

## PART II

- Answer all the questions.

(01) One of the main interdependent components of the earth's physical system is the atmosphere. Many studies are done by the scientists on atmosphere and the structure of the earth.

Based on these factors, briefly answer the following questions.


- i) Which layer of the earth's structure provides soil necessary for agriculture \_\_\_\_\_ (1)
- ii) What is the name given to the movement of tectonic plates, when two tectonic plates move towards each other and collide? \_\_\_\_\_ (1)
- iii) Which atmospheric layer holds high temperature when comparing with the rest of the layers? \_\_\_\_\_ (1)
- iv) Write 2 adverse effects caused due to air pollution.  
\_\_\_\_\_  
\_\_\_\_\_ (2)
- v) Without the protective layers of gasses that make up earth's atmosphere, the harsh conditions of the Solar system would render the planet a barren.  
Mention two advantages of having the earth's atmosphere.  
\_\_\_\_\_  
\_\_\_\_\_ (2)
- vi) In which layer of the earth's structure that you find large amounts of magnesium. \_\_\_\_\_ (1)
- vii) On which atmospheric layer does the ozone layer stands? Write the importance of having a ozone layer.  
\_\_\_\_\_ (1)
- viii) Mention the most abundant gas in the lowest layer of the atmosphere.  
\_\_\_\_\_  
\_\_\_\_\_ (1)

(02) The following items were collected by a student to perform an activity.

A bathroom mirror (A), Side mirror of a vehicle (B), A mirror used by a dentist to inspect teeth (C)

After several observations these items were tabulated as given below.

Fill the space given in the table.

Diagram	Purpose of use	Type of mirror
 <p>a.</p> <p>b.</p>	A	c. _____
	B	d. _____
	C	e. _____

(2 ½)

- i. What is the name given to the image formed when a glowing candle is placed in front of a mirror. \_\_\_\_\_ (1/2)
- ii. Mention 2 features of the image formed by the mirror A.  
 \_\_\_\_\_  
 \_\_\_\_\_ (1)
- iii. Write the number of images formed when two plane mirrors are kept at an angle of  $60^\circ$ . (1)
- iv. Mention the type of mirror suitable for the below given instance.

Image formed by the mirror

- Always upright a. \_\_\_\_\_
- Can be inverted b. \_\_\_\_\_

(2)

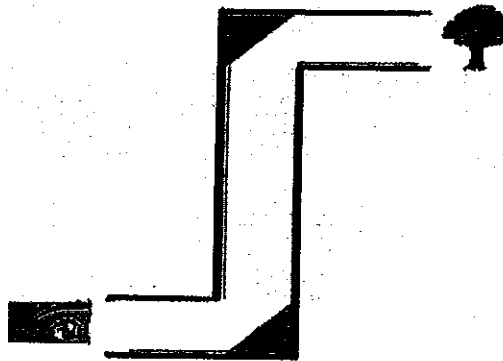
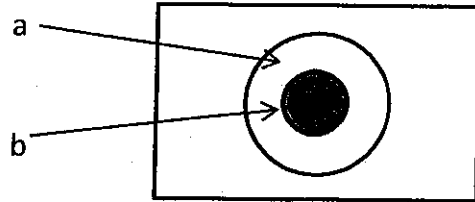
- v. When a screen is kept behind a rubber ball and a glowing torch is directed in front of the ball the screen appeared as shown below.

(1)

Name a and b

a \_\_\_\_\_

b \_\_\_\_\_



Name the above device which is made using plane mirrors. \_\_\_\_\_

- vi. Draw a ray diagram on the figure to show the pathway of the light that makes the tree visible. (2)

(03) Conversion of complex food into simpler forms and its absorption is the main function of the digestive system.

- i. Recognize the parts or part of the digestive system that performs the below given functions.

- Where the digestion begins \_\_\_\_\_
- The passage that pushes food from the mouth cavity to the stomach. \_\_\_\_\_
- Place where digestion completes and absorption takes place. \_\_\_\_\_
- The common area for the digestive tract and to the respiratory tract \_\_\_\_\_

(4)

(06)

i.



This device serves as a useful instrument of how a vibrating object can produce sound.

What is this device?

(1)

ii. The given illustration is to experience the propagation of sound.

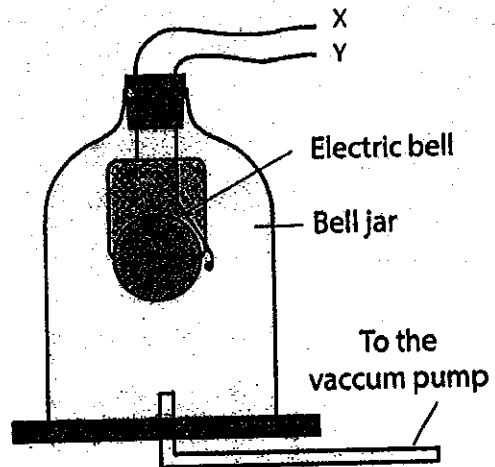
a) What will you connect to the x, y ends of the electric bell.

b) Mention your observation.

c) For what purpose does the vacuum is connected to the bell jar?

d) Mention the observation when vacuum pump is evacuating the air.

e) Based on the above observation what will be the conclusion.



(5)

iii. When lightning is about to strike, what do you notice first? \_\_\_\_\_  
mention reason for your answer.

(2)

iv. In which medium does sound travel fastest?

(1)

v. Mention the three main ways that musical instruments produce sound.

(1)