

# Maharashtra State Board

## Class VII Science

### Board Paper – 2

**Time: 2 hrs**

**Total Marks: 60**

#### **General Instructions:**

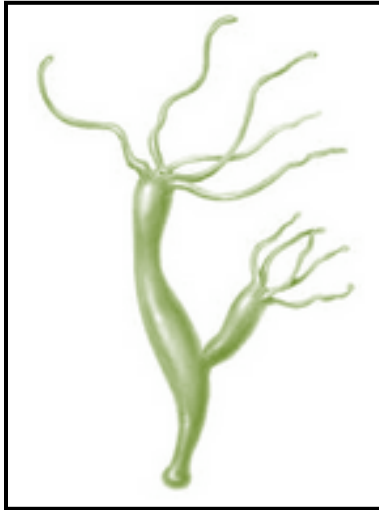
1. All questions are compulsory.
2. The marks related to the question are given in brackets.

#### **I. Choose the correct alternative:**

**[15]**

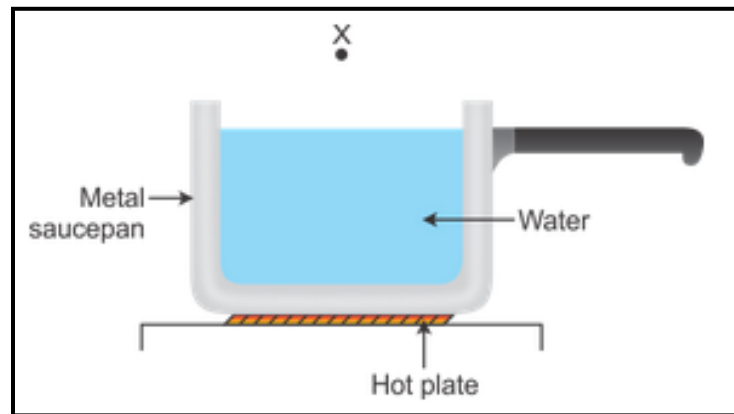
1. Which of the following is true for elements?
  - (a) They are pure substances.
  - (b) They cannot be broken down into simpler substances.
  - (c) They are classified into metals, non-metals and metalloids.
  - (d) All of the above
2. Floods can be prevented by
  - (a) Afforestation
  - (b) Cutting down of forests
  - (c) Tilling the land
  - (d) Removing the topsoil
3. The length of the shadow \_\_\_\_\_ as time passes through the day.
  - (a) Increases
  - (b) Decreases
  - (c) Increases and then decreases
  - (d) Decreases and then increases
4. Which of the following is not a property of water?
  - (a) Transparent
  - (b) Sweet taste
  - (c) Odourless
  - (d) Universal solvent
5. Which of the following makes up an organ?
  - (a) Tissues
  - (b) Organism
  - (c) Organ system
  - (d) None of the above

6. The technique of reproduction in *Hydra* shown below is



- (a) Fragmentation
  - (b) Budding
  - (c) Fission
  - (d) Regeneration
7. Which of the following is true about pasteurisation?
- (a) It destroys any disease-causing microorganisms present in milk.
  - (b) It preserves milk.
  - (c) It prevents the growth of microbes.
  - (d) All of the above
8. Excessive intake of foods containing sugar is a major cause of
- (a) Indigestion
  - (b) Stomach pain
  - (c) Headache
  - (d) Tooth decay
9. A packet of bread is kept outside the fridge in summer for about two weeks. When the packet is opened after two weeks, what will be seen?
- (a) Fresh bread
  - (b) No change in the bread
  - (c) A greenish growth on the bread
  - (d) Pieces of bread
10. Which of the following group of foods will help to prevent night blindness?
- (a) Eggs, Liver, Citrus fruits
  - (b) Carrots, Green vegetables, Milk
  - (c) Fish liver oil, Milk, Ghee
  - (d) Meat, Milk, Whole wheat

**11.** The diagram shows a metal saucepan containing water and placed on a hot plate. After some time, the air at point X also becomes hot.



What are the main ways by which heat travels from the hot plate through the base of the metal saucepan through the water and through the air to point X?

