

**2017****Class****National Achievement Survey****8****Achievement Test**

|                             |                                      |
|-----------------------------|--------------------------------------|
| Test Form No.<br><b>8 2</b> | Medium of Instruction <b>English</b> |
|-----------------------------|--------------------------------------|

&lt;&lt; TO BE FILLED IN BY FIELD INVESTIGATOR &gt;&gt;

|  |  |                                 |  |                                |  |                                 |  |  |  |  |  |
|--|--|---------------------------------|--|--------------------------------|--|---------------------------------|--|--|--|--|--|
| UDISE School Code  |  |                                 |  | <input type="text"/>           |  |                                 |  |  |  |  |  |
| Student's ID   |  | Student's Aadhaar Number        |  |                                |  |                                 |  |  |  |  |  |
| <input type="text"/>   |  | <input type="text"/>            |  |                                |  |                                 |  |  |  |  |  |
| Area Code  |  | Section                         |  | Social Group                   |  | CWSN                            |  |  |  |  |  |
| 1 Rural <input type="checkbox"/>   |  | <input type="checkbox"/>        |  | 1 SC                           |  | 1 LD                            |  |  |  |  |  |
| 2 Urban <input type="checkbox"/>   |  |                                 |  | 2 ST <input type="checkbox"/>  |  | 2 VI                            |  |  |  |  |  |
|  |  |                                 |  | 3 OBC <input type="checkbox"/> |  | 3 HI                            |  |  |  |  |  |
| School Management  |  | Student's Gender                |  | 4 General                      |  | 4 S&LD <input type="checkbox"/> |  |  |  |  |  |
| 1 Govt. <input type="checkbox"/>   |  | 1 Boy <input type="checkbox"/>  |  |                                |  | 5 ID                            |  |  |  |  |  |
| 2 Govt.-aided <input type="checkbox"/>   |  | 2 Girl <input type="checkbox"/> |  |                                |  | 6 OthD                          |  |  |  |  |  |
| CWSN : LD- Locomotor Disability; VI-Visual Impairment; HI- Hearing Impairment; S&LD- Speech & Language Disability; ID- Intellectual Disability; OthD- Other Disabilities |  |                                 |  |                                |  |                                 |  |  |  |  |  |
| Student's name   |  | <input type="text"/>            |  |                                |  |                                 |  |  |  |  |  |
| School's name  |  | <input type="text"/>            |  |                                |  |                                 |  |  |  |  |  |
| District   |  | <input type="text"/>            |  |                                |  |                                 |  |  |  |  |  |
| State  |  | <input type="text"/>            |  |                                |  |                                 |  |  |  |  |  |

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## 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. This booklet has **60** questions. Try to answer **all** the questions.
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 darkened as shown below:



11. **Do not overwrite/change the answer once marked in the OMR Sheet because it will be treated as wrong 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 passage given below and answer the questions that follow:**

A bicycle, also called a bike, is the cheapest and most common means of transport all over the world. The word 'bicycle' comes from the English word *bi* meaning 'two' and the Greek word *kuklos* meaning 'wheel'.

The earliest bikes were made of wood and had no pedals. Then came iron bikes which had no chains or tyres. In the 1860s, two French designers took bicycle design in a new direction by adding pedals on an enlarged front wheel, and by connecting the two wheels. These bicycles were difficult to ride due to their high seat and poor weight distribution.



This problem was later addressed by reducing the front wheel diameter and setting the seat further back. Today, the front and back wheels on all cycles are connected through gears.

Nowadays, different types of bicycles are available in the market. Sports bikes have

multiple gears, but are quite expensive. Bikes for entertainment are mostly used in circus shows. There are bikes for fitness and for cycling on mountain tracks. Bicycles are fun to ride and helpful in reducing pollution. They do not run on fuel and a license is not needed to ride them.

In India, bicycles are widely used in rural areas for transport, because they can easily go through forests and fields. In urban areas, many people are switching to bicycles because of traffic congestion. We need to take strong steps to encourage the use of bicycles instead of cars. Separate tracks and free parking spaces should be provided for cyclists. Banks should make loans available at low interest rates. Cities like Mysuru have started large-scale 'bicycle sharing' schemes which let people hire bicycles for a few hours or days.

**Q.6 Which of these were the earliest bikes?**

1. Iron bikes
2. Wooden bikes
3. Exercise bikes
4. Mountain bikes

**Q.7 What is the second paragraph about?**

1. The history of a bicycle
2. The structure of a bicycle
3. The distribution of bicycles
4. The advantages of a bicycle

**Q.8 How is a sports bike different from an ordinary bicycle?**

1. It has no pedals.
2. It is much cheaper.
3. It has special gears.
4. It has different wheel sizes.

**Q.9 How are bicycles better than cars?**

1. They require licenses.
2. They are more expensive.
3. They do not pollute the air.
4. They run on separate tracks.

**Q.10 A COMMON advantage of bicycles in rural and urban areas is that people \_\_\_\_\_.**

1. ride them through forests and fields
2. do not need fuel to ride them
3. use them to avoid congestion
4. ride them on separate tracks

