The Shishukunj
INTERNATIONAL SCHOOL
INDORE

Home Assignment – May 23, 2020
Class VIII

English

Q.1 All of us enjoy travelling to different places and meeting new people. Recollect and describe your most memorable trip in about 160 to 180 words. Mention the place you travelled to, the sights you saw, the people you travelled with and also what made the trip a memorable one for you.

Q.2 "No one likes confinement but at the same time, confinement opens doors to new experiences".
Express in 120 to 150 words how you and your family members have been successful in transforming the time at home into an interesting, enriching and memorable period.

Q.3 You have been selected to participate in a Group Discussion organized in your school. The topic is: 'We alone are responsible for our health and well-being'. Pen your views on this topic in about 100 to 120 words.

Q.4 Veena started writing the following story but couldn't complete it.
'Rajiv was a vendor at Hyderabad Railway Station. He was about 19 years old. Like every other day, Rajiv reached the station to sell his wares. A scheduled train was about to arrive. Suddenly he saw ....'.
Help Veena complete the story in about 125-150 words.

Q.5. All of us make some common errors while writing or speaking English. Can you spot the errors in the following sentences?
Read the sentences given below carefully and rewrite them correctly without changing their tense or meaning. Do not copy the incorrect sentences. What is more – make sure you do not make these errors in your language ever again!

a) Mary referred him as the funny uncle.
b) I am so happy, my all answers are correct.
c) I seeked the help of my teachers to solve the problem.
d) Where does Mrs Jones sits?
e) I am very much excited to meet my best friend after so many years.
f) I go to the dance class on alternative days.
g) The fisherman caste a net to catch the fish.
h) These all are my books.
i) I cannot accompany you, I am having a severe headache.
j) We may not agree with our elders but we must be respectable to them.

हिंदी

प्रश्न1- निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए ;

संगीत सुनना किसे अच्छा नहीं लगता? ऐसा माना जाता है कि संगीत से ईश्वरीय आनंद की अनुभूति होती है। गायन हो या वादन,ये संगीत के ही अंग हैं। आपने सुना या पढ़ा होगा कि संगीत से अस्वस्थ लोग भी स्वस्थ हो जाते हैं, फसलें तेज़ी से बढ़ती हैं। पौधे भी संगीत का काआनंद लेकर अपनी प्रसन्नता ज़ाहिर करते हैं। दक्षिण भारत के अन्नामालाई विश्वविद्यालय के वनस्पति शास्त्री डॉ. टी.एन. सिंह ने 1986 में एक अद्भुत प्रयोग द्वारा वैज्ञानिक जगत के सामने यह बात रखी कि पौधों पर संगीत की मधुर स्वर लहरियों का अनुकूल प्रभाव पड़ता है। उन्होंने एक महीने तक कुछ पौधों के सामने वीणा-वादन की व्यवस्था की व जाँचने पर पता चला कि वे पौधे अन्य पौधों की अपेक्षा तेज़ी से लंबे हुए। यही नहीं, शांत और मीठी धुनों पर पौधे खुशी महसूस करते हैं तथा तेज़,तीखी धुनें उन्हें नापसंद हैं। एक बार जब कुछ पौधों को तेज़ धुन वाला संगीत सुनाया गया तो वे विपरीत दिशा में मुड़ गए।

(क) डॉ. टी.एन. सिंह ने पौधों के विषय में क्या कहा? उन्होंने अपनी बात को कैसे सिद्ध किया?

(ख) संगीत किन-किन को प्रभावित करता है?

(ग) इस गद्यांश को उचित शीर्षक दीजिए।

(घ) निम्नलिखित शब्दों के हिंदी प्रचलित रूप लिखिए :ज़ाहिर ,तेज़,खुशी,महसूस।

(ड.) शब्दों के विलोम शब्द लिखिए :मधुर, अनुकूल, अपेक्षा ,खुशी।

(च) शब्दों से उपसर्ग अलग कीजिए: नापसंद, अनुकूल।

(छ) शब्दों को शुद्ध कीजिए : तेज, मधुर, जांच, दक्षीण, दीशा।

प्रत्यय :

ऐसे शब्द या शब्दांश जो किसी शब्द के पीछे जुड़कर उसके अर्थ में परिवर्तन या विशेषता ला दें ,उन्हें प्रत्यय कहते हैं।

उदाहरण :दया(मूल शब्द),वान(प्रत्यय), पूर्ण शब्द–दयावान

प्रश्न 2- (क) निम्नलिखित प्रत्ययों से दो-दो शब्द बनाइए :
        इत, वाला, इक, इन,आई ,दार

(ख) निम्नलिखित शब्दों से मूल शब्द एवं प्रत्यय अलग कीजिए:
        बाज़ीगर, सुंदरता, पीलापन,दयालु,तहसीलदार, भोपाली

(ग) निम्नलिखित वाक्यों में से प्रत्यययुक्त शब्दों को छाँटिए: (वाक्य पूरा लिखिए)

   i. सबको मिठाई बाँटी गई।
   ii. नीना की लिखावट समझ नहीं आती।
   iii. बच्चे के भोलेपन पर सब हँस पड़े।
   iv. पुलिस ने कमरे की तलाशी ली।
   v. मालिन ने माला बनाई।
   vi. करेले के कारण मुँह में अभी भी कड़वाहट है।
   vii. लिहाफ़ की गरमाहट पाते ही बच्चों को नींद आ गई।

विराम-चिह्न :
भाषा के लिखित रूप में स्थान विशेष पर बल देने, रुकने,उतार-चढ़ाव आदि दिखाने के लिए विभिन्न प्रकार के चिह्नों की सहायता ली जाती है।इस प्रकार के संकेत-चिह्नों को विराम-चिह्न कहते हैं।
उदाहरण: * रोको मत,जाने दो । * रोको,मत जाने दो।

प्रश्न 3- (क) निम्नलिखित वाक्यों में उचित विराम-चिह्न लगाइए:

   i. डॉ ने मुझे पौष्टिक भोजन खाने की सलाह दी

   ii. दूरदर्शन पर महाभारत धारावाहिक समाप्त हो गया

   iii. घर में हम भाई बहन माता पिता दादा दादी एक साथ भोजन करते हैं

   iv. अरे वाह तुम्हारा गृहकार्य तो पूर्ण है

   v. (ड़.) माँ ने जय से कहा तुम्हारा काम तुम्हें ही करना होगा

Home Assignment – May 23, 2020
Class VIII

(ख) निम्नलिखित विराम-चिह्नों के नाम लिखिए:

? ....   **,** ....

