# National Achievement Survey

## Achievement Test

**Test Form No.** 81  
**Medium of Instruction** English

<< TO BE FILLED IN BY FIELD INVESTIGATOR >>

<table>
<thead>
<tr>
<th>UDISE School Code</th>
<th>Student's ID</th>
<th>Student's Aadhaar Number</th>
</tr>
</thead>
<tbody>
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<table>
<thead>
<tr>
<th>Area Code</th>
<th>Section</th>
<th>Social Group</th>
<th>CWSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Rural</td>
<td>□</td>
<td>□</td>
<td></td>
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<tr>
<td>2 Urban</td>
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<table>
<thead>
<tr>
<th>School Management</th>
<th>Student's Gender</th>
<th>Social Group</th>
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<tbody>
<tr>
<td>1 Govt.</td>
<td>□ Boy □ Girl</td>
<td>□ SC □ ST □ OBC □ General</td>
</tr>
<tr>
<td>2 Govt.-aided</td>
<td></td>
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</tbody>
</table>

- **CWSN** :  
  - LD – Locomotor Disability
  - VI – Visual Impairment
  - HI – Hearing Impairment
  - S&LD – Speech & Language Disability
  - ID – Intellectual Disability
  - OthD – Other Disabilities

Student’s name  
School’s name  
District  
State
INSTRUCTIONS

1. The field investigator/teacher should build a rapport with the students before administration the test.

2. This test is not assessing the teacher or quality of teaching. The test is designed to learn about what the child knows, understand and is able to apply in different contexts.

3. Write UDISE School Code, Student’s ID, Student’s Aadhaar Number, Area Code (Rural-1, Urban-2), School Management (Govt.-1, Govt. aided-2), Student’s Gender (Boy-1, Girl-2), Social Group (SC-1, ST-2, OBC-3, General-4), CWSN: LD(Locomotor Disability)–1; VI (Visual Impairment) – 2; HI (Hearing Impairment)–3; S&LD (Speech & Language Disability) – 4; ID (Intellectual Disability) – 5; OthD (Other Disabilities)–6; Student’s Name, School’s Name, District and State.

4. This booklet has 60 questions. Try to answer all the questions.

5. This test booklet has 4 subjects. Each carry 15 questions i.e. Language 1-15; Mathematics 16-30; Science 31-45 and Social Science 46-60.

6. You have 120 minutes to answer these questions. Mark your answers in the OMR Sheet.

7. To mark your answer, darken the circle of the option in the OMR Sheet against the question which according to you is the correct answer.

8. Use only blue/black ball-point pen/HB Pencil for darkening the circle in the OMR Sheet.

9. Each question has four options as ‘1’, ‘2’, ‘3’ and ‘4’. Only one of them is correct answer.

10. Answer carefully on the OMR Sheet given to you as explained below:

   Example:

   Q. Which one of the following is the largest number?

   1. 273
   2. 275
   3. 257
   4. 253

   In the example, option 2 is a correct answer. Hence circle of option 2 is darken as shown below:

   ![Correct way of marking the answer]

   1 3 4

   11. Do not overwrite/change the answer once marked in the OMR Sheet because it will be treated as wrong answer.

   ![Wrong ways of marking the answer]

   12. You may do calculation work/rough work in this booklet itself.

   13. If you have still any doubt, clarify it from field investigator/teacher right now.
Q.1-5. Read the following passage and answer the questions that follow.

Neem is a tall evergreen tree with small bright green leaves. It has a straight trunk. Its bark is hard, rough and scaly. It blossoms in spring with small white flowers. The tree is never bare as all its leaves do not fall at the same time. It is found throughout India. The Sanskrit name of neem is ‘Arishtha’ meaning the reliever of sickness. It is popularly known as the miracle tree. Each part of the neem tree is used in medicines.

Neem oil called Margosa oil, is extracted from its seeds and is effective in the treatment of leprosy and skin diseases. Its leaves are used in the treatment of chickenpox. Neem tea is usually taken to relieve headache and fever. Its flowers are used to cure intestinal problems. Neem bark and gum also yield valuable medicines.

