Q1*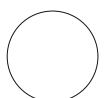* When you wake up one morning, you find entire human race **has got ability to fly! Everybody, in excitement has started flying randomly. This is creating some serious problems. You are required to **identify one such problem** due to this new ability developed in humans & find **a suitable solution for the same**. Visualise and explain them in the box given below. .

15

Problem :-

_____

_____

_____

_____

Solution :-

_____

_____

_____

_____

15

Q2   Read through the following process.

A chocolate sponge is a very handy piece of cake! And when it can be made in a pressure cooker, its preparation is a piece of cake too! Serve this soft and succulent Eggless Chocolate Sponge Cake warm and fresh off the cooker with a cup of tea, top it with ice-cream to make a delicious dessert, or decorate it to make the prettiest – and tastiest - cake in town. Serve along with Herbed Sticks and Banana Pepper Wafers for an exciting evening tea time treat.

Preparation Time: 5 mins   Cooking Time: 38 mins   Makes 1 cake (7")

Ingredients
2 tbsp cocoa powder
1 1/4 cups plain flour (maida)
1 1/2 tsp baking powder
1/2 tsp soda bi-carb
3/4 cup condensed milk
4 tbsp melted butter
1 tsp vanilla essence
1 cup salt
1/2 tsp melted butter for greasing
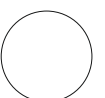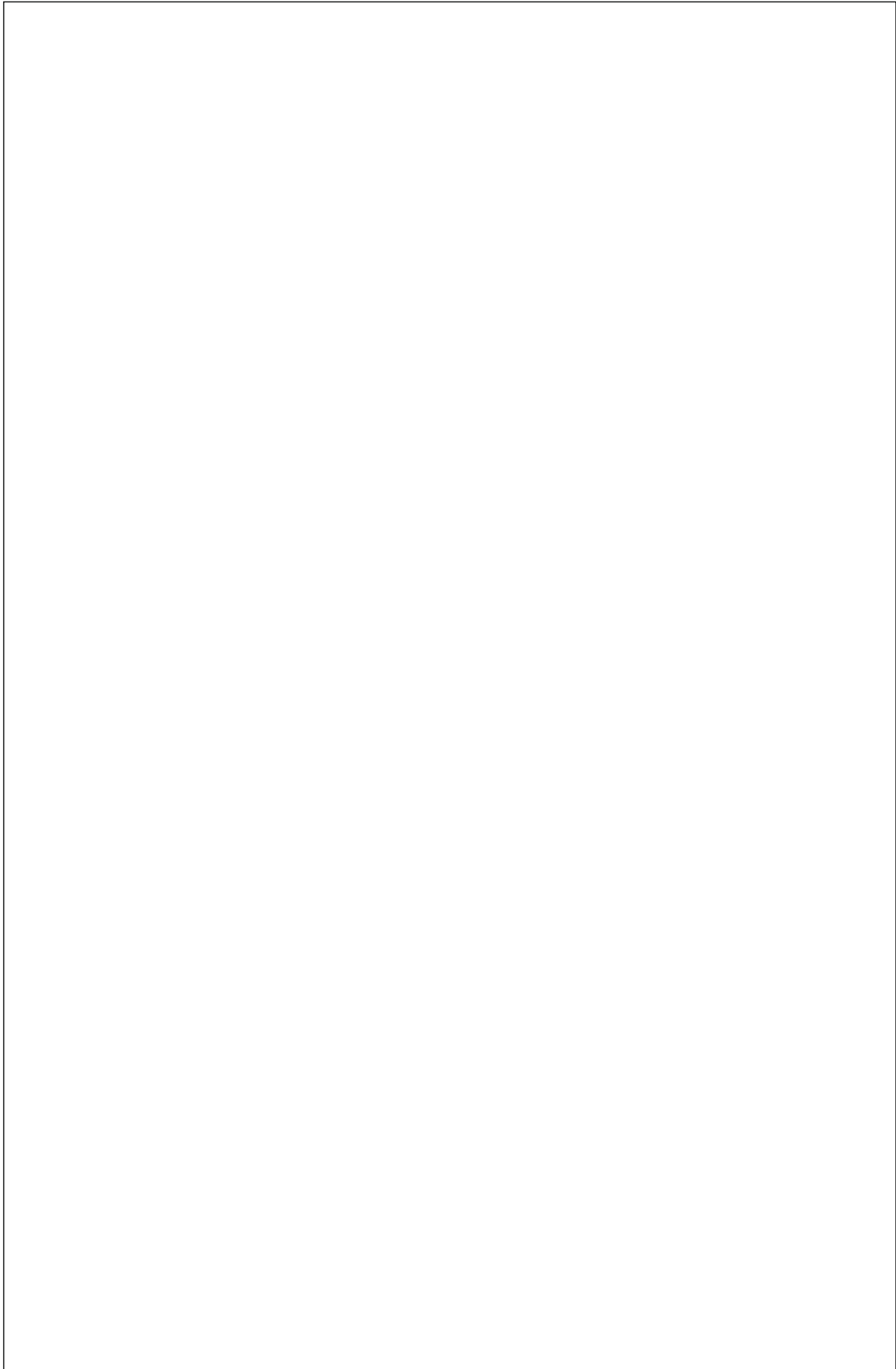plain flour (maida) for dusting