( )............................   **-** ....

! ....   **^**................................

" " ....   **।**................................

प्रश्न 4- 'फिर जी उठी प्रकृति'- विषय पर प्रकृति की पूर्व एवं वर्तमान स्थिति के आधार पर लगभग 80 से
100 शब्दों में एक अनुच्छेद लिखिए।

Home Assignment – May 23, 2020
Class VIII

Mathematics

Introduction

▸ **Mensuration** is the branch of mathematics which deals with the study of Geometric shapes, their area, volume and related parameters.

▸ *Mensuration* is the mathematical name for calculating the areas, volumes, length of sides, and other geometric parts of standard geometric shapes such as circles, spheres, polygons, prisms, cylinders, cones, etc., through the use of mathematical equations or formulas.

What is Perimeter?

The perimeter is the distance all the way around the outside of a 2D shape.
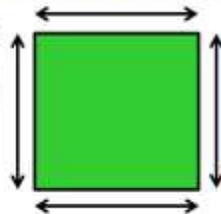
Area is . . .

6 sq units

3x3=9 sq units

Count the square units.

Area = length x width

Area is the number of square units needed to cover a region or figure. It is measured in square units.
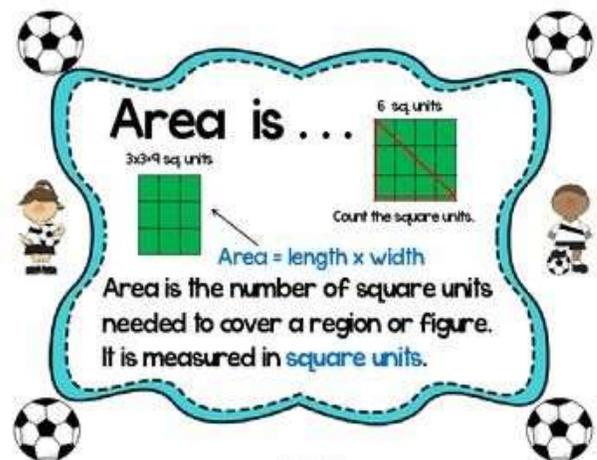
Home Assignment – May 23, 2020
Class VIII

NAME	FIGURE	AREA	PERIMETER CIRCUMFERENCE
TRIANGLE		$A = \dfrac{b \times h}{2}$	$P = MN + NP + PM$
PARALLELOGRAM		$A = b \times h$	$P = DE + EF + FG + GD$
RHOMBUS		$A = b \times h$	$P = b + b + b + b$ $P = 4b$
RECTANGLE		$A = L \times w$	$P = L + w + L + w$ $P = 2L + 2w$
SQUARE		$A = l^2$	$P = l + l + l + l$ $P = 4l$
TRAPEZOID		$A = \dfrac{(B+b) \times h}{2}$	$P = MN + NP + PR + RM$
CIRCLE		$A = \pi r^2$	$C = 2\pi r = \pi d$
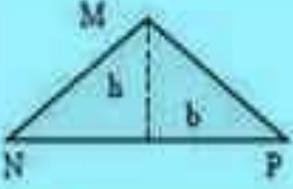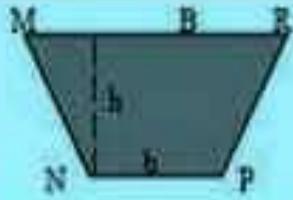
Home Assignment – May 23, 2020
Class VIII

Note:
   1. **Area of Rhombus = ½ x (d₁ x d₂) where d₁ and d₂ are the diagonals of the Rhombus.**
   2. **Area of Trapezium = ½ x (sum of parallel sides) x height.**

General Instructions:
1. Solve the assignment in your mathematics notebook.
2. Be neat in your presentation.
3. Draw figures wherever necessary. Figures are not to scale.

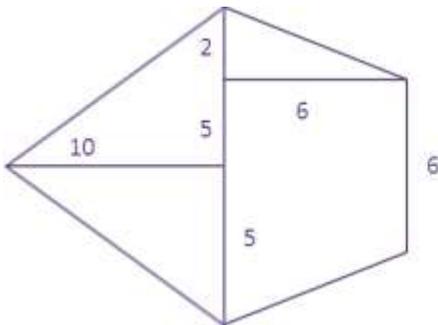**Q.1** Find the length of the missing side (all measures are in cm) :

(i)

P = 54 cm

(ii)

P = 43 cm

(iii)

P = 43 cm
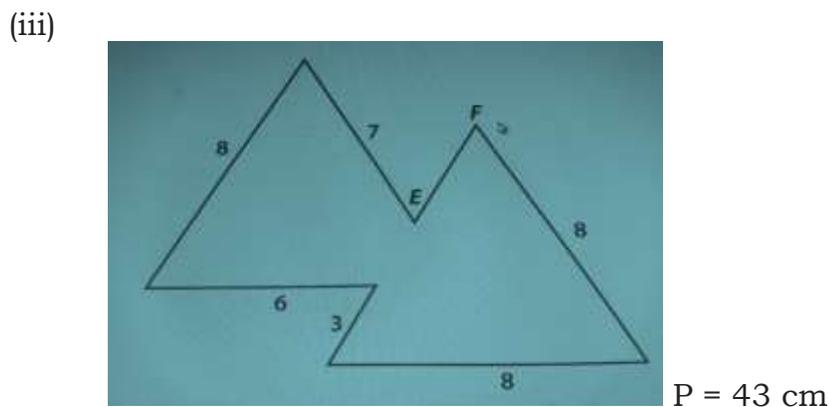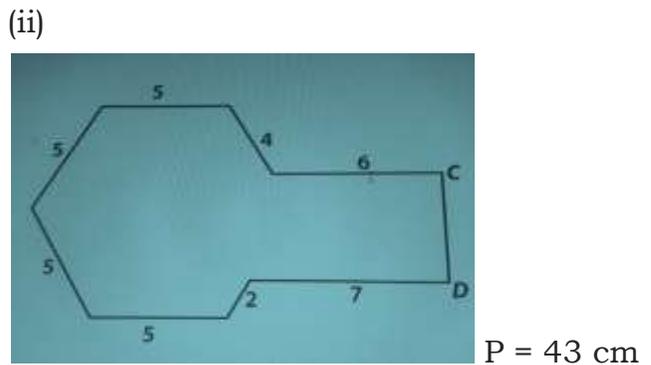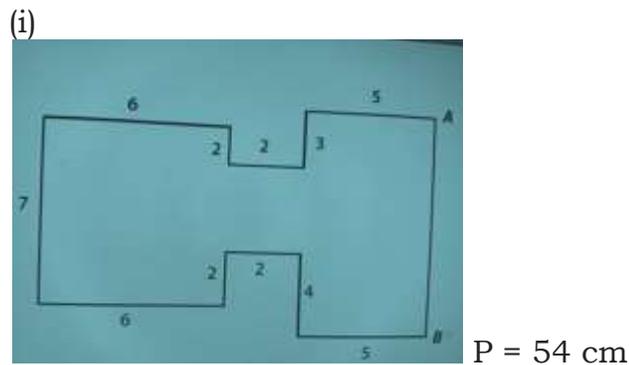
Q.2 Find the area of the shaded portion in the adjoining figure. (Π = 3.14)
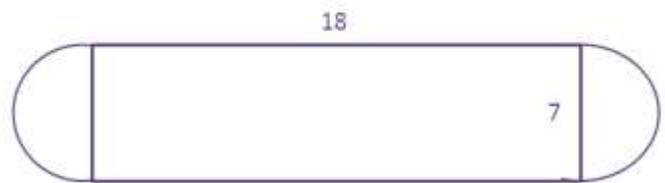