**Q.11-15 Read the data given below and answer the questions that follows:**

| About the Animal   | Length/<br>Height | Weight      | Food<br>habit |
|--|-------------------|-------------|---------------|
| The dinosaur was a kind of <i>lizard</i> or <i>reptile</i> . Most people think of dinosaurs as big and ferocious reptiles. Some dinosaurs were the largest land animals of all time. They are now extinct.   | More than 35 m    | 7,40,000 kg | Herbivore     |
| Blue whales are the largest living animals on Earth. Blue whales are among the planet's longest-lived animals. Scientists can determine the age of a Blue whale by counting the layers of wax in the ears.   | 30.4 m            | 1,70,000 kg | Carnivore     |
| African elephants are the world's largest land animals. The other notable feature of African elephants is their very large ears, which allow them to radiate excess heat.  | 10.7 m            | 6,300 kg    | Herbivore     |
| Giraffes are the tallest living animals in the world. These tall animals are identified by their long necks, equally long and spindly legs, and spotted coats. A group of giraffes is aptly called a tower. Towers typically have 12 to 15 members and are led by an older male. The other members in the tower are females, calves and young males. | 5.8 m             | 2000 kg     | Herbivore     |
| The saltwater crocodile is the largest of all living reptiles. As its name implies, this species of <u>crocodile</u> can live in marine environments, brackish <u>mangrove swamps</u> and lower stretches of <u>rivers</u> .   | 5.3 m             | 1,360 kg    | Carnivore     |
| Ostriches are large, flightless birds that have long legs and a long neck that protrudes from a round body. Ostriches are bigger than any other bird in the world.   | 2.8 m             | 150 kg      | Omnivore      |

**Q.11** The largest animals living in the present and the past are \_\_\_\_\_.

1. giraffe and dinosaur
2. blue whale and dinosaur
3. blue whale and African elephant
4. saltwater crocodile and African elephant

**Q.12** How do scientists calculate the age of a blue whale?

1. measuring the weight
2. calculating the height
3. measuring the length and breadth
4. counting the layers of wax in the ear

**Q.13** What is a group of giraffes called?

1. shoal
2. herd
3. tower
4. crowd

**Q.14** Which of these pieces of information are arranged in a particular order in the table?

1. only the weight of the animals
2. height and weight of the animals
3. food habits and height of the animals
4. age, height and weight of the animals

**Q.15** Which of the following eats leaves, insects, lizards, fruits etc.?

1. dinosaur
2. blue whale
3. ostrich
4. African elephant

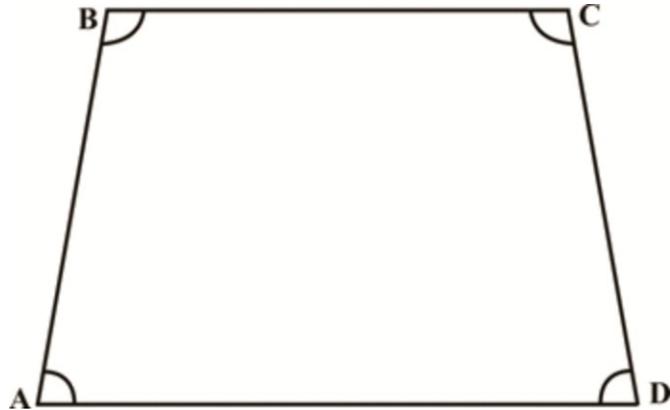
**Q.16** Which of the amount of time given below will be same as that of one day?

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  $80^\circ$  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.

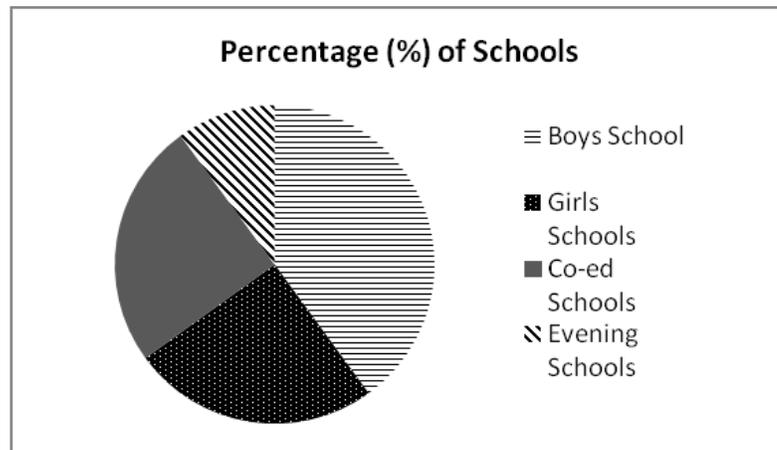
**Q.19** The test marks in three subjects for Rita and Renu studying in the same class are given below:

|      | Physics | Chemistry | Mathematics |
|------|---------|-----------|-------------|
| Rita | 78      | 76        | 74          |
| Renu | 72      | 82        | 74          |

