of tests.	• Filling up of Teacher Questionnaire with subject teachers teaching to sampled students					
• Selection of section (if required).	and School Questionnaire with Head of the					
• Selection of students (if required).	School.					
• Filling up of Field Notes (Sheet-I & Sheet-II).	• Arrange Test-OMR and PQ-OMR sheets as					
• Making sitting arrangement as per sitting plan.	per Student ID.					
• Distribution of tests and Test-OMR as per Sheet-II of Field Notes.	• Pack one packet for used material i.e., Test-OMR, PQ-OMR, TQ-OMR, SQ-OMR					
• Explain necessary codes and other information in OMR sheets to sampled students.	and Field Notes (as explained in Packing of Used and Unused Survey Material).					
• Distribution of PQ and PQ-OMR immediately after completion of test administration.	• Seal the packet number one (used material) in the presence of Head teacher and get stamp of					
• Check that Test-OMR must be in equal number to PQ-OMR and	school with signature of head teacher.					
ensure that Student ID should be same on Test-OMR and PQ- OMR for each student and must match with the Sheet-II of Field	• Pack second packet for all unused material.					
Notes.	• Complete remaining task if any.					

Schedule for Administration of Tests in the Sampled School

* All activities of test administration should be completed within a day.

ix. Ensure that all entries should be filled on OMR Sheet, test form and Field Notes as mentioned in Guideline Manual.

Below is an example of filling different codes:

UDISE Code: Use 11 digit UDISE school code as per list provided by NCERT

0	1	1	2	0	3	1	2	3	1	3
State Code		Dist Co	rict de		ock de	1	Villag Code		Sch Co	nool ode

Student ID:

Allotted by FI in **Sheet-I** of Field Notes against each selected student and thereafter, transferred into **Sheet-II**, Student ID wise serially arranged, i.e. 01-45 with other required fields available in Sheet-II of Field Notes.

Test form Code: Ex.: Code for Test form 1 (booklet 1) of Mathematics

Medium Code: In which test to be administered e.g. code for **English** (As per Annexure-II)

x. Sitting Plan and Distribution of Test Forms: Sitting arrangement of students and distribution of test forms explained in the following table for 45 students:

Student ID	01	02	03	04	05
			8		8
Test Form No.	11	21	31	41	51
Student ID	06	07	08	09	10
				30	
Test Form No.	12	22	32	42	52
Student ID	11	12	13	14	15
			8	E.	8
Test Form No.	13	23	33	43	53
Student ID	16	17	18	19	20
		8			
Test Form No.	11	21	31	41	51
Student ID	21	22	23	24	25
				H.	
Test Form No.	12	22	32	42	52
Student ID	26	27	28	29	30
Test Form No.	13	23	33	43	53
Student ID	31	32	33	34	35
		B.	8	J.	8
Test Form No.	11	21	31	41	51
Student ID	36	37	38	39	40
Test Form No.	12	22	32	42	52
Student ID	41	42	43	44	45
				B.	
Test Form No.	13	23	33	43	53

- xi. Classroom Activities of FI: Given below are specific tasks to be completed by FIs-
 - Read out instructions and examples for the students from the test booklet before test administration.
 - Explain to sampled students about filling codes on OMR sheets one by one using blackboard.
 - Explain them that answers are to be given by **darkening circle of the option** in the OMR sheet.
 - Blackboard may be used to explain the method of answering.
 - Ask students to raise his/her hand, if there is any question regarding directions.
 - Give sufficient time to complete the test.
 - Ensure that Codes on OMR Sheet and SHEET-II of Field Notes must be the same.

How to use OMR Sheet?

- Distribute one Test-OMR sheet to each student along with test booklet.
- Ask students to use CAPITAL LETTERS of English only wherever required (Don't use regional language).
- The FI will ensure that all the codes have been filled properly in the Test-OMR sheets and Field Notes. The FI should explain each entry one by one to sampled students using blackboard before administration of tests in the school.
- Explain to students how to mark their responses on the OMR sheet.
- Ask students to use **ball point pen only (Black or Blue)** for filling up of OMR sheet.
- Explain to students that NO OVERWRITING OR CORRECTION is allowed after darkening the circle against each entry.
- Ensure that OMR sheet should not be folded or spoiled, keep it neat and clean.
- After completion of test administration, immediately distribute one Pupil Questionnaire (PQ) with PQ-OMR to each student before leaving the class (every selected student has to fill PQ).
- Ensure that student ID on Test-OMR and PQ-OMR should be the same as mentioned in Sheet-II of Field Notes (As PQ data is to be linked with his/her achievement data).
- Make sure to collect the Test Booklets, Test-OMR, PQ and PQ-OMR from all the students before they leave the class.

