## KENDRIYA VIDYALAYA SANGTHAN, LUCKNOW REGION SESSION ENDING EXAMINATION-(2023-24) CLASS- VII

SUBJECT- SCIENCE

M.M.- 60 TIME- 2 HR 30 MIN.

## **General Instructions-:**

- 1. Section A comprises of question numbers 1 to 8. These are MCQ carrying one mark each. You have to select one most appropriate response out of the four provided options.
- 2. Section B comprises question numbers 9 to 13. These are VSAQs carrying two marks each.
- 3. Section C comprises question numbers 14 to 17. These are SAQs carrying three marks each.
- 4. Section D comprises question numbers 18 to 20. These are LAQs carrying five marks each.
- 5. Section E comprises question numbers 21 to 23. These are CCTQs carrying five marks each

Section A (1x8=8)

- (1) The green pigment that is present in the leaves are called
- (a) Haemoglobin

(b) Globulin

(c) Albumin

(d) Chlorophyll

- (2) Mature ovule forms
- (a) Buds (c) Fruit

(b) Endosperm

(d) Seed

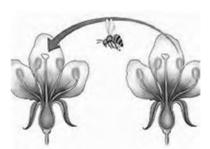
- (3) Which one of the following contains haemoglobin?
- (a) RBC

(b) WBC

(c) Platelets

(d) None of these

(4)



Which of the following phenomenon is represented by the above diagram

(a) pollination

b)Fertilization

(c)Spore Formation

d) Budding

- (5) A bus travels 54 km in 90 minutes. The speed of the bus is
- (a)  $0.6 \, \text{m/s}$

(b) 10 m/s

(c) 5.4 m/s

(d)  $3.6 \, \text{m/s}$ 

- (6) Which of the following is used as a side view mirror?
- (a) Plane mirror

(b) Concave mirror

(c) Convex mirror

(d) Convex lens

- (7) Which of the following is not a source of wastewater?
- (a) Sewers

(b) Homes

(c) Industries

- (d) Hospitals
- (8) Which one of the following is a quality of wastewater?
- (a) Foul smell

(b) Bad taste

(c) Dirty look

(d) All of these

## Section B

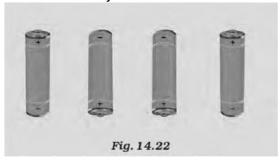
(2X5=10)

**9.** In a plant, photosynthesis occurs in a part other than leaf. Name that plant and the part where photosynthesis occurs.

Or



- a) Identify the given plant.
- b) Which type of mode of nutrition it follows?
- **10.** A simple pendulum takes 32 s to complete 20 oscillations. What is the time period of the pendulum?
- **11.** Fig.14.22 shows four cells fixed on a board. Draw lines to indicate how you will connect their terminals with wires to make a battery of four cells.



- **12.** Why should oils and fats be not released in the drain? Explain.
- 13. ..... And ...... are by products of waste water treatment

## **Section C**

(4x3=12)

- 14. Autotrophs and heterotrophs are two different organisms with distinct modes of nutrition state. How are they different from each other?
- **15.** Explain the following.
- (a) Lime water turns milky on passing carbon dioxide gas through it.
- (b) Bubbles are produced when acetic acid is added to a solution of sodium hydrogen carbonate.

Or

(a) Explain why rusting of iron objects is faster in coastal areas than in deserts?

(b) How do we prevent iron articles from rusting?

**16.** Which type of change takes place in the following and state whether the energy is evolved or absorbed during the change?

Burning of a candle, lightning of a bulb, preparation of food by green plants, volcanic eruption, evaporation of petrol, burning of LPG.

17. List three products we get from forests.

 $\underline{Section D} \tag{5X3=15}$ 

18. (a) Draw a diagram of the human excretory system and label any 4 parts.

(2.5)

(b) Sketch the reproductive parts of a flower.

(2.5)

19. (a)Do you think an electromagnet can be used for separating plastic bags from a garbage heap? Explain.

(2)

(b) An electrician is carrying out some repairs in your house. He wants to replace a fuse with a piece of wire. Would you agree? Give reasons for your response.

(3)

20. (a) State the characteristics of the image formed by a plane mirror

(2

(b) Which type of mirror can form a real image?

(1)

(c) Fill in the blanks. (2)

(i) An image formed by a concave \_\_\_\_\_ cannot be obtained on a screen.

(ii) The inner surface of spoon act like a ..... mirror.

Section E (5X3=15)

- 21. Priya's grandfather was taken to the hospital as he was unable to perform excretory processes. Priya heard a nurse talking to her father that her grandfather's has kidney failure and needs to undergo dialysis. Priya later asked her father as to what dialysis process is and why grandpa does needs it. Her father smiles and tells her all the facts associated with this process.
- (a) What do you mean by dialysis?
- (b) Why is there a need for dialysis in some people?
- (c) Excretion is an important life process. How?
- (d) Which is the major excretory organ in humans?
- (e) Which part of excretory system stores urine?
- **22.** Paheli reminded Prof Ahmad that he had not explained why forests are called Green lungs. Prof Ahmad explained that plants release oxygen through the process of photosynthesis. The plants help to provide oxygen for animal respiration. They also maintain the balance of oxygen and carbon dioxide in the atmosphere. That is why forests are called lungs. The children saw clouds forming in the sky. Trees take in water from their roots and

release water vapour into the air through evaporation.

If there were fewer trees, how will the water cycle be affected? Tibu told them that the forest is not just home to plants and animals. Many people also live in the forest. Some of them may belong to different tribes. Tibuexplained that these people depend mostly on the forests. The forest provides them with food, shelter, water and medicines. They have traditional knowledge about many medicinal plants in the forest.



(1) Plants release oxygen through which	process?
(a) Metabolism	(b) Catabolism
(c) Anabolism	(d) Photosynthesis
(2) The children saw	forming in the sky.
(a) Animal	(b) Cow
(c) Bird	(d) Cloud
(3) Trees take in water through	and release it to
environment in the form of	
(a) Roots, vapours	(b) Shoot, vapours
(c) Stem, water	(d) Leaves, gas
(4) What did Paheli reminded Professor	Ahmed?
(5) What does the forest provide to hum	ans?
23. The smallest time interval that can b	e measured with commonly available clocks and
watches is one second. However now sp	pecial clocks are available that can measure time
intervals smaller than a second. Some o	f these can measure time intervals as small as one
millionth or even one billionth of a secon	nd.
1. A micro-second is a very small time interval. It is equal to	
(a) one thousandth of a second	•
(c) one millionth of a second	(d) one billionth of a second
2. The time measuring devices used in s	
(a) a milli second	(b) a micro second
(c) a nano second	(d) None of these
3. Which of the following will be needed to measure the time period of a pendulum?	
(a) a stop watch	(b) a table clock
(c) a wrist watch	(d) Any one of these
4. The clocks and watches which are used for measuring time are based on	
(a) rectilinear motion	(b) circular motion
(c) periodic motion	(d) rotational motion
5. The most well known periodic motion is that of	
(a) sundial	(b) stop watch
(c) simple pendulum	(d) sand clock