**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 of the sentence below is correct?**

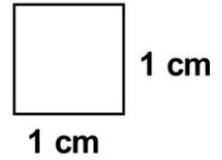
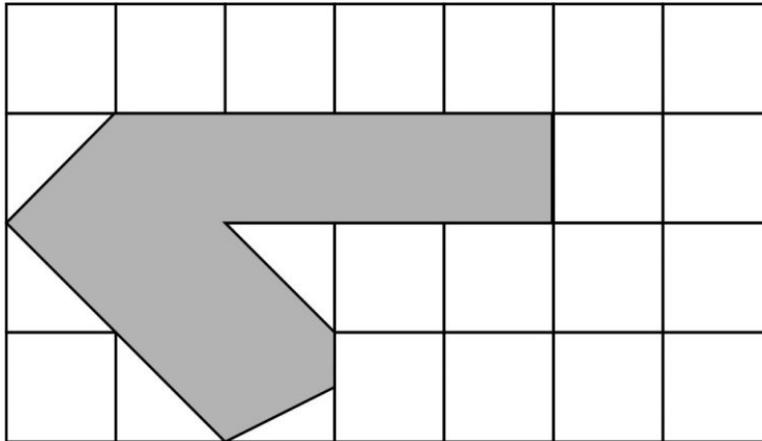
1. Co-ed schools are more than the Boys schools.
2. Boys' schools are more than the one-half of the total schools.
3. Evening schools are more than one- third of the total schools.
4. The total number of Girls' and Co-ed schools is greater than the number of Boys' schools.

**Q.21** A girl bought  $1\frac{1}{2}$  metres of cloth for shirt and  $2\frac{1}{4}$  metres cloth for kurta.

**How much total cloth she bought?**

1.  $\frac{32}{6}$  metres
2.  $3\frac{2}{6}$  metres
3.  $3\frac{3}{4}$  metres
4.  $\frac{43}{4}$  metres

**Q.22** The area of the shape shown on the grid is closest to:

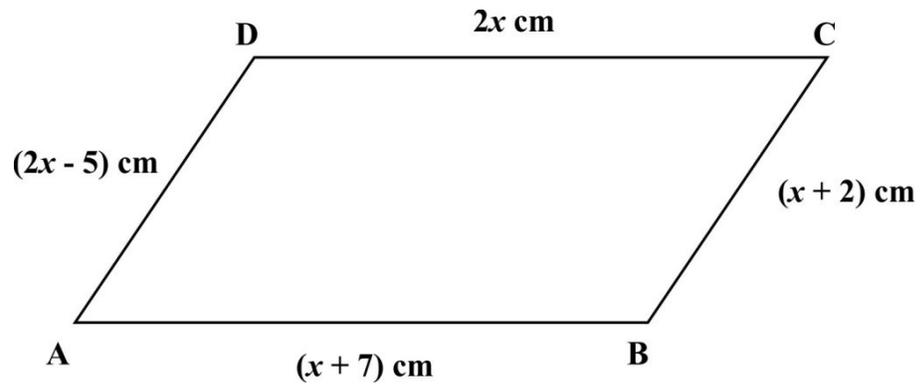


1.  $7 \text{ cm}^2$
2.  $8 \text{ cm}^2$
3.  $10 \text{ cm}^2$
4.  $13 \text{ cm}^2$

**Q.23** The marks in weekly English tests of Tina are 26, 18, 17, 23, 11, 7, 5 then median is:

1. 15
2. 16
3. 17
4. 18

Q.24 In the given figure, ABCD is a parallelogram.



What will be the length of AB?

1. 7 cm
2. 9 cm
3. 14 cm
4. 16 cm

Q.25 The total length of all sides of a rectangular park is 72 metres.

If its length is 20 metres then its area is:

1.  $140 \text{ m}^2$
2.  $160 \text{ m}^2$
3.  $320 \text{ m}^2$
4.  $400 \text{ m}^2$

Q.26 If the number 

|   |   |   |   |
|---|---|---|---|
| 9 | 8 | ? | 3 |
|---|---|---|---|

 is divisible by 9, then the digit in place of 

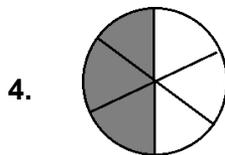
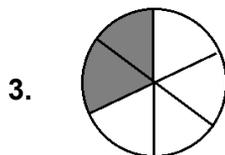
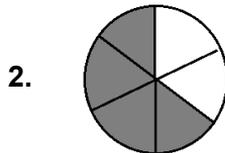
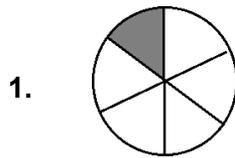
|   |
|---|
| ? |
|---|

 is:

1. 6
2. 7
3. 8
4. 9

**Q.27** A girl shaded two-thirds of half of a circle.

Which of the following shows the circle that she shaded?