People in India use neem twigs to brush their teeth. Dried neem leaves are put in drawers and cupboards to keep out moths and cockroaches. Neem is widely used as a fertilizer for sugarcane and vegetables.

Some people consider the neem tree sacred and tie its leaves at the entrance of their houses to keep evil spirits at bay. Newly born babies are laid upon the neem leaves for good health and protection from diseases. No doubt, neem is considered to be a wonder tree by people all over the world.

Q.1 The bark of neem tree is:
   1. smooth and green.
   2. rough and scaly.
   3. soft and scaly.
   4. hard and green.

Q.2 Neem flowers are beneficial in treating:
   1. skin diseases.
   2. chickenpox.
   3. intestinal problems.
   4. fever.

Q.3 Dried leaves are put in cupboards to:
   1. keep out lizards and ants.
   2. keep away insects.
   3. retain the shine of clothes.
   4. keep them clean.
Q.4 Some people tie the leaves of neem at the entrance of their houses:
   1. to keep off evil spirits.
   2. to keep away moths.
   3. to decorate their houses.
   4. to relieve sickness.

Q.5 Neem is called a ‘wonder tree’ because:
   1. its twigs are used for brushing teeth.
   2. it is a useful fertilizer.
   3. it protects newly born babies.
   4. each part of the tree is useful.

Q.6-10 Read the story given below and answer the questions that follow.

Hema: Hello! I am Hema. Do you know what I enjoy doing the most? I like visiting historical places with my family and friends. Last year during my summer vacations, I visited Hyderabad and saw the Charminar and the Golconda Fort. This year I visited Agra and was very happy to see the Taj Mahal. Every time I visit a new place, I make new friends. Which place do you think I should visit next year?

Ali: My name is Ali. Nice to meet you all! I am very keen on learning new things. My science teacher always encourages me to read more books. She says asking questions is the beginning of scientific inquiry. Last week, I read a book called ‘Discovered Questions’ and found it very informative and interesting. Can you tell me why rain falls in drops? I found the answer in that book.

Rajat: Hi friends! I am Rajat. I am fond of sports and games. I am passionate about playing football. It is also known as soccer and is played between two teams of eleven players each. There are goalkeepers, defenders and strikers in the game. I watch all the football matches. One day I want to play for India like Bhaichung Bhutia. I want to become a striker like him.

John: Hello everyone! I am John. My hobby is to keep the environment ‘green and clean’. Do you know, this rainy season I planted four saplings of trees in my school? These are Jamun, Neem, Mango and Gulmohar. My teacher said that we will put the names of trees next to the saplings. Soma from my class is designing the placards. Her hobby is drawing and painting.
Q.6 What is common to Golconda Fort and the Taj Mahal?
   1. They are located in Agra.
   2. They have historical value.
   3. They are the only places to visit.
   4. They are located in Hyderabad.

Q.7 What is NOT true for football?
   1. It is also referred to as soccer.
   2. It is played by eleven players.
   3. It requires two teams to play.
   4. It is a game only for goal keepers.

Q.8 How will the saplings be identified?
   1. The names of the trees will be put near the saplings.
   2. The teacher will keep track of the saplings.
   3. The school will have only four trees.
   4. Children will memorize the names.

Q.9 What is Soma good at?
   1. planting trees
   2. playing soccer
   3. reading books
   4. drawing and painting

Q.10 What is common between Hema’s and Ali’s hobbies?
   1. They like planting saplings and trees.
   2. They enjoy playing games like football.
   3. They like discovering new things and places.
   4. They like watching matches on television.
Q.11-15 Look at the poster given below and answer the questions that follow.

"Mission: Swachh Bharat"
Participate Everybody!
Make Our Railway Beautiful, Neat and Tidy!

Use the dustbin  Use the toilet  Use the Spitting pot  Save Water

You can be fined upto Rs. 500 if you throw garbage in the Railway premises or in the Railway compartments

"Change yourself the way you want to see the world"
– Mahatma Gandhi

North Eastern Railway
Clean India - Healthy India

Q.11 The main purpose of the advertisement is to:

1. encourage to save water.
2. encourage cleanliness.
3. talk about Gandhiji.
4. collect fine from people.

