Number of printed pages: 7

Class: VII
Annual Examination 2023-24
Science
Set – A2

MT: 2½ hr **MM:60**

For question number 1, fill up the blanks with correct word (s)/ scientific expression. (write only correct answer with correct serial number, no need to write the words) (1) × 13 = (13)

1

(a) The safety device based on the heating effect of electric current is called a _____

(b) In photosynthesis solar energy is captured by the pigment called _____

(c) Bases are _____ in touch.

(d) Temperature of boiling water cannot be measured by a _____ thermometer.

(e)The largest gland in the human body is _____

(f) The number of times a person breathes in a minute is termed as the_____

(g) Formation of rust is a _____ change.

(h) Arteries and veins are joined by a network of _____

(i) _____ is a flower which may have either male or female reproductive parts.

(j) The device used to read distance travelled by car is _____

(k) An image formed by a concave _____ cannot be obtained on a screen.

(l) A forest is a purifier of _____

(m) Wastewater released by houses is called _____

For question number 2 write True or False (write only correct answer with correct serial number, no need to write the words, only "T" and "F" can be written in front of the correct serial number.) (1) × 4 = (4)

2.
(a) Boiling of water is a physical change.

(b) Sweat contains water and salt.

(c) Uniform motion has constant speed.

(d) Drains do not get blocked by fats.

For question number 3 write the correct option out of 4 choices. (write only correct answer with correct serial number, no need to write the words)

3. **(1) × 10 = (10)**

(i) The plant which traps and feeds on insects is:

(a) cuscuta
(b) china rose
(c) pitcher plant
(d) rose

(ii) Calamine solution is

(a) acidic in nature
(b) basic in nature
(c) both acidic and basic in nature
(d) an indicator solution.

(iii) An iron ball at 65°C is dropped in a mug containing water at 65°C. The heat will

(a) flow from iron ball to water.
(b) not flow from iron ball to water or from water to iron ball.
(c) flow from water to iron ball.
(d) increase the temperature of both.

(iv) Fat is completely digested in the

(a) stomach
(b) mouth
(c) small intestine
(d) large intestine

(v)
In cockroaches, air enters the body through

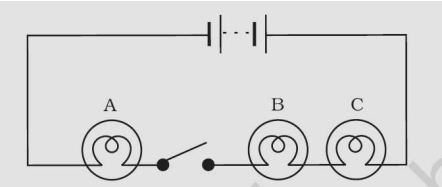
(a) lungs

(b) gills

(c) spiracles

(d) skin

(vi)
In the circuit shown below, what will be the order in which the bulbs A, B and C will glow when the switch is moved to the 'ON' position?



(a) first A then B then C

(b) first C then B then A

(c) all will start to glow at the same time

(d) cannot be commented (insufficient information)

(vii)

Changes in which new substances are formed are called

(a) only physical changes

(b) only chemical changes

(c) can be both physical or chemical changes

(d) neither physical nor chemical changes

(viii)

The basic (S.I.) unit of speed is (symbols have usual meaning)

(a) km/min

(b) m/min

(c) km/h

(d) m/s

(ix)

Micro-organisms act upon the dead plants to produce

(a) sand
(b) mushrooms
(c) humus
(d) wood

(x)

Chemical used to disinfect water before releasing it into distribution system is

(a) base

(b) acid

(c) ozone

(d) common salt

For question 4, give one word answer. (write only correct answer with correct serial number, no need to write the whole sentence again) **(1) × 6 = (6)**

4.

(a) Process of depositing a layer of zinc on iron.

(b) One components of blood.

(c) Process of release of water by plants.

(d) The to and fro motion of a simple pendulum.

(e) It is enriched by the decaying leaves and animal droppings in a forest.

(f) Micro-organism which causes cholera.

For question number **5** two statements are given- one labelled **Assertion (A)** and the other labelled **Reason (R).** Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

(a) Both A and R are true, and R is the correct explanation of the assertion.
(b) Both A and R are true, but R is not the correct explanation of the assertion.
(c) A is true, but R is false.
(d) A is false, but R is true.

5.

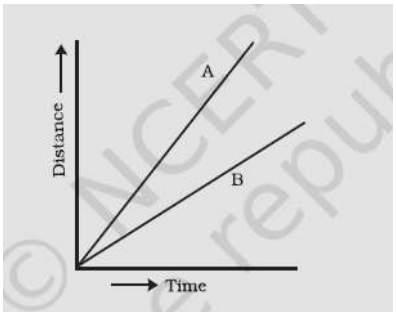
Assertion (A): When baking soda is mixed with lemon juice, bubbles are formed with the evolution of a gas

Reason (R): The gas released is oxygen. (1)