**Q.28** The table shows test marks obtained by students of a class:

| Test Marks<br>(Out of 10) | Frequency<br>(Number of Students) |
|---------------------------|-----------------------------------|
| 1                         | 2                                 |
| 2                         | 4                                 |
| 3                         | 7                                 |
| 4                         | 8                                 |
| 5                         | 3                                 |
| 6                         | 6                                 |
| 7                         | 2                                 |
| 8                         | 5                                 |
| 9                         | 6                                 |
| 10                        | 4                                 |

How many students scored more than 6?

1. 2
2. 6
3. 9
4. 17

Q.29 Which of these is the best estimate of  $\frac{8.31 \times 5.89}{12.03} =$

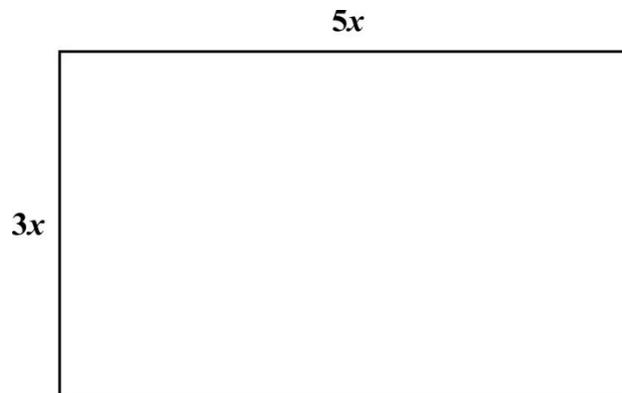
1.  $\frac{8 \times 5}{12}$

2.  $\frac{8 \times 6}{12}$

3.  $\frac{8 \times 5}{13}$

4.  $\frac{8 \times 6}{13}$

Q.30 In the rectangle given below:



Which of the following represents its perimeter?

1.  $3x + 5x$

2.  $3x \times 5x$

3.  $2(5x + 3x)$

4.  $2(5x - 3x)$

**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:

|                  |   |   |
|------------------|---|---|
| <b>Student A</b> | - | <b>Outermost zone</b>                     |
| <b>Student B</b> | - | <b>Middle zone</b>                        |
| <b>Student C</b> | - | <b>Innermost zone</b>                     |
| <b>Student D</b> | - | <b>Between middle and innermost zones</b> |

**Whose water will boil first?**

1. Student A
2. Student B
3. Student C
4. Student D

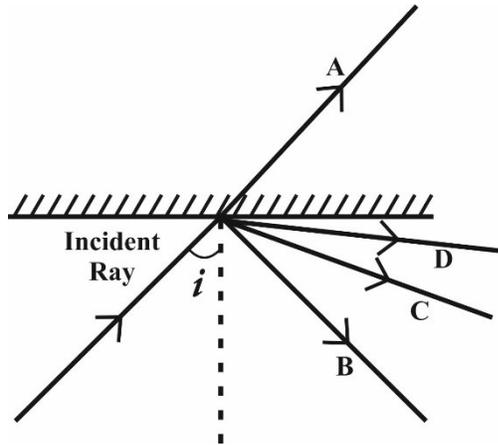
**Q.33** A farmer wants to do farming of roses. Which of the methods of propagation should be followed?

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.



**The reflected ray would be:**

1. Ray A
2. Ray B
3. Ray C
4. Ray D

**Q.36** The two tables show the classification of animals into two categories.

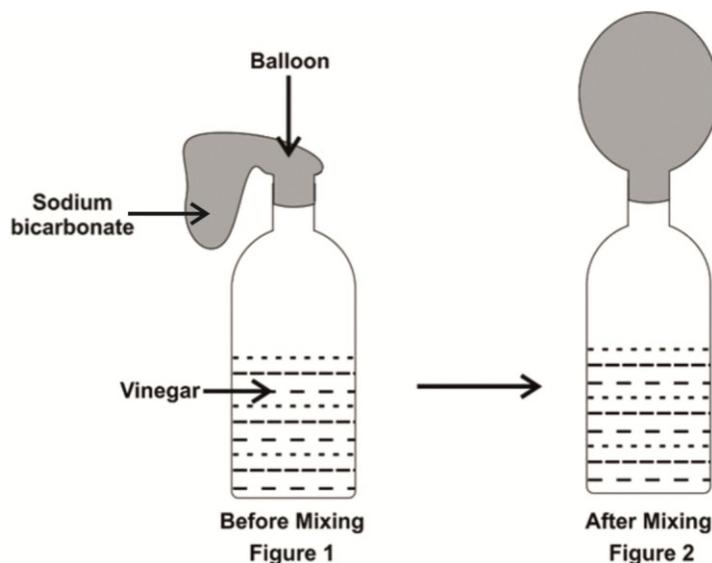
| Category 1 |
|------------|
| Deer       |
| Elephant   |
| Cow        |

| Category 2 |
|------------|
| Crocodile  |
| Spider     |
| Lion       |

**Which of the options given below was used to classify these animals?**

1. Organs for breathing
2. Methods of reproduction
3. Kind of food they eat
4. Sleep pattern they follow

Q.37



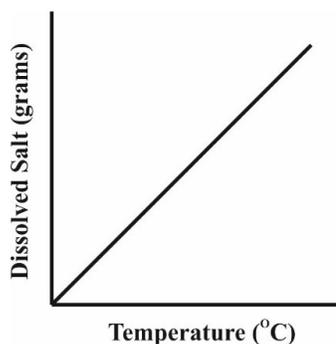
**Figure 1** → A Balloon filled with sodium bicarbonate attached to the mouth of the bottle that is filled with vinegar.