3 cm
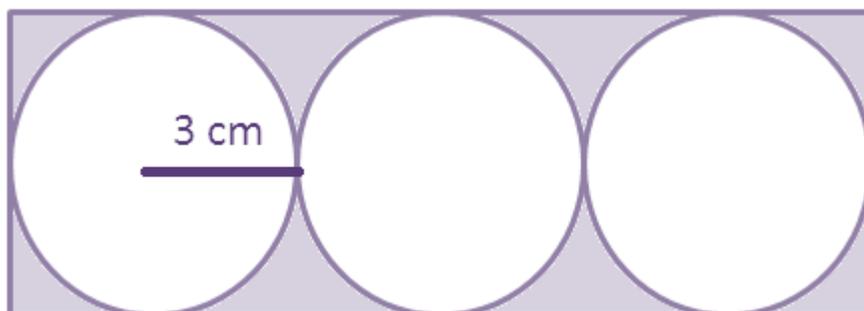
Home Assignment – May 23, 2020
Class VIII

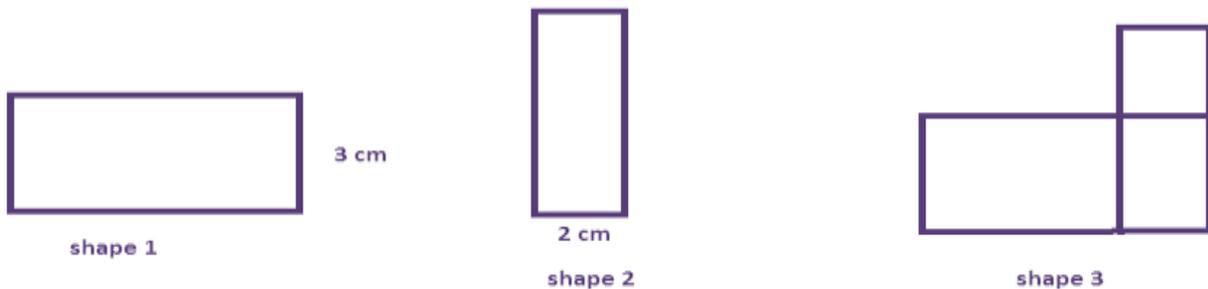**Q.3** Find the area of the following figures. (All measurements are in cm)

(i)

(ii)

Q.4 Shape 1 and shape 2 are overlapped to form shape 3 as shown below. The area of shape 1 is 30 sq cm and the area of shape 2 is 20 sq cm. What is the area of shape 3?

shape 1

3 cm

2 cm

shape 2

shape 3

Q.5 Arham found that the minute hand of a circular clock of his room is 15 cm long. According to you, how far does the tip of the minute hand move in one hour? (Π = 3.14)



r = 15 cm
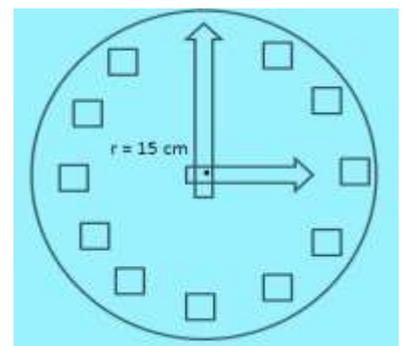
Home Assignment – May 23, 2020
Class VIII

Q.6 Anya decided to make a card for her mother on Mother's Day. She took a circular card sheet of radius 14 cm. But to her utter surprise she found that two circles of radii 3.5 cm each and a rectangle of length 3 cm and breadth 1 cm are removed (as shown in the figure). How much of the card sheet can she now use to make the Mother's Day card? ($\Pi = 22/7$)

Q.7 A door of height 2m and breadth 1m is fitted in a wall. The height of the wall is 4.5 m and breadth is 3.6m. Find the cost of white-washing the wall, if the rate of white-washing the wall is Rs. 20 per m².
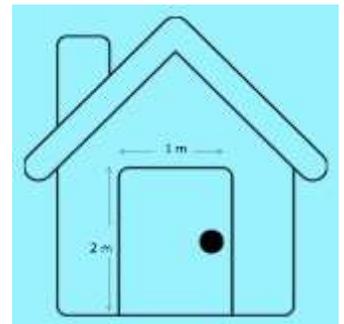
Q.8 Rahul had a trapezium shaped garden with parallel sides 10m and 20m and height 8m, a circular pond with a diameter 7m was made on it. Find the area of the garden in which Rahul can play.
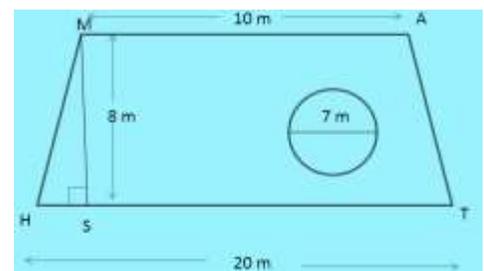
Home Assignment – May 23, 2020
Class VIII