6. Write the function of xylem and phloem in plant? (2)

7. Give two functions of stomata. (2)

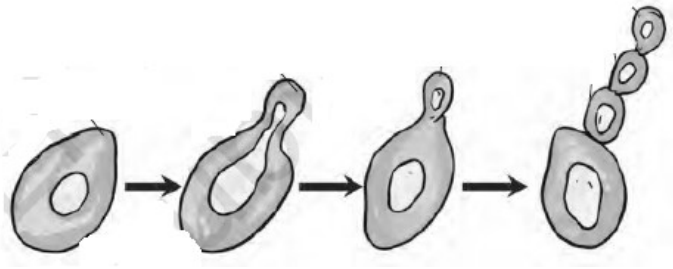
8. Following picture shows the distance-time graph for the motion of two vehicles A and B. Which one of them is moving faster? (2)



9. Name **any two**, time measuring devices/ ways before invention of pendulum clocks. (2)

10. Write any one differences between a convex and a concave lens. (2)

11. Name the organism and describe the process happening in the following picture in brief. (3)



12. Read the following passage and answer the questions that follow:

By harbouring greater variety of plants, the forest provides greater opportunities for food and habitat for the herbivores. Larger number of herbivores means increased availability of food for a variety of carnivores. The wide variety of animals helps the forest to regenerate and grow. Decomposers help in maintaining the supply of nutrients to the growing plants in the forest. Therefore, the forest is a 'dynamic living entity' — full of life and vitality. Forests provide us with oxygen. They protect soil and provide habitat to a large number of animals. Forests help in bringing good rainfall in

neighbouring areas. They are a source of medicinal plants, timber and many other useful products. We must preserve our forests.

(a) How are forests helpful to us for fighting against some diseases? (1)
(b) Why are forests called full of life and vitality? (1)
(c) Name the life supporting gas provided to us by forests. (1)

For question number 13, either do 13 (a) fully OR do 13 (b) fully. (any one only out of two). Write clear and correct serial number of the one you are attempting. Do not do/touch both of them.

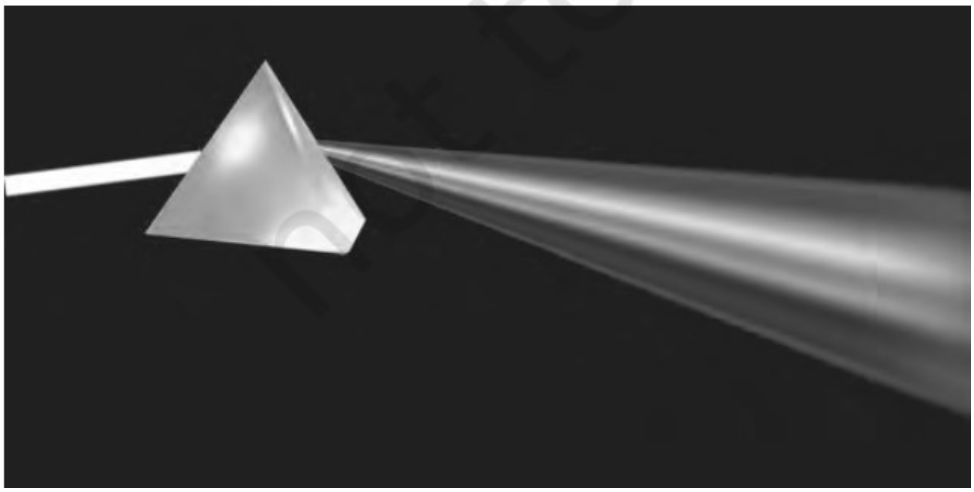
13 (a)

(i) Write three characteristic properties of image formed by a plane mirror. (3)
(ii) Draw basic shape of concave and convex mirror. Label both clearly. (2)

OR

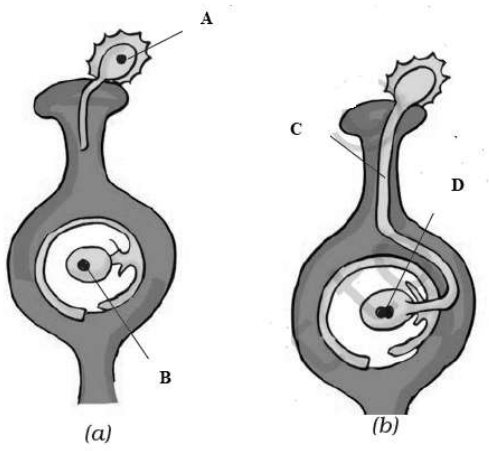
13 (b)

Name the device shown in the following picture and explain the natural phenomenon happening in brief. (5)



For question number 14, Either do "14(i)" fully with its all parts. OR do "14(ii)" fully with its all parts. Do not attempt/touch both. Write clear and correct serial number of the one you are attempting

14.(i) Define asexual reproduction. Name **<u>any two</u>** types of asexual reproduction methods and describe **<u>any one</u>** of them with **<u>an example.</u>** (5)

OR

14.(ii) Define fertilization. In context of fertilization label parts "A", "B", "C" and "D". (No need to draw diagram on your answer sheet) (5)