**Figure 2** → The Balloon inflates as sodium bicarbonate is added to the vinegar.

**What causes the balloon to inflate?**

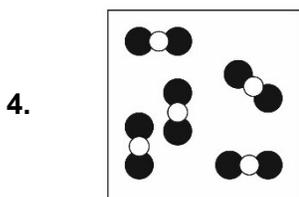
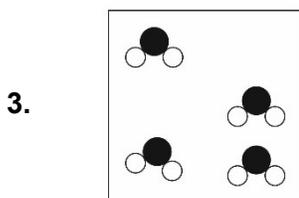
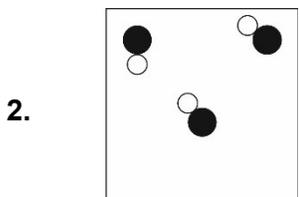
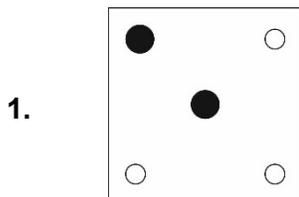
1. Water released due to the chemical reaction
2. Air in the bottle fills up the balloon
3. Carbon dioxide released due to the chemical reaction
4. The above experiment cannot take place.

**Q.38** What does the graph show?

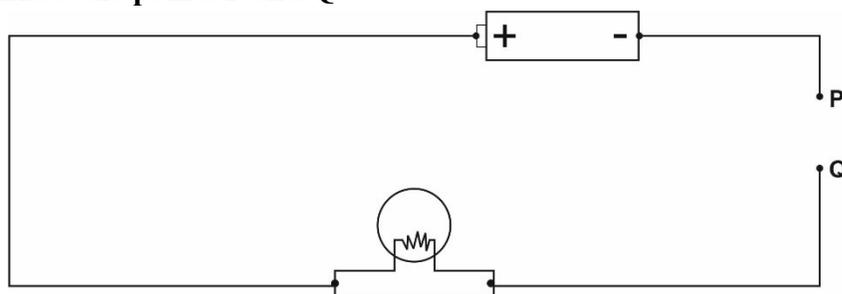


1. Amount of dissolved salt increases with temperature
2. Amount of dissolved salt decreases with temperature
3. There is no change in the amount of dissolved salt with temperature
4. The amount of salt dissolved first increases and then decreases with the increased in temperature

**Q.39** In which of the boxes below the water molecules are shown by combining hydrogen atoms (white circles) and oxygen atoms (black circles)?



**Q.40** The figure below is a circuit diagram with a bulb and a battery. Rods of different material are used to connect the points P and Q.



**Which rod would cause the bulb to light?**

1. Copper
2. Wood
3. Glass
4. Plastic

**Q.41** During which of the chemical processes below is energy being absorbed?

1. Burning of candle
2. Rusting of iron
3. Rotting of vegetables
4. Photosynthesis in plants

**Q.42** Given the two lists, List 1 and List 2.

| List 1    |
|-----------|
| Air       |
| Sea Water |

| List 2 |
|--------|
| Sugar  |
| Salt   |

**How have the above two lists been categorized?**

1. List 1 consists of compounds and List 2 consists of mixture.
2. List 1 consists of mixtures and List 2 consists of compounds.
3. List 1 and List 2 both consists of compounds.
4. List 1 and List 2 both consists of mixtures.

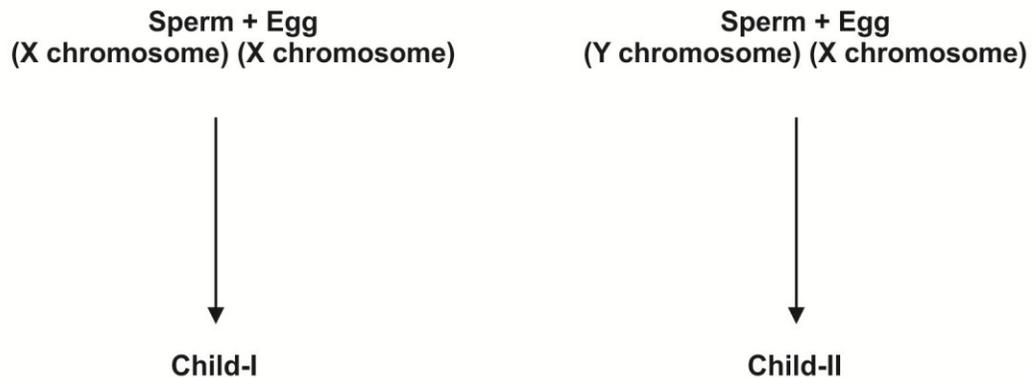
**Q.43** A small fire can be put off by placing a heavy blanket over it. How does this happen?