Q.9 Two cross roads, each of width 10m, cut at right angles through the centre of a rectangular park of length 700m and breadth 300m are parallel to its sides. Find the area of the cross roads. Also find the area of the park excluding the cross roads. Give the answer in hectares.
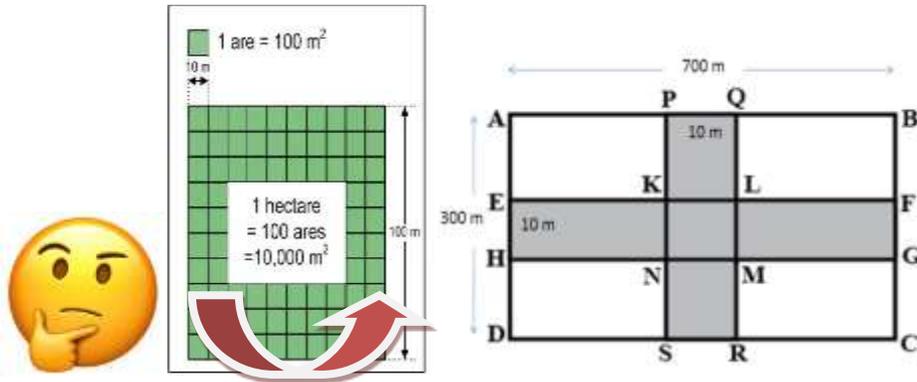
Q.10 The diagonal of a square garden is 28.28 cm long. Find the length of the garden and also its area. ($\sqrt{2}$ = 1.414)
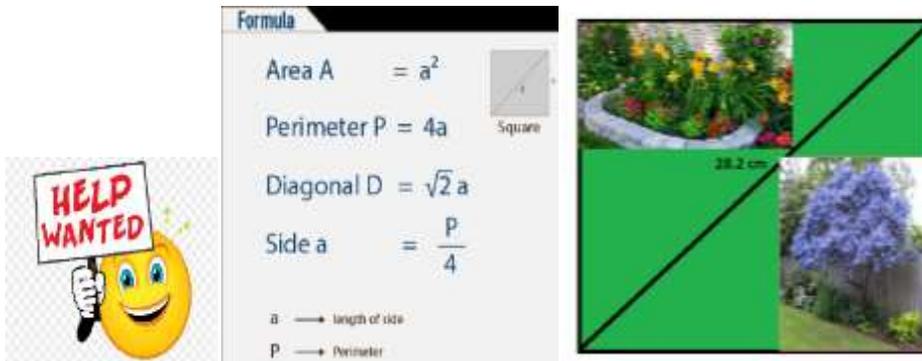
Home Assignment – May 23, 2020
Class VIII

**Q.11** Swastika wrapped a cord around a circular pipe of radius 4 cm and cut off the length required of the cord. She then wrapped the same cord around a square box of side 4 cm. How much more cord was used by her to wrap the circular pipe? (Π = 3.14)

Q.12 Raj had a Rhombus shaped carom board with the diagonals measuring 16 cm and 18 cm. Find the area of the board.
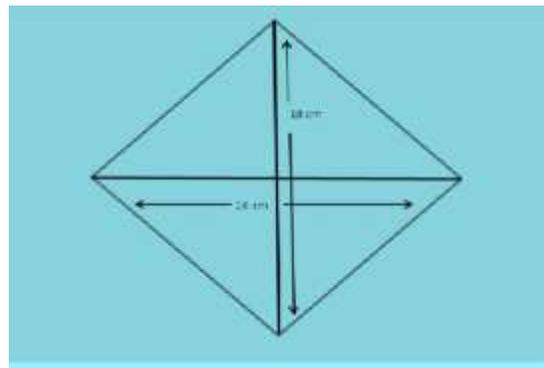

Q.13 In the adjoining figure, the outer trapezium ABCD has area 320 cm². The area of the region between outer and inner trapezium is 140 cm². Find the area of the inner trapezium EFGH. If the lengths of the parallel sides of the inner trapezium are 16 cm and 20 cm, find the height **h**.
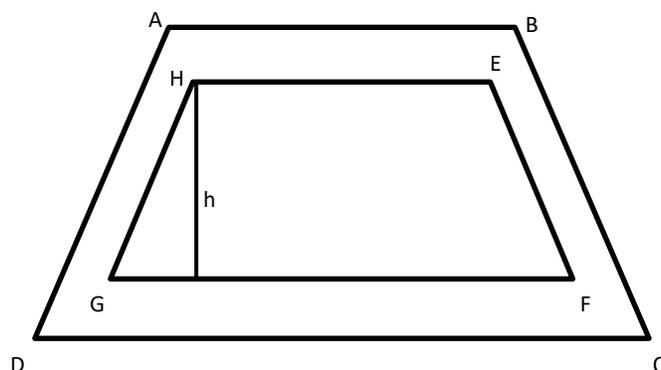
Home Assignment – May 23, 2020
Class VIII