POST-survey Activities

- i. Cross check all entries are made correctly and properly on all OMR Sheets and Field Notes.
- **ii.** Fill **Teacher questionnaire (TQ)** for each subject teacher who is teaching to selected section. (Use separate TQ for each subject teacher. If any teacher is teaching more than one subject to selected students, then use only one TQ for his/her main subject).
- iii. Fill School Questionnaire (SQ) with the help of Principal/Head Teacher
- iv. The FI must submit the Survey material (used and unused) immediately after test administration. Write UDISE code of the sampled school with name and address and also mention number of students appeared on the packet. The procedure for packaging is given below:

Packet-1 (Used Material)	 Arrange Test-OMR sheets as per Student ID Arrange PQ-OMR as per Student ID Then pack one combined packet of used material, i.e., Test-OMR, PQ-OMR, TQ-OMR, SQ-OMR and Field Notes. Seal the Packet-1 (used material) in the presence of Head teacher and get stamp of school with signature of head teacher. 	To be submitted to District Coordinator immediately after completing tools
Packet-2 (Unused Material)	 Test booklets (Used and unused) PQ, TQ and SQ (Used and unused) OMR Sheets of Test, PQ, TQ and SQ Field Notes and Guideline Manual for FIs 	administration in the sampled school.

* To be kept safely at District Level by District Coordinator for at least next six months.

- **v.** Both packets have to be handed over to the District Coordinator with actual expenditure statement with original bills & vouchers.DC/ADC.
- vi. Collect payment after submission of survey material from DC/ADC.



Annexure-I

FIELD NOTES

(TO BE FILLED BY FIELD INVESTIGATOR)

National Achievement Survey

Class X

(Cycle 2)

	Complete all entries before sta	art of the test administration
1.	Date of Survey [in DD MM YYYY format]	D D M M Y Y Y
2.	UDISE Code	
3.	Complete Name and Address of the School	
4.	Name of the State	Name of the District
5.	Area Code of the School (1 – Rural, 2 – Urban)	
6.	Is it a replacement school? If yes, reasons for repl	acement
7.	Section and Medium in which test administered (Use medium code as per sample list) :
	Section	Medium
8.	Name & Designation of Head of the School	
		(Sign. of the Field Investigator)
	(Name in Capital letters)	

9.	 a. In case Class is a Single Section: i. Number of students Enrolled in the Class 	
	ii. Number of students taken the tests	
	iii. Number of selected students absent on the day of testing	
	b. In case Class has more than one Section:i. Number of sections of Class	
	ii. The serial number of the selected section	
	iii. Number of students enrolled in the selected section	
	iv. Number of students taken the tests	
	v. Number of selected students absent on the day of testing	

10. Details of Teachers, teaching the selected section:

S.No.	Teacher's Name	Subject(s)	Present (P)/Absent (A)
1.			
2.			
3.			
4.			
5.			

11. Provide following information for all sections of Class X

Number of students belonging to different SOCIAL GROUPS						
Social Group	No. of Students					
SC						
ST						
OBC						
Other						
Total Students						

Number of students belonging to different DISABILITY GROUPS						
Disability Group	No. of Students					
LD-Locomotor Disability						
VI-Visual Impairment						
HI-Hearing Impairment						
S&LD- Speech & Language						
Disability						
ID-Intellectual Disability						
OthD- Other Disability						
Total Students						

Procedure for the Selection of a Section

(If the school has more than one section in a Class then select section from verified medium only) If there are **more than one section** in the selected school in a class then select only one section through random sampling method as specified in this annexure.