1. Lowering the temperature
2. Make the flame smaller
3. Absorbing the burning substance
4. Preventing the oxygen from reaching the fire

**Q.44** Your friend has to climb a rock. She wants your help to select the rope for safe climbing. Which of the following ropes would you suggest her?

1. Cotton
2. Nylon
3. Silk
4. Woolen

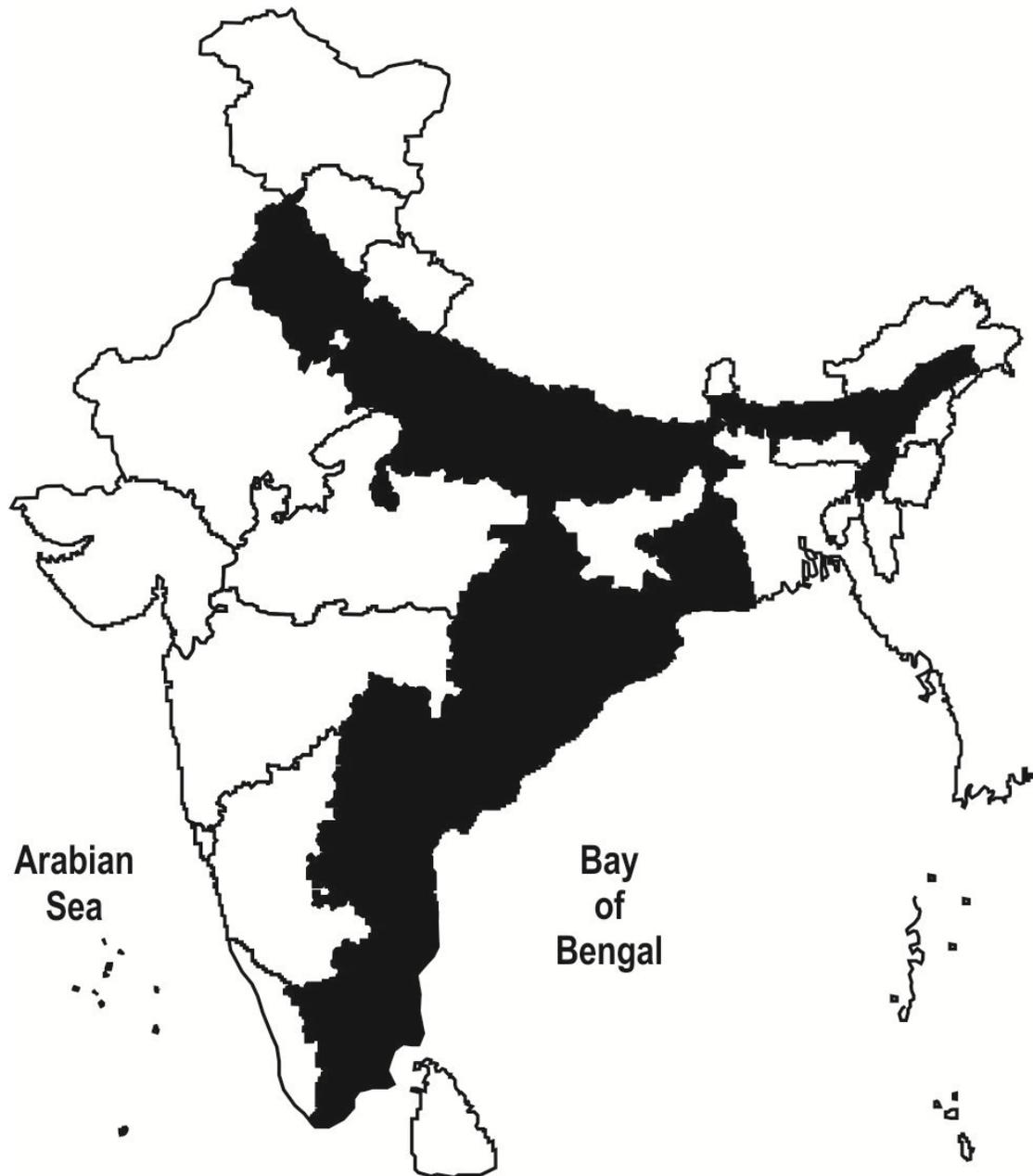
**Q.45** Observe the figure given below.



**What will be the sex of child-I and child-II?**

1. Both will be males.
2. Both will be females.
3. Child-I will be a female and child-II will be a male.
4. Child-I will be a male and child-II will be a female.

Q.46 Observe the given map.



Which crop is grown largely in the shaded area?