Method
- Grease a 175 mm. (7") diameter cake tin with butter on all the sides.
- Dust it with plain flour and sift to ensure uniform distribution of the flour.
- Shake and tap the tin to remove the excess flour and keep aside.
- Sieve the plain flour, cocoa powder, baking powder and soda bi-carb in a deep bowl, mix well and keep aside.
- Combine the condensed milk, melted butter, vanilla essence in a deep bowl and mix well.
- Add the prepared sieved plain flour-cocoa mixture and approx. 6 tbsp of water and mix gently with help of a spatula.
- Pour the prepared cake batter into the greased and dusted tin and spread it evenly.
- Sprinkle the salt at the base of a pressure cooker, and place a steel ring stand and a perforated plate over it. Cover it with a lid (with the ring on the lid but without the whistle) and heat on a medium for 5 minutes.
- Open the lid of the pressure cooker, place the cake tin on the perforated plate. Cover it with a lid (with the ring on the lid but without the whistle) and steam on a medium for 20 to 22 minutes or till the cake is done.
- Allow the steam to escape before opening the lid. Keep aside to cool for 10 minutes.
- Invert the tin over a wire rack and tap sharply to unmould the cake or use a knife to
- loosen the edges of the cake.
- Use immediately or as required.

Prepare an **INFOGRAPHICS** for the above mentioned process on the next page. Try to explain highlights of the process visually. The INFOGRAHICS should contain minimum text & should be visually attractive.

Information graphics or infographics are graphic visual representations of information, data or knowledge intended to present complex information quickly and clearly. They can improve cognition by utilizing graphics to enhance the human visual system's ability to see patterns and trends. The process of creating infographics can be referred to as data visualization, information design, or information architecture.

Q2 **... continued ...**

Q3 Imagine you have a closet full of clothes. It's very hard to find a particular garment.
So what can you do to **organize your clothes** for easy retrieval?
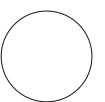Explain your solution through sketches in the box given below.

10

Q4. Imagine **5 sounds** (without human conversation) for the given visual.

Write them down & explain its context (as in what must be happening that is generating that sound)

10

Q5   Answer the following: tick correct answer where ever required.   **06**

A.   What was Industrial Revolution? When did it happen?   01

_____

_____

_____

_____

B.   05

1. "_____" is believed to mark the main site of Hastinapur, which was capital of Kauravas and Pandava The imperial gazetteer of India quotes about which of the following places?

a) Delhi
b) Ghaziabad
c) Meerut
d) Faridabad

2. First English NEWSpaper in India

a) The Bengal Gazette
b) The Calcutta Gazette
c) The Bengal Journal
d) The Bombay Herald

3. 'Madhubani' a style of folk paintings, is popular in which of the following states in India?

a) Bihar
b) Madhya Pradesh
c) West Bengal
d) Rajasthan

4. Which of the following combinations of the States and the festivals mainly celebrated there is not correct?

a) Rajasthan - Gangaur
b) Gujarat - Durga Puja
c) Maharashtra - Ganesh Chaturthi
d) Uttar Pradesh - Krishna Janmashtami