Q.14 Avi being very health conscious decides to jog in his garden. Every week he chooses a different route with a condition that each week his run should be longer than the week before. Help him decide his route for next 4 weeks.
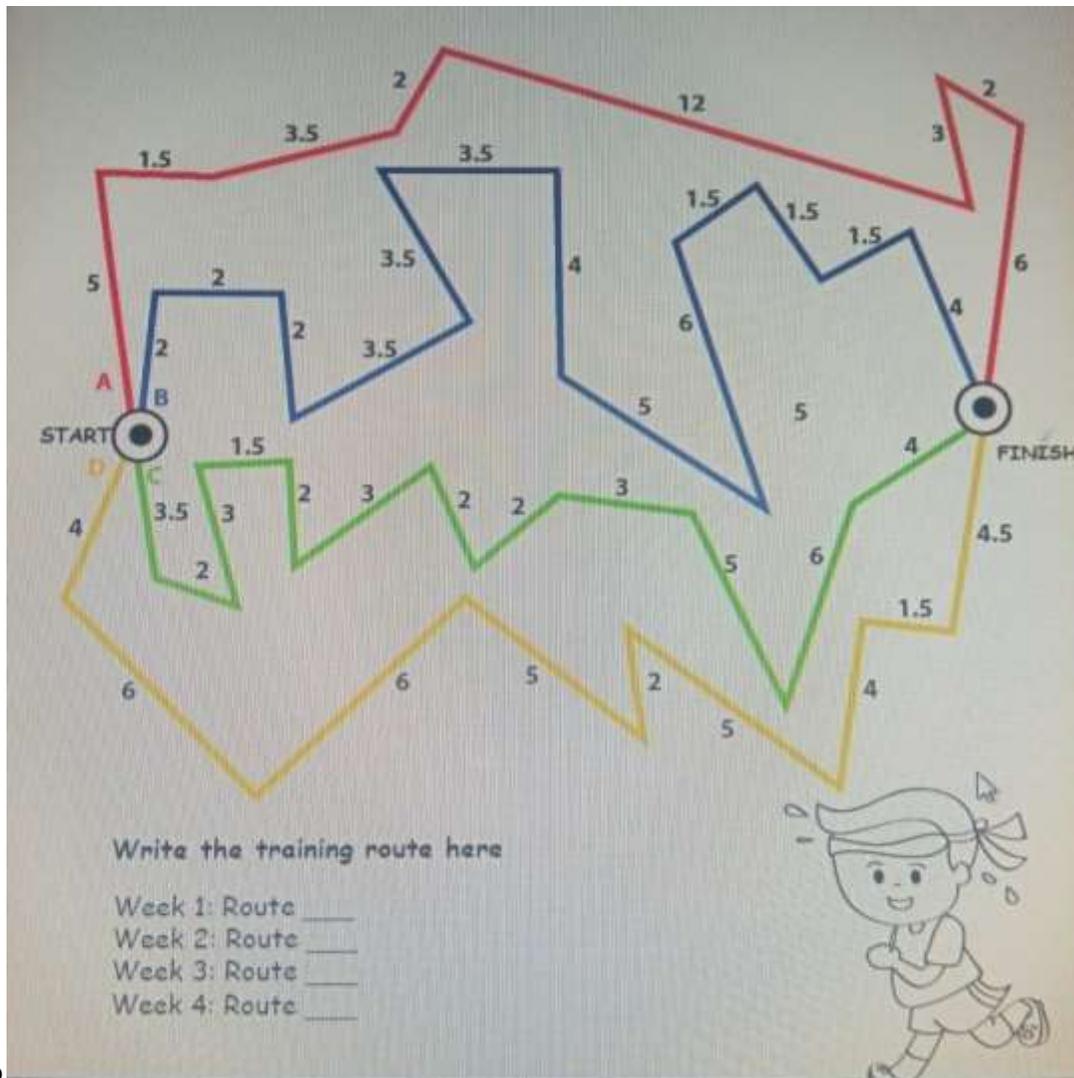
Q.15 Trace out the figures given below on a graph paper/square sheet and cut them carefully.

Note: You can prepare your own squared paper by drawing 1unit x 1unit squares on plane sheet of paper/Notebook page.

Label them as square, rhombus, parallelogram, rectangle, trapezium, right triangle etc.....

Join any two or more shapes to make a polygon. Find the perimeter and area of the polygon thus formed. Note down your observations systematically.

Home Assignment – May 23, 2020
Class VIII
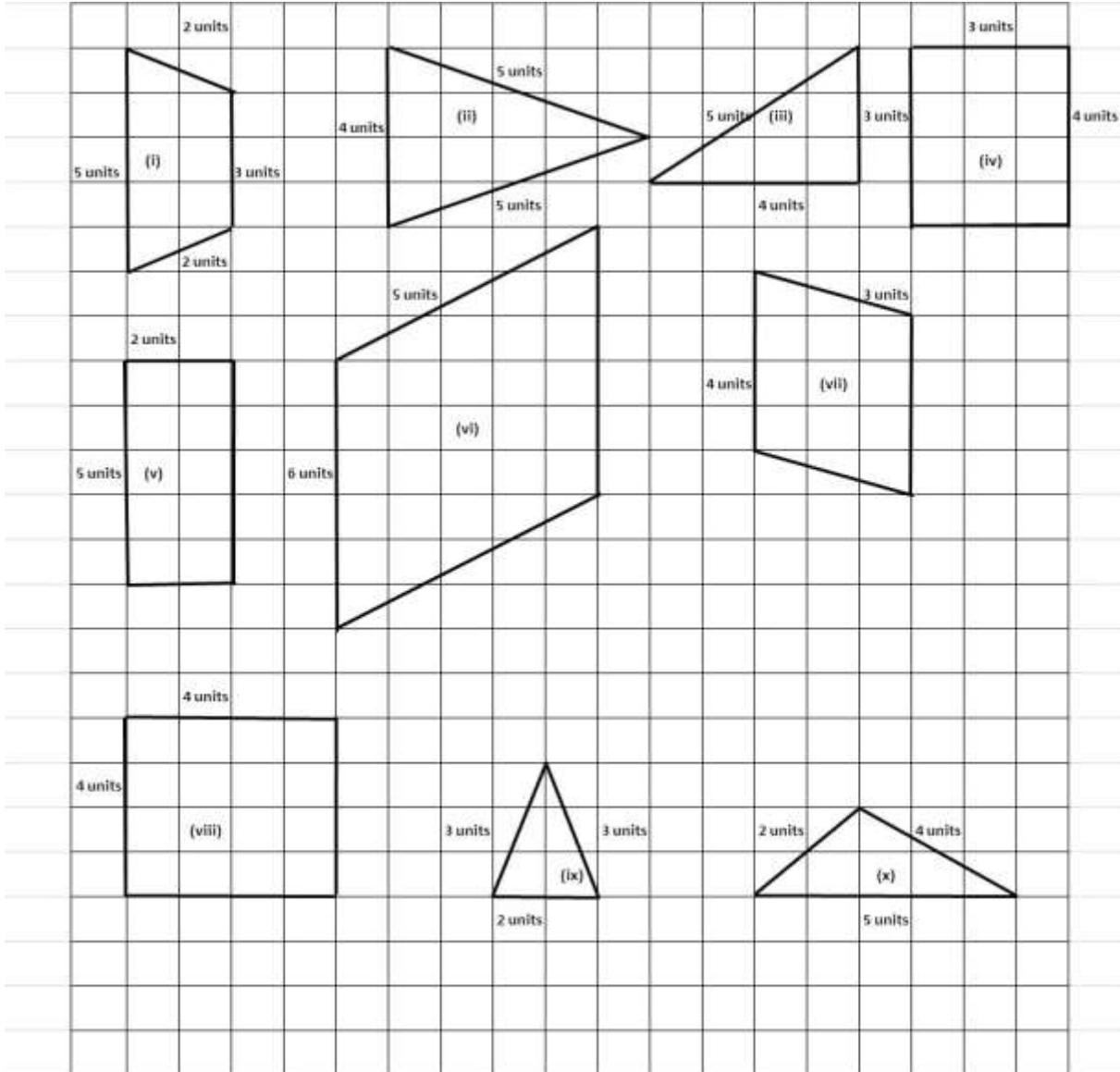
Home Assignment – May 23, 2020
Class VIII