1. Maize
2. Wheat
3. Rice
4. Bajra

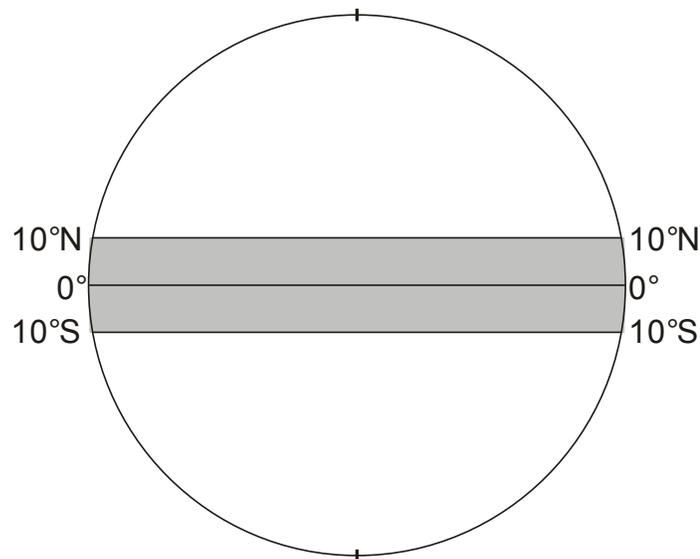
**Q.47** If you are in the classroom and earthquake occurs, what will be your immediate action to save yourself?

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  $10^{\circ}$  N and  $10^{\circ}$  S latitude?

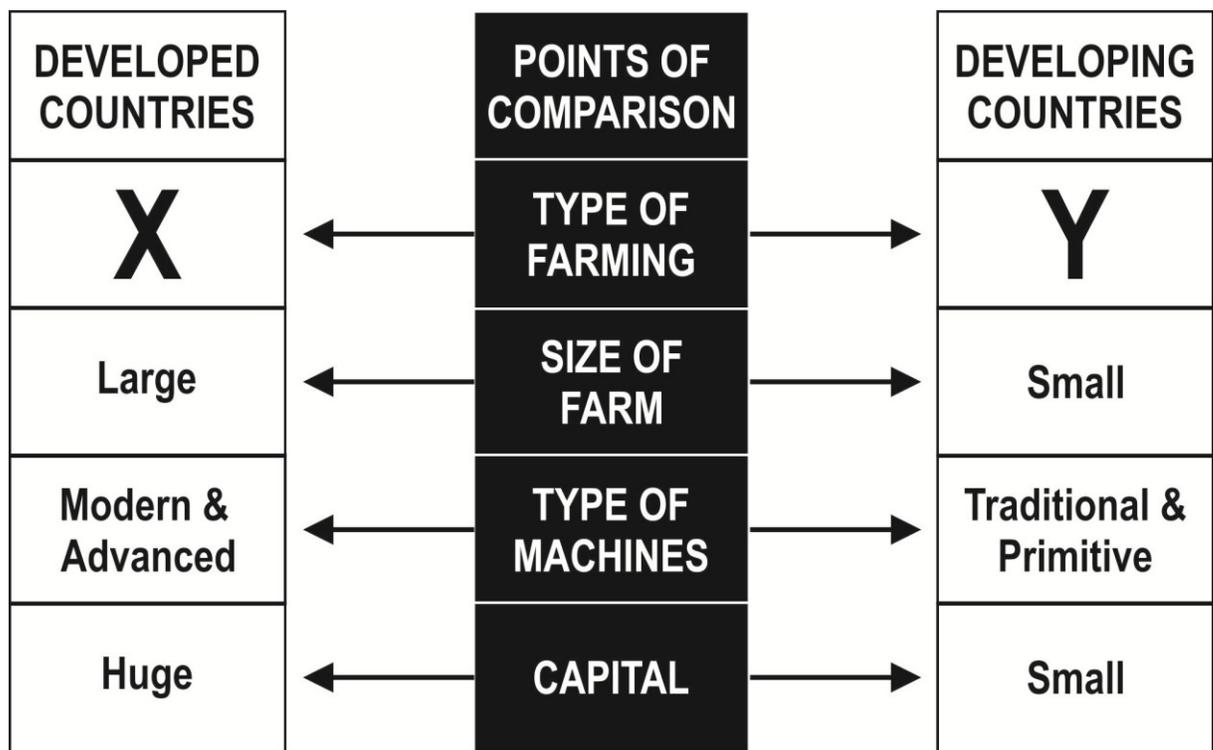


1. Polar
2. Equatorial
3. Temperate
4. Monsoon

**Q.50** Which of the options given 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 following chart.



The marked boxes with 'X' and 'Y' in the diagram are:

1. X- Subsistence,            Y- Commercial
2. X- Commercial,        Y- Subsistence
3. X- Primitive,            Y- Commercial
4. X- Subsistence,        Y- Primitive

**Q.52** Observe the given map of the world.



**Identify the distribution of resource marked (●) in the above map.**

1. Iron
2. Coal
3. Petroleum
4. Copper

**Q.53** Which of these would be a source for getting information on the number of people in an area and their occupation in Modern India?