5. Ikebana is Japanese art of :

a) Paper craft
b) Dress designing
c) Miniature tree farming
d) Flower arrangement

Q6 Answer the following: tick correct answer where ever required. **09**

A. 1. Which of the gas is not known as greenhouse gas? **05**

a) Methane
b) Nitrous Oxide
c) Carbon dioxide
d) Hydrogen

2. Reading of a barometer going down is an indication of

a) Snow
b) Storm
c) Intense Heat
d) Rainfall

3. The absorption of ink by blotting paper involves

a) Viscosity of Ink.
b) Capillary Action Phenomenon
c) Diffusion of ink through the blotting
d) Siphon Action.

4. Which unit is used commonly to specify vehicle tyre air pressure?

a) Kg/cm^3
b) PSI
c) Kg/m^2
d) pounds

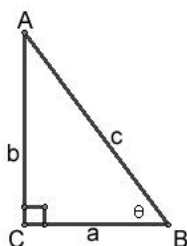5. On a rainy day, small oil films on water show brilliant colours. This is due to

a) Dispersion
b) Interference
c) Diffraction
d) Polarization

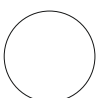**B.** What will happen, if an Astronaut throws a football while he is in space? **02**

_____

_____

_____

_____

_____

C. Prove: $Sin^2\theta + Cos^2\theta = 1$ **02**
for a right angle triangle ABC. (Hint: Use Pythagoras theorem)

_____

_____

_____

_____

_____

Q7   Answer following situations.   **09**

A.   Three cannibals and three wild life photographers have to cross a river.   04
The boat they have is only big enough for two people. The cannibals are ready to
cooperate, with one exception. If at any point in time there are more cannibals on one
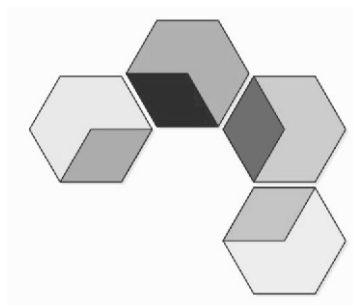side of the river than photographers, the cannibals will eat them.
How will the photographers cross the river?

Illustrate your solution through simple sketches.

B.   You are provided with four hexagon tiles as those shown in the illustration.   03

The object is to create from these tiles the contours of six regular hexagons. You
can rotate and/or overlap the tiles, but you are not allowed to flip them over.

C.   A store declares a scheme that they would give one chocolate for seven wrappers.   02
A boy goes to the store with 49 wrappers. **How many chocolates does he get?**
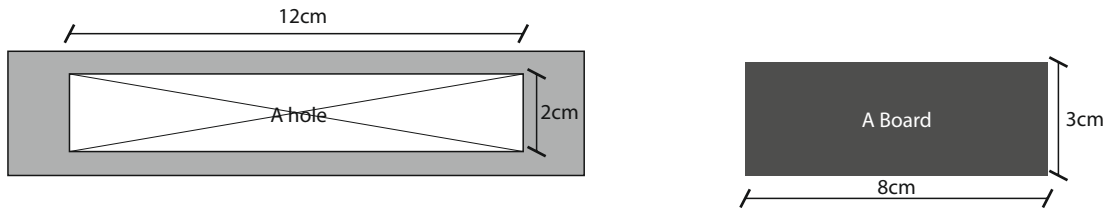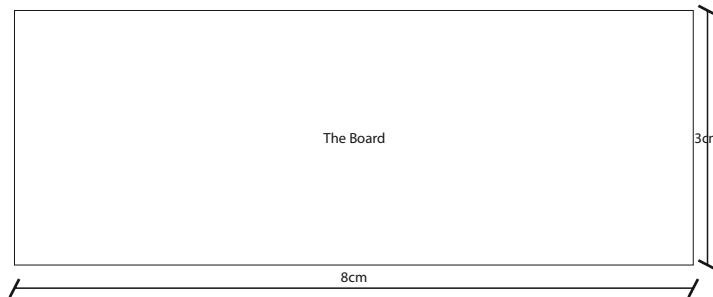
Q8   Answer following situations.   **06**