(a)

Through the base of the saucepan	Through water	Through air
Conduction	Convection	Convection

(b)

Through the base of the saucepan	Through water	Through air
Conduction	Radiation	Convection

(c)

Through the base of the saucepan	Through water	Through air
Convection	Convection	Conduction

(d)

Through the base of the saucepan	Through water	Through air
Radiation	Convection	Conduction

**12.** The function/s of blood is/are

- (a) To transport digested food
- (b) To carry oxygen from the lungs to the body cells
- (c) To collect wastes for removal from the body
- (d) All of the above

**13.** When nylon is rubbed with amber, then

- (a) Nylon : positively charged, amber : negatively charged
- (b) Nylon : negatively charged, amber : positively charged
- (c) Nylon : negatively charged, amber : negatively charged
- (d) Nylon : positively charged, amber : positively charged

- 14.** The speed of sound in a medium depends on the
- (a) Frequency of sound
  - (b) Properties of the medium
  - (c) Amplitude of sound
  - (d) Wavelength of sound
- 15.** Which of the following does not deplete the water table at a place?
- (a) Increasing snowfall
  - (b) Increasing number of tube wells
  - (c) Increasing deforestation
  - (d) Scanty rainfall

**II. Answer the following:**

**[10]**

- 16.** What is the other name of mineral acids? Why is it advised to never taste or touch these acids?
- 17.** Define nerve. List the different types of nerves.
- 18.** What is an electroscope? Name the two kinds of electroscopes.
- 19.** Draw a well-labelled diagram of budding in yeast.
- 20.** How do heat and temperature differ from one another?

**III. Answer the following:**

**[15]**

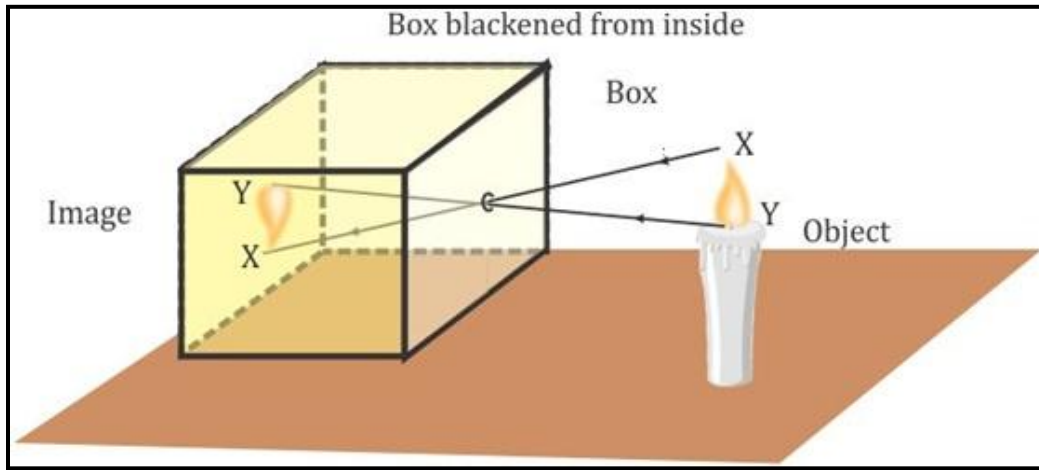
- 21.** Why is the density of seawater more than the density of ordinary water?
- 22.** Write any three advantages of food preservation.
- 23.** Name the following:
- (a) Its deficiency causes skin problems
  - (b) Component of vitamin B<sub>12</sub>
  - (c) Its deficiency causes pellagra
- 24.** Differentiate between charging by conduction and charging by induction.
- 25.** Why is a woman's voice different from a man's voice?

**IV. Answer the following in brief:**

**[20]**

- 26.**
- (a) Name the largest gland in the human body. Where is it situated?
  - (b) Where is the pancreas located? What are its functions?
- 27.**
- (a) What is irrigation? State its importance.
  - (b) What is chlorination?
- 28.** Find the odd one out:
- (a) Onion, Potato, Turmeric, Sweet potato
  - (b) Snake, Rabbit, Cat, Rat
  - (c) Segmentation, Cell division, Budding, Pollination
  - (d) Stigma, Anther, Ovary, Petal

29. Observe the figure below and answer the questions based on it:



- (a) Which device is shown in the figure? State its principle.
- (b) List the characteristics of the image obtained using the device.

30. State any two applications of each:

- (a) Conduction
- (b) Convection