Note down the information of all sections of Class X as shown below:

S.No. of Section	Section Medium of Name Instruction				Selected Section (Please tick \sqrt{mark})
1.	А	Odiya	48	46	
2.	В	English	54	53	
3.	С	English	52	52	
4.					
5.					
Total S	tudents				54

How to get Random Number: Use school UDISE code digits of District and School to calculate random number as shown below:

0	1	1	2	0	3	1	2	3	1	3
Sta Co		Dist Co	trict de		ock de	Village Code			Sch Co	

UDISE CODE SYSTEM

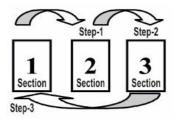
Example-1:

A. Add together the two digits of the district code (8th & 9th digit from right) and the two digits of the school code (1st & 2nd digit from right) from UDISE code as shown below:

District code '12' and School code '13'

Random Number = 1 + 2 + 1 + 3 = <u>7</u>

B. Write down the serial numbers of the sections in a line as shown in the figure. Starting from section '1', move to next section at a time in a cyclic fashion, and continue till you get to the number calculated at **A** above as a result. The section where you stop is the section selected.



Starting at section sr. no. '1' to 7 steps bring us to section sr. no. '2' i.e. Section-B. Test the students in section 'B'.

Note: If the Random number comes out in 2 digits i.e., 21 then add these two digits again like- 2+1=3, so the Random Number is 3. (Repeat the process until get 1 digit random number).

Conditions for Selection of the Students

- **1.** If the selected school has presence less than 15 students in the class on the day of survey then survey is to be conducted in that school communicate the same to DC/ADC immediately.
- **2.** If the selected school has minimum 15 and not more than 45 students in the class then take all of them.
- 3. If there are more than 45 students in the selected section in a Class, then select only 45 students as per procedure.

Procedure for the Selection of Students

Step-1 : List all the students of the selected Section/Class as per school register in SHEET-I.

Step-2 : Calculate the Sampling Interval (SI) by using formula given below or follow the table of SI :

Sampling Interval (SI) = $\frac{\text{Total number of students enrolled in selected section/class in the school}}{45}$

Example: Suppose the total enrollment in the selected section/class in the school is 78, then

$$SI = \frac{78}{45} = 1.73$$
 (rounded to 2)

Example: Suppose the total enrollment in the selected section/class in the school is 58, then

$$SI = \frac{58}{45} = 1.28$$
 (rounded to 1)

Note: If the value after decimal is equal to or more than 0.50 then it would be rounded to next whole number and if the value after decimal is less than 0.50 then it would be rounded to preceding whole number.

Number of Students in the selected section/class in the school	46-67	68-112	113-157
Sample Interval	1	2	3

Step-3 : In order to select the first student by Random Start (RS) method, follow the procedure as below:

Example:	If the District Code	=	12
	and School Code	=	13
	Add the District code + School Code		1+2+1+3
	Then, Random start (RS)	=	7

Step-4 : Select your first student from serially arranged students' list (**SHEET-I**) at S.No.'7' (take reference of Step-1 above). The next student will be selected as per following method:

RS+SI; RS+2SI; RS+3SI; RS+4SI, likewise...

For example: If SI is 2, then the selected students would be at serial number 7, 9, 11, 13, 15, 17, 19...

RS		SI	_	0		RS		2SI	-	11	_	RS		3SI	_	10
7	+	2	=	9	;	7	+	4	=	11	;	7	+	6	=	13

- **Step-5** : If you get the end of list before getting 45 students, then continue the process from the beginning until you have selected 45 students.
- Step-6 : If by chance you get again to a student already selected in this process, then select the immediate next student and continue your counting following the same process until you get 45 students.
- **Step-7** : Allot Student ID against each selected student in **Sheet-I**. Transfer students' names, (As per class register), and other details in **SHEET-II** as per their Student ID serially.

SHEET - I

List all students of selected section/class as per School Attendance Register.

(If total number of students in the Class/selected section, is more than given space, use additional sheet).

	<u>GENDER</u> : 1 – Boy, 2 – Girl, 3 – Other				3 – OBC,	
Childr	<u>GENDER</u> : 1 – Boy, 2 – Girl, 3 – Other en With Special Needs (CWSN)–Type of Disabilities:		EGORY : 1 -			
3 -	 - VI (Visual Impairment); - ID (Intellectual Disability); - ID (Other Disability); 	airme	nt); 5			age Disability);
S.No.	Name of Students		Gender	Category	CWSN	Allot Student ID
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						

SHEET - II

List of 45 Selected Students arranged serially according to Student ID (in case the selected section/class has less than 45 students, then list all the students and allot student ID).