A.   How can I cut the board into only two pieces so that they will cover the hole exactly?   **02**

12cm

A hole   2cm

A Board   3cm

8cm

illustrate your solution through a sketch on the given board
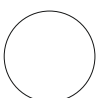
The Board   3cm

8cm

B.   Six men, whose names are Prakash, Luky, Bhola, Mahesh, Billu, and Jayesh were in an elevator together. Suddenly, the lights went off. When the lights came back, Prakash's wallet was missing. Detectives have investigated. They have questioned the suspects, the witnesses, and people who know the suspects.   **04**

Identify the criminal by looking at the following clues.

- No two suspects have the same weight, colour shoes, colour umbrella, colour car, or hair colour.
- The suspect who owns a purple car was wearing red shoes.
- The suspect who weighs 180 pounds owns a green car.
- The suspect who owns a black car was wearing blue shoes.
- Bhola owns a green car.
- The suspect who weighs 150 pounds was wearing red shoes.
- Mahesh was carrying a purple umbrella. Fox has red hair.
- Lucky weighs 210 pounds.
- Jayesh has red hair.
- The suspect who weighs 190 pounds was wearing blue shoes.
- The suspect who was carrying a red umbrella is not the one who was wearing black shoes.
- The thief owns a black car.
- The suspect who owns a white car is not the one who weighs 170 pounds.
- Billu was wearing white shoes.
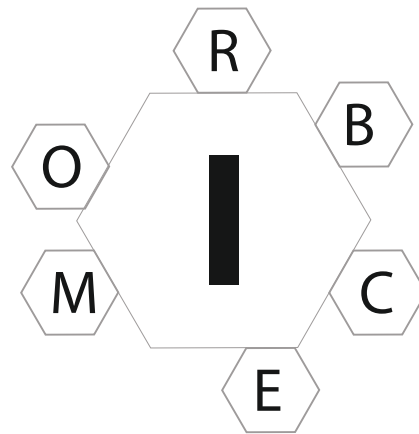- The suspect who weighs 190 pounds is not the one who has red hair.

Q9a. How many words of **four or more letters** can you make from the letters shown? **05**

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Every word **must contain the central letter**.
There should be **one seven letter word.**
No letter should be repeated twice

British English Dictionary is used as a reference.

R B O I M C E

Q9b.   Read carefully the passage given below and answer the questions that follow.   **05**

Nehru's was a many sided personality. He enjoyed reading and writing books as much as he enjoyed fighting political and social evils or residing tyranny. In him, the scientist and the humanist were held in perfect balance. While he kept looking at special problems from a scientific standpoint. He never forgot that we should nourish the total man. As a scientist, he refused to believe in a benevolent power interested in men's affairs. but, as a self proclaimed non-believer, he loved affirming his faith in life and the beauty of nature. Children he adored. Unlike Wordsworth, he did not see him trailing clouds of glory from the recent sojourn in heaven. He saw them as a blossoms of promise and renewal, the only hope for mankind.

1. Nehru though that children
A.   were tailing clouds of glory
C.   were like flowers to be loved and admired

B.   held promise for a better future
D.   held no hope for mankind

2. Nehru enjoyed
A.   reading and writing books
C.   resisting tyranny

B.   fighting political and social evils
D.   doing all the above and much more

3. Which of the statements reflects Nehru point of view?
A.   Humanism is more important than science
B.   Science is supreme and humanism is subordinate to it
C.   Science and Humanism are equally important
D.   There is no ground between science and humanism

4. In this passage, 'a benevolent power interested in men's affairs' means
A.   a supernatural power of god
C.   the spirit of science

B.   beauty of nature
D.   the total man

5. A 'many-side personality' means
A.   a complex personality
C.   a person having varied interests

B.   a secretive person
D.   a capable person

Q10 **Write your views** about the following topic. The number of words should be strictly between 100 to 150 .

10

Advantages & disadvantages of buying the products from internet?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

you can use this page for **ROUGH WORK**