Q.12 What do you understand by the statement, 'Change yourself the way you want to see the world'?

1. Work hard to see the change in the world.
2. Change in the world starts from you.
3. See the world before changing it.
4. The world changes if you look at yourself.
Q.13  You will be fined if you:

1. use the dustbin.
2. use the spitting pot.
3. throw garbage in the railway premises.
4. turn off the tap.

Q.14  A girl told her father not to throw banana skins under the seat. Which statement in the advertisement is applicable to the above sentence?

1. Throw the garbage only in the garbage bin
2. Use the spitting pot
3. Use the toilets
4. Save water

Q.15  What is the purpose of the *Swachh Bharat* Mission?

1. To keep only the railway premises neat and clean
2. To popularize Gandhiji’s thoughts
3. To build toilets all over India
4. To make India clean
Q.16 Which of the amount of time given below will be same as that of one day?

1. 12 x 12 hours
2. 24 × 60 minutes
3. 24 × 12 × 60 seconds
4. 1/360 year

Q.17 Subtract \( \frac{5x}{8} - \frac{3x}{8} = \)

1. \( \frac{1}{4} \)
2. 5
3. 3x
4. \( \frac{x}{4} \)

Q.18 ABCD is a quadrilateral. Another quadrilateral PQRS is congruent (same size and shape to ABCD). \( \angle P \) and \( \angle S \) measure 80° which of the statements could be true:

1. PQ = AB
2. \( \angle Q \) is right angle.
3. All sides of PQRS are of same length.
4. The area of PQRS is less than the area of ABCD.
Q.19 The test marks in three subjects for Rita and Renu studying in the same class are given below:

<table>
<thead>
<tr>
<th></th>
<th>Physics</th>
<th>Chemistry</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rita</td>
<td>78</td>
<td>76</td>
<td>74</td>
</tr>
<tr>
<td>Renu</td>
<td>72</td>
<td>82</td>
<td>74</td>
</tr>
</tbody>
</table>

Which of the statements below about their average scores is correct?

1. Rita’s average score is higher than Renu’s
2. Rita’s average score is lower than Renu’s
3. Average score of Rita and Renu are equal
4. Average score of Rita and Renu cannot be compared

Q.20 The graph shows the distribution of four different types of schools: Boys schools, Girls schools, Co-ed schools and Evening schools.

Which sentence below is correct?

1. Co-ed schools are more than the Boys schools.
2. Boys’ schools are more than the one-half of the total schools.
3. Evening schools are more than one- third of the total schools.
4. The total number of Girls’ and Co-ed schools is greater than the number of Boys’ schools.
Q.21 In which of the lists given below, are the numbers ordered from greatest to smallest?

1. 0.355, 0.4, 0.43, 0.444
2. 0.4, 0.43, 0.444, 0.355
3. 0.43, 0.355, 0.444, 0.4
4. 0.444, 0.43, 0.4, 0.355

Q.22 \[
\frac{5}{7} + \left( \frac{5}{14} \times \frac{6}{21} \right) =
\]

1. \(\frac{5}{7}\)
2. \(\frac{6}{49}\)
3. \(\frac{5}{49}\)
4. \(\frac{40}{49}\)

Q.23 A thin wire 30 cm long is formed into a rectangle. If the width of this rectangle is 6 cm. What is its length?

1. 6 cm
2. 9 cm
3. 12 cm
4. 18 cm

Q.24 When a new bridge is built, the average time taken by a bus to travel from one city to another is reduced from 50 minutes to 40 minutes. What is the percentage decrease in time taken to travel between two cities?

1. 10%
2. 20%
3. 45%
4. 50%
Q.25 A square board has an area of 7056 cm\(^2\). How long is each side of the board?