Name of the Selected Section_____

Attendance:	Please mark 'A' in 'Attendance' column for selected absentees.								
<u>GEN</u>	<u>DER</u> : 1 – Boy, 2 – Girl, 3 – Other <u>CATEGORY</u> : 1 – So	C, 2-	ST,	3 - OF	BC, 4	- Other			
3 - VI (V	th Special Needs (CWSN)–Type of Disabilities:1 – None (No Disabilities:isual Impairment);4 – HI (Hearing Impairment);5 –ntellectual Disability);7 – OthD (Other Disability)					Disability); Disability);			
TEST FORM No.: Language - 11, 12, 13 Mathematics - 21, 22, 23 Science - 31, 32, 33 Social Science - 41, 42, 43 MIL - 51, 52, 53 Science - 31, 32, 33									
Student ID	Name of the Student	Attendance	Gender	Category	CWSN	Test Form Number			
01									
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

Student ID	Name of the Student	Attendance	Gender	Category	CWSN	Test Form Number
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

Annexure-II

	Medium Codes									
Sl.No.	Medium of Instruction	Code								
1.	Assamese	01								
2.	Bangla	02								
3.	English	03								
4.	Gujarati	04								
5.	Hindi	05								
6.	Kannada	06								
7.	Malayalam	07								
8.	Manipuri	08								
9.	Marathi	09								
10.	Mizo	10								
11.	Odiya	11								
12.	Punjabi	12								
13.	Tamil	13								
14.	Telugu	14								
15.	Urdu	15								
16.	Bodo	16								

Annexure-III

 This booklet has 60 items. You have 90 minutes to answer these items. Use blue or black ball-point pen only for darkening the circle. Each item has four options as '1', '2', '3' and '4'. Only one of them is a right answer. You have to mark your answers in the Test-OMR Sheet provided with this booklet. To mark answer in the Test-OMR Sheet, darken the circle of the option, which accordin you is right answer, as below: Right Method : O You are not allowed to change the answer once marked in the OMR Sheet. You may do calculation work/rough work in this booklet itself.
ENGLISH
Instructions for the Student: Read the following instructions carefully.
This booklet has 60 items.
You have 90 minutes to answer these items.
Use blue or black ball-point pen only for darkening the circle.
Each item has four options as '1', '2', '3' and '4'. Only one of them is a right answer.
You have to mark your answers in the Test-OMR Sheet provided with this booklet.
To mark answer in the Test-OMR Sheet , darken the circle of the option, which according to you is right answer, as below:
Right Method:
You are not allowed to change the answer once marked in the OMR Sheet.
You may do calculation work/rough work in this booklet itself.
If you have still any doubt, clarify it from Field Investigator right now !
Educational Survey Division राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद् NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

Annexure-IV

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING विद्यया ऽ मृतमङनुते NATIONAL ACHIEVEMENT SURVEY (NAS) CLASS X (Cycle-2) : 2017-18 TEST-OMR SHEET Student Name : School Name & Address : SECTION : A 1. USE ONLY BLACK OR BLUE BALL POINT PEN UDISE School Code Section Student ID 2. There is only one correct answer for each question. While marking your answer, darken the circle which is a correct answer, as shown in the example below: Correct way of marking the answer Wrong way of marking the answer <u>55555555555</u> Ō 3. Please do not overwrite because it will be ⊕ \overline{O} Ō treated as wrong answer. 4. Please DO NOT FOLD / TEAR OMR SHEET. Aadhar Number Medium **Test Form** Social Group **CWSN** Area Code SC Rural None ST LD Urban OBC ③ VI Other ④ HI S&LD School 666666666666 Gender ID Management OthD $\overline{0}$ \overline $\overline{\mathcal{O}}$ Bov Govt. Girl Aided Other Private SECTION : B - Student Responses Q.No. Responses Q.No. Responses Q.No. Responses Q.No. Responses Q.No. Responses (1)(2)(3)(4)(1)(2)(3)(4)(1)(2)(3)(4)(1)(2)(3)(4) CWSN: None - No disability ; LD- Locomotor Disability ; VI - Visual Impairment ; HI- Hearing Impairment; S&LD- Speech & Language Disability; ID-Intellectual Disability: OthD- Other Disabilities. Signature of FI

Sample Design for OMR Sheets