Science (Physics)

Topic: Light

IMPORTANT TERMS:

- **Light:** The sense of sight is one of the most important senses. Through it we see mountains, rivers, trees, plants, chairs, people and so many other things around us. We also see clouds, rainbows and birds flying in the sky. Eyes alone cannot see any object. It is only when light from an object enters our eyes that we see the object. The light may have been emitted by the object, or may have been reflected by it. Light is a form of energy which makes things visible to us.

- **Reflection of light:** Bouncing back of light when it is incident on a surface is called reflection.

Regular reflection:

When a beam of light consisting of parallel light rays incident on a smooth surface gets reflected back such that parallel light rays remain parallel after reflection, then the reflection is called Regular reflection.

Regular Reflection

Home Assignment – May 23, 2020
Class VIII

One can see an image on a surface if the surface is reflecting light regularly. For example, mirror, still water surface, etc.

- **Irregular Reflection:**
  When a beam of light consisting of parallel light rays incident on a rough surface and gets reflected back such that parallel light rays do not remain parallel after reflection, then the reflection is called Irregular reflection.
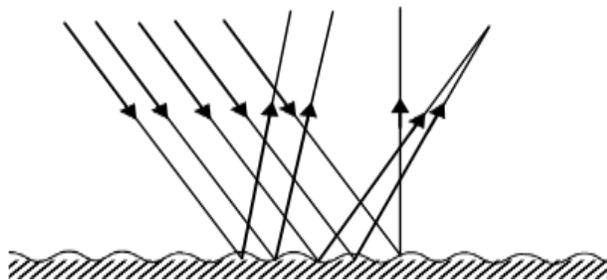

One cannot see the image on a surface from which irregular reflection of light takes place.

Some other important terms:

- o **Incident ray:** The beam of light that initially strikes the mirror/ reflecting surface.
- o **Reflected ray**: The beam of light that bounces off the mirror/ reflecting surface after striking the mirror.
- o **Normal:** It is the ray perpendicular to the surface of the mirror/ reflecting surface at the point of incidence.
- o **Angle of incidence** is the angle that the incident ray makes with the normal.
- o **Angle of reflection**, or reflected angle, is the angle that the reflected ray makes with the normal.

Laws of reflection of light:

(i)   Incident ray, reflected ray and the normal at the point of incidence all lie in the same plane.

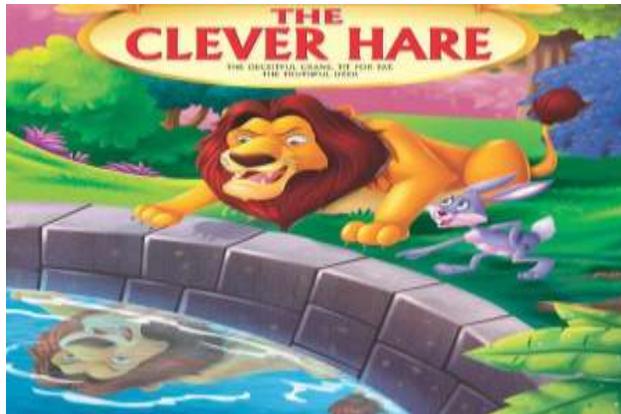(ii)   Angle of incidence (i) = Angle of reflection (r)
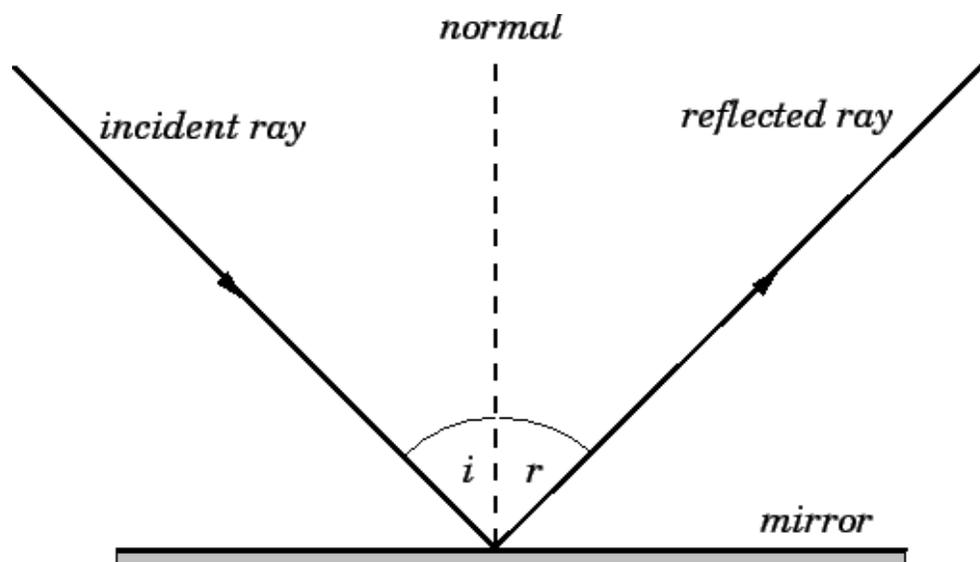
Laws of reflection are valid for both regular and irregular reflections.