1. Population survey reports of 19th century C.E.
2. Pre-historic cave paintings
3. Pillar inscriptions of 3rd century C.E.
4. Currencies issued by king in 14th century C.E.

**Q.54 Which of the following is performed only by the government?**

1. Providing education
2. Supplying liquid petroleum gas (LPG)
3. Supplying petrol
4. Running trains

**Q.55 Why has the Indian government recently permitted women to fly fighter planes?**

1. To provide equal opportunities to women in defence services
2. Lack of manpower in defence services
3. To pay respect to women of the Economically Weaker Sections (EWS)
4. To encourage young females to join defence services

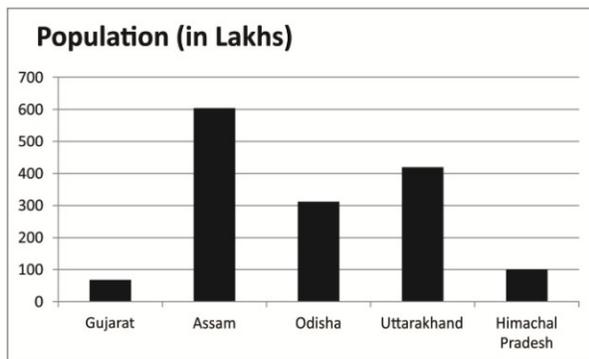
**Q.56 Suppose your parent had applied for an electricity connection two months ago, but no action has been taken yet. Which of the following rights helps you to know the steps taken by the electricity department?**

1. Right to education
2. Right to constitutional remedies
3. Right to equality
4. Right to information

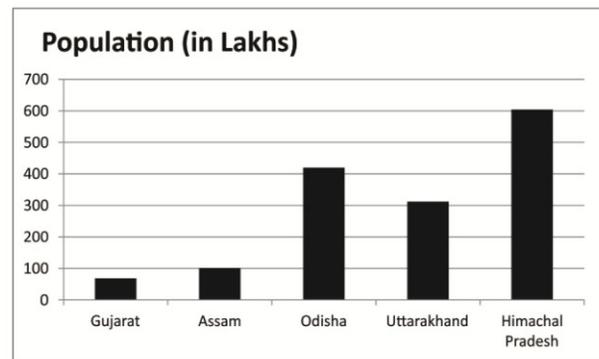
**Q.57** Observe the following table.

| States           | Population (Lakhs)<br>as per census 2011 |
|------------------|--|
| Gujarat          | 604.3                                    |
| Assam            | 312.1                                    |
| Odisha           | 419.7                                    |
| Uttarakhand      | 100.8                                    |
| Himachal Pradesh | 68.6                                     |

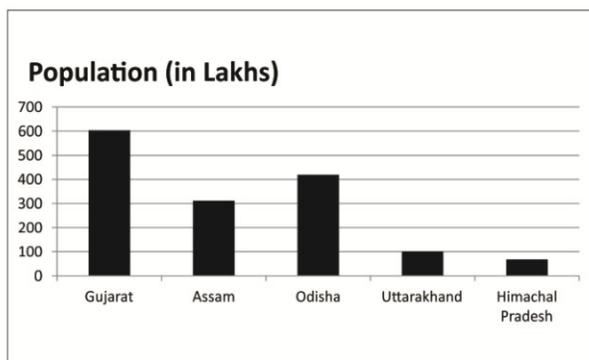
Which one of the following diagrams represents the above table?



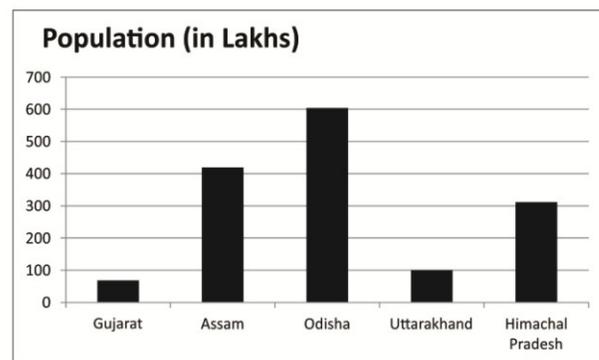
1



2



3



4

**Q.58** For conducting the elections to a legislative assembly, a state is divided into various areas.

**This area is called:**

1. ward
2. regions
3. constituency
4. block

**Q.59** The role of media in democracy is to:

1. make laws for a country
2. solve disputes in a country
3. provide information about events taking place in a country
4. implement social welfare schemes

**Q.60** A farmer, after spending Rs. 3000 to cultivate tomato, sold his harvest for Rs. 4000. The same tomato was sold by a trader for Rs. 7000 in a vegetable market.

**Which one of the following statements is true?**

1. Vegetable traders benefitted the most
2. Farmer benefitted the most
3. Benefit of farmer is more than the vegetable traders
4. Benefit of vegetable traders is equal to the benefit of farmer