1. 76 cm  
2. 84 cm  
3. 86 cm  
4. 94 cm

Q.26 In the figures below, small blocks are put together to get bigger blocks. If all the small blocks are of the same size, which one of the bigger blocks will have a different volume than the others?

Q.27 The age of Ravi's father is 5 years more than 3 times Ravi's age. If Ravi's age is \(x\) years, his father's age can be expressed as:

1. \(3x + 5\)  
2. \((x - 5)/3\)  
3. \(3(x + 5)\)  
4. \((x/3) - 5\)
Q.28 From the bar graph given below, in which of the two months the difference between the consumption of electricity is 30 mega Watts?

1. February and March
2. February and April
3. April and May
4. March and May

Q.29 Look at the number line below.

Which of the following has the greatest value?

1. q + p
2. q - p
3. qp
4. q/p

Q.30 $5^{200}$ is equal to:

1. $5^{100} + 5^{100}$
2. $2^{100} + 3^{100}$
3. $5^{100} \times 5^{100}$
4. $5^{100} \times 5^2$
Q.31 A car travels 60 km in 2 hours. What is the speed of the car?
   1. 120 km/h
   2. 60 km/h
   3. 30 km/h
   4. 20 km/h

Q.32 Four students boiled same quantity of water in similar test tubes. They placed their test tubes in different zones of the flame as mentioned below:
   Student A - Outermost zone
   Student B - Middle zone
   Student C - Innermost zone
   Student D - Between middle and innermost zone

Whose water will boil first?
   1. Student A
   2. Student B
   3. Student C
   4. Student D

Q.33 A farmer wants to do farming of roses. Which of the methods of propagation should be followed?
   1. Spore formation
   2. Fragmentation
   3. Gamete formation
   4. Cutting

Q.34 There is a tree in your school campus. During autumn its leaves shed. What is the best way to dispose of these leaves?
   1. Burn the leaves outside the school campus.
   2. Throw the leaves in a nearby water body.
   3. Put the leaves in a pit to get compost.
   4. Let the leaves scatter in the school campus.
Q.35 A ray of light strikes a mirror as shown in the diagram by the incident ray.

![Diagram of light rays](image)

The reflected ray would be:
1. Ray A
2. Ray B
3. Ray C
4. Ray D

Q.36 Which of the forces given below is a contact force?
1. Magnetic force
2. Electrostatic force
3. Gravitational force
4. Force of friction

Q.37 A ball is released from point A to travel on different horizontal surfaces. On which of the following surfaces the ball will travel maximum distance?
1. Brick
2. Glass
3. Cement
4. Mud

![Diagram of ball](image)
Q.38 The table shows the temperature and precipitation in four different cities on the same day.

<table>
<thead>
<tr>
<th>Temperature</th>
<th>City A</th>
<th>City B</th>
<th>City C</th>
<th>City D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>18° C</td>
<td>-5° C</td>
<td>16° C</td>
<td>-6° C</td>
</tr>
<tr>
<td>Highest</td>
<td>42° C</td>
<td>7° C</td>
<td>30° C</td>
<td>6° C</td>
</tr>
<tr>
<td>Precipitation</td>
<td>0 cm</td>
<td>5 cm</td>
<td>2.5 cm</td>
<td>0 cm</td>
</tr>
</tbody>
</table>

In which city did it snow?
1. City A
2. City B
3. City C
4. City D

Q.39 Which of the statements is an example of a neutralization reaction?
1. Addition of litmus solution to hydrochloric acid
2. Addition of litmus solution to caustic soda
3. Applying quick lime (calcium oxide) to basic soil
4. Applying baking soda (sodium bicarbonate) on ant bite

Q.40 Many industries have come up around the area of Taj Mahal in Agra. Which of the reasons given below, arising from the industrial presence is damaging the Taj?
1. Occurrence of acid rain.
2. Effect of noise levels
3. Crowding in the cities
4. Weaving of carpets
Q.41  Reshma accidentally placed her hand over a flame and immediately pulled it back. She felt sensation of heat. The message of sensation is carried through:

1. blood cells.
2. skin cells.
3. nerve cells.
4. muscle cell.