Home Assignment – May 23, 2020
Class VIII

Characteristics of images formed in a plane mirror:

1. Image is virtual (cannot be obtained on screen).

2. Image is erect.
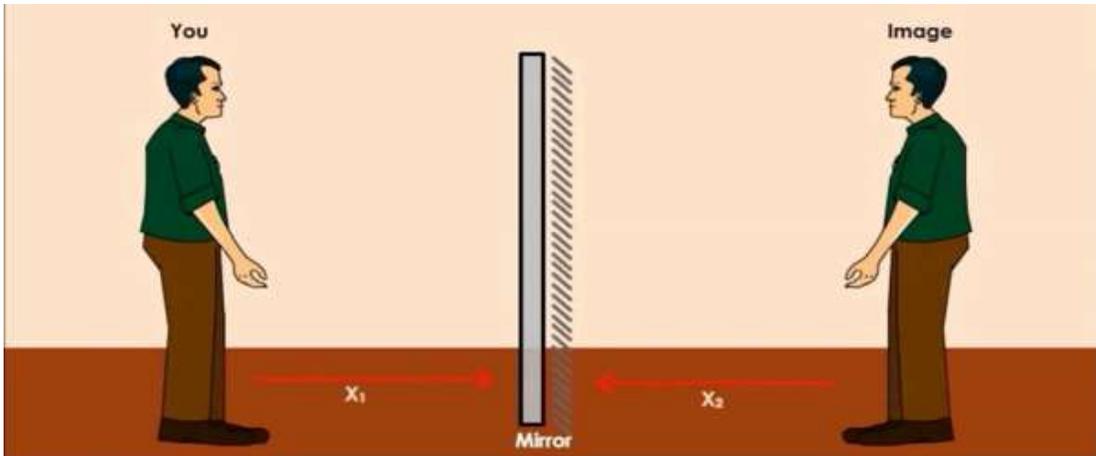

3. Image is laterally inverted.
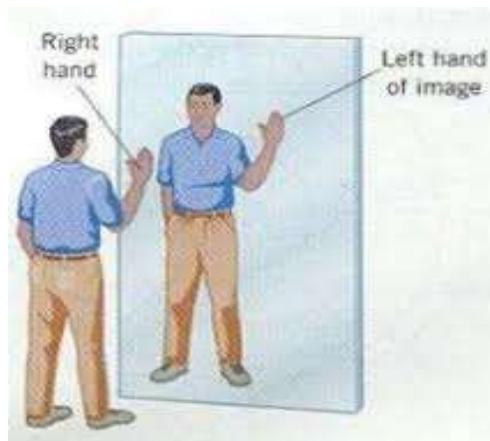
Home Assignment – May 23, 2020
Class VIII

4. Distance of an object in front of the mirror is equal to the distance of the image behind the mirror.

$$X_1 = X_2$$

5. Height of the image is equal to the height of the object.
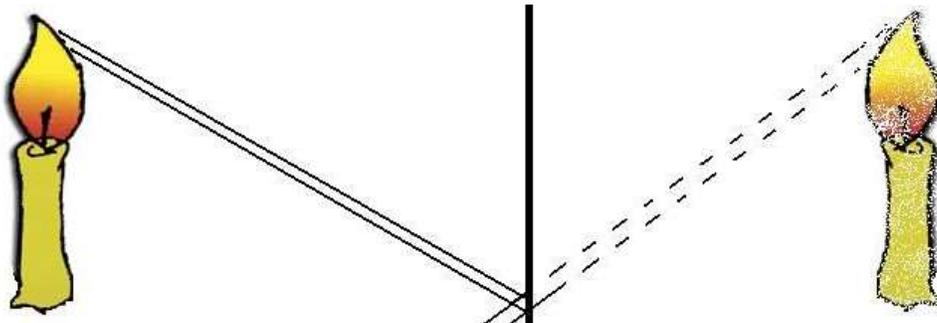
Multiple reflections

When two mirrors are kept at an angle we get multiple images due to multiple reflection of light.
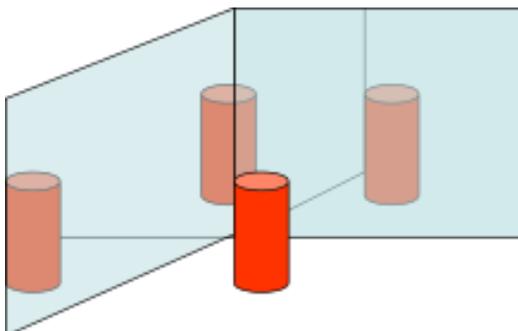
Home Assignment – May 23, 2020
Class VIII

Formula for number of images formed in two plane mirrors kept at an angle x^0.

Number of images formed = $\frac{360}{x}$ **- 1**

When two plane mirrors are parallel, we get infinite number of images.

Applications of multiple reflections:

A kaleidoscope is an optical instrument with two or more reflecting surfaces tilted to each other at an angle, so that one or more (parts of) objects on one end of the mirrors are seen as a regular symmetrical pattern when viewed from the other end, due to repeated reflection.

Home Assignment – May 23, 2020
Class VIII

Periscope:

It is an apparatus consisting of a tube attached to a set of mirrors or prisms, by which an observer (typically in a submerged submarine or behind a high obstacle) can see things that are otherwise out of sight.
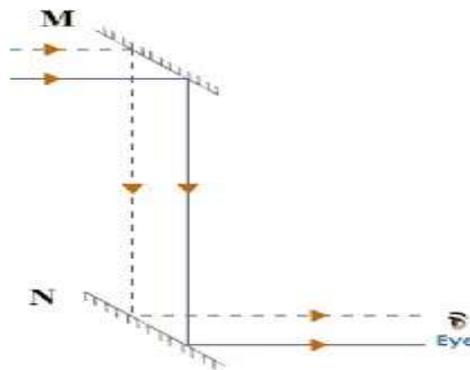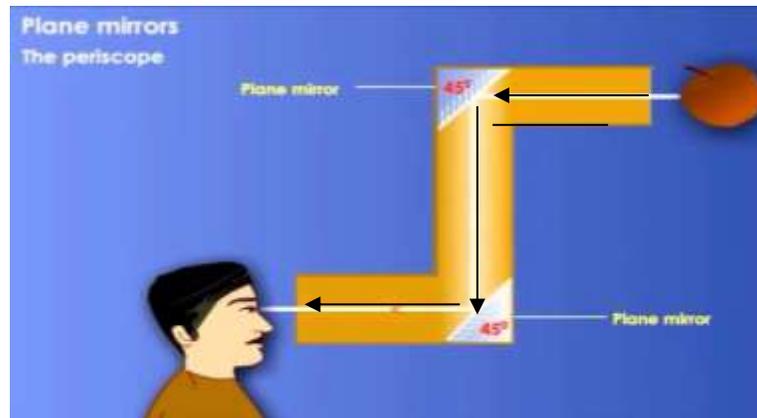
Exercise:

Q.1 Multiple Choice Questions:

i. Light falling on surface S_1, S_2, S_3 is shown in figures given below:
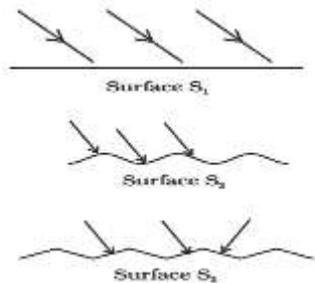
Surfaces on which the angle of incidence is equal to the angle of reflection is/are:

a) S_1 only

b) S_1 and S_2 only

c) S_2 and S_3

d) all the three surfaces

Home Assignment – May 23, 2020
Class VIII

ii. Which of the following is opaque:

a) Cooking oil
b) A mirror
c) Spectacles
d) River water

iii. Property of plane mirror to make 'right appear as left' and vice versa, is called:

a. Vertical inversion
b. Refraction
c. Reflection
d. Lateral inversion

iv. An image formed by the plane mirror is:

a) Always real
b) Always virtual
c) Sometimes real sometimes virtual
d) None of these

v. An object of height 10 cm is placed at a distance of 50 cm from a plane mirror. The size of the image will be:

a) 20 cm
b) 40cm
c) 10cm
d) 100cm

vi. An image formed by a plane mirror is:

a) virtual, behind the mirror and enlarged.

b) virtual, behind the mirror and of the same size as the object.

c) real at the surface of the mirror and enlarged.

d) real, behind the mirror and of the same size as the object.

vii. Distance between an object and its image in a plane mirror is 100 cm.
What is the distance between the plane mirror and the image?

a) 25 cm
b) 50 cm
c) 100 cm
d) 200 cm

viii. If a light ray incident is normal to the surface of a plane mirror, what is the angle of incidence?

a. 90^0
b. 0^0
c. 100^0
d. 45^0

ix. If the angle between two plane mirrors is 60^0, then number of images formed are:

a. 5
b. 6
c. 8
d. 9

x. If light is made to fall on the following objects: a plane mirror, a card board, a white and a drawing sheet, reflection of light will take place from:
   a) only plane mirror
   b) only white drawing sheet
   c) only card board
   d) all of the above

Q.2 Fill in the blanks:

   i. The _____ line at the point of incidence is called the normal.
   ii. When two mirrors are kept parallel to each other, the number of images is/are _____.
   iii. Incident ray perpendicular to the surface of the plane mirror is called.............
   iv. Kaleidoscope works on the principle of _____.
   v. Angle between incident ray and normal is called _____.
   vi. Surface of a newspaper exhibits _____ reflection.
   vii. If the number of images formed by the two plane mirrors kept at an angle is four, then the angle between the mirrors is..............
   viii. Number of plane mirrors used in a periscope are.......
   ix. The instrument used to see regular symmetric images of an object in two- mirror or three – mirror system is called ....
   x. The instrument used by the submarines to see objects on the surface of the water when it is dipped inside the water is called..........

Q.3 Answer the following questions:

   i. Differentiate between regular and diffused reflection. Draw a diagram to show these two types of reflection.
   ii. Write three uses of a plane mirror.
   iii. What is a Kaleidoscope? Name the principle on which it is based.
   iv. Mention whether regular or diffused reflection will take place in each of the following cases when a beam of light strikes the surface. Justify your answer.
      (a) Polished wooden table
      (b) Chalk powder
      (c) Cardboard surface
      (d) Marble floor with water spread over it
      (e) Mirror
      (f) Piece of paper
   v. What is the angle of incidence if the reflected ray is at an angle of 90° to the incident ray?

Home Assignment – May 23, 2020
Class VIII

vi. Two mirrors meet at right angles. A ray of light is incident on one at an angle of 30°. Draw the reflected ray from the second mirror.

vii. "Reflected light can be reflected again", give an example to justify this statement.

viii. Look at the following picture. Can the image of the child be obtained on the screen? Give reason for your answer.

Home Assignment – May 23, 2020
Class VIII

Social Science

Topic - Resources

Q.1

Resources in the world can broadly be classified into: Natural resources, Man-made resources and Human resources. Amongst the three, human beings are considered to be the greatest and the most important resource of the earth. Write two reasons for the same.

Q.2 Choose the correct option:

a. Which of the following elements make a substance a resource?

i)	Utility	iii)	Quantity
ii)	Value	iv)	Both i and ii

b. Which one of the following is a man made resource?

i)	Medicines to treat cancer	iii)	Tropical forests
ii)	Spring water	iv)	Mountains

c. Complete the statement: Non-renewable resources are those:
  i)   which have limited stock
  ii)   made by human beings
  iii) derived from non-living things
  iv)   not available at all

d. Balancing the need to use resources and also conserve them for the future is known as:

  i)   Natural resources
  ii)   Sustainable development
  iii) Resource conservation
  iv)   Human resource

Q.3 Rahim, one of the nine gems of Akbar's court has very rightly said:

"Rahiman paani raakhiye

Bin paaani sab soon.

Paani gaye na ubre

Moti, manus,choon"

This means: keep water, as without water there is nothing. Without water, pearl, swan and dove cannot exist.

Can you imagine life without water? In about 80 words, describe what would happen if water were to disappear from the surface of the earth.

Q.4 Match the words in Column A with their correct meaning given in Column B:

Column A	Column B
1.Soil	a) Potential resource
2.Bridge	b) Actual resource
3.Patent	c)Natural resource
4.Uranium	d)Right over an idea/invention
5.Petroleum	e) Human made resource

Q.5 Read the passage given below and answer the questions that follow:

CARBON FOOTPRINTS

Footprint is an imprint of your feet on the sand. Similarly, carbon footprint is an imprint of our activities on Earth. It is a measure of the impact that human activities have on the environment, particularly climate change. You may have heard of global warming. This term is often used in newspapers and television. It is the gradual increase in temperature on the surface of the Earth. Most of this warming is being caused by human activities. Greenhouse gases are formed by burning of fossil fuels for electricity, heating and transportation. These gases have changed the composition of the atmosphere. So, when you ride a car, a certain amount of carbon dioxide, one of the greenhouse gases, is produced. The production of food and goods also emit carbon dioxide.

a. What are carbon footprints?
b. How are greenhouse gases formed?
c. Explain global warming.
d. Name a few activities that produce carbon dioxide.