Q.42  Which one of the following uses the magnetic effect of electric current?

1. Electroplating
2. Electric iron
3. Electric bulb
4. Electric bell

Q.43  Which one of the changes given below cannot be reversed?

1. Formation of steam from water
2. Burning of coal
3. Dissolving salt in water
4. Melting of wax

Q.44  When does respiration occur in plants?

1. Only during night time
2. Only during day time
3. All the time
4. Only when photosynthesis does not occur.
Q.45 The figure given below shows a food web. In the food web we have the primary consumers and the secondary consumers.

The arrows point from the organism that gets eaten to the one that eats it.

Which sentence is true?

1. Primary consumers eat plants.
2. Primary consumers eat animals.
3. Owls are primary consumers.
4. Carrots are primary consumers.
Q.46 Observe the given map of India.

Which crop is grown largely in the shaded area?

1. Maize
2. Wheat
3. Rice
4. Bajra
Q.47 If you are in the classroom and earthquake occurs, what will be your immediate action to save yourself?
   1. Call for help
   2. Wait for teacher's instruction
   3. Sit quietly wherever you are
   4. Cover and protect your head

Q.48 Which of the following was responsible for the decline of Indian handicraft industry during colonial rule?
   1. Duty-free import of cheaper machine made goods into India from Britain
   2. Imposition of heavy duties on the import of Indian goods into Europe
   3. The British policy of exporting raw materials from India to Britain
   4. Increasing tendency among the Indian elites to adopt western lifestyle

Q.49 In the diagram below, which climatic region is shown between 10° N and 10° S latitude?

1. Polar
2. Equatorial
3. Temperate
4. Monsoon
Q.50 Which of the options below was a social reform in India during the colonial rule?

1. Reduction of voting age from 21 to 18
2. Introduction of postal system
3. Establishment of Railways
4. Abolition of Sati

Q.51 Observe the diagram of soil profile.

The most suitable layer for cultivation of crops is :

1. B
2. C
3. A
4. D
Q.52 Observe the given diagram of a river.

Identify the feature marked ‘?’ in the diagram.

1. Ox-bow lake
2. Delta
3. Waterfalls
4. Meander
Q.53 Which of the reasons below was responsible for the Indian soldiers to rise in revolt in 1857?

1. The introduction of the cartridges that were suspected to have been greased with the cow and pig fats
2. The unfair treatment meted out to the Indian Soldiers in comparison to their British peers and superiors
3. The daily humiliation laid on the Indian soldiers by their British superiors on account of their religious affiliations
4. The realization among the Indian soldiers that they were far more in numbers than the British soldiers

Q.54 A boy of about 10 years age is working in a roadside tea shop. Which of the Fundamentals Rights given in the Indian Constitution is violated in this situation?

1. Right to equality
2. Right to education
3. Right to freedom
4. Right against exploitation

Q.55 Which of the following institutions makes laws?

1. Lok Sabha only
2. Rajya Sabha only
3. Parliament
4. Supreme Court
Q.56 Why is sanitation being provided by local governments in India?

1. It is part of the Right to Life given in Indian Constitution
2. Local governments have no other work
3. Indian Laws do not allow private sector to do this work
4. People cannot do this activity on their own

Q.57 Which one of the following public facility is only provided by the Government?

1. Railways
2. Education
3. Bus services
4. Food grains supply

Q.58 Suppose people from your district want a new school in their area. Which is the competent authority to grant permission?

1. High Court
2. Union Government Only
3. State Government Only
4. Both State and Union Government
Q.59 The map provides a glimpse of the places which formed part of the Mughal Empire during the reigns of Akbar and Aurangzeb. Observe the map and answer the question given below.

In which of the Indian States given below are Chittor and Amber presently located?

1. Gujarat
2. Madhya Pradesh
3. Uttar Pradesh
4. Rajasthan
Q.60  Suppose you wish to procure 2000 pens for your class, which one of the following shops will you prefer to go?

1. Wholesale stationary shop
2. Shop in a weekly market
3. Retail stationary shop
4. Street shop