

# TERM 1 EXAMINATION 2022-23

## SCIENCE VII

**Time Allowed: 3 hours**

**Maximum Marks: 80**

1. The green colour in plants is due to a pigment called \_\_\_\_\_. [1]  
a) Protein  
b) Xanthophylls  
c) Hemoglobin  
d) Chlorophyll
2. Name the pores through which leaves exchange gases. [1]
3. Boiled rice turns blue after addition of iodine solution to it due to the presence of \_\_\_\_\_. [1]  
a) Maltose  
b) Sucrose  
c) Sugar  
d) Starch
4. What is the function of Villi? [1]  
OR  
Give one word for organisms which synthesize their own food.
5. Which kind of clothes will you prefer most in summers? [1]  
a) Thin clothes with white colour  
b) Thin clothes with black colour  
c) Thick clothes with white colour  
d) Thick clothes with black colour
6. The temperature of hot milk can not be measured by clinical thermometer because: [1]  
a) Clinical thermometer is used for body temperature only  
b) The clinical thermometer can not be used for liquid.  
c) Hot milk has a temperature higher than the maximum range  
d) Hot milk temperature is less than the minimum range
7. The indicator which gives reddish-pink colour with acid is \_\_\_\_\_. [1]  
a) Turmeric  
b) Rose petals  
c) Methyl orange  
d) Phenolphthalein
8. Which of the following is obtained from plants and animals and can be consumed as food?. [1]  
a) Natural acid  
b) Organic acid  
c) Inorganic acid  
d) Mineral acid  
OR  
Chemical name of washing soda is \_\_\_\_\_.  
a) Calcium sulphate  
b) Copper carbonate  
c) Sodium bicarbonate  
d) Sodium carbonate
9. Which is a poor conductor: tap water or pure water? [1]
10. Khushi draws a picture on an airplane on a piece of paper and folded into a paper plane. His brother Harsh ripen [1]  
up the paper and throws it into the fire. Which of the following is an example of a chemical change?

- a) Burning of paper in the fire  
b) Ripening of paper  
c) Drawing on the paper  
d) Folding of paper in the shape of an aeroplane
11. Which type of a change involves energy changes? [1]
12. Breathing rate in human beings in normal condition is: [1]  
a) 22-25 times in a minute  
b) 18-22 times in a minute  
c) 15-18 times in a minute  
d) 12-15 times in a minute
13. In anaerobic respiration which chemical substance is produced? [1]  
a) Lactic acid  
b) Formic acid  
c) Alcohol  
d) Citric acid
14. Total distance covered by a body in unit interval of time in particular direction is called [1]  
a) Momentum  
b) Speed  
c) Velocity  
d) Motion
15. The time period of a simple pendulum depends on which factors? [1]
16. Wheat dough is left in the open, after a few days, it starts to emit a foul smell and becomes unfit for use. Give reason. [2]
17. What is heat? How heat is different from temperature? [2]
18. Match the substances on the left side with the appropriate properties on the right side. [2]

Vinegar	changes red litmus blue
Sodium Chloride	is sour to taste
Milk of magnesia	major salt of sea
Potassium nitrate	used in fertilizer industry

19. How would you prepare calcium chloride from marble (calcium carbonate)? [2]
- OR
- Why should you take an antacid tablet when you suffer from acidity?
20. Explain only by equations: [3]  
(i) aerobic respiration  
(ii) anaerobic respiration in yeast

21. Write the differences between holophytic nutrition and holozoic nutrition. [3]
22. In the given figure, mark where the heat is being transferred by conduction, by convection and by radiation. [3]



23. How can you test the presence of acid in a substance? [3]

OR

State the difference between acids and bases.

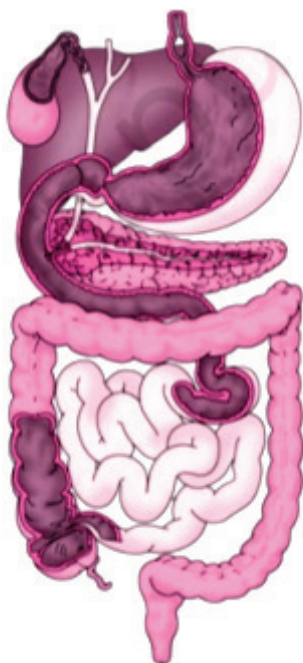
24. Classify the changes involved in the following processes as physical or chemical changes: [3]

- a. Photosynthesis
- b. Dissolving sugar in water
- c. Burning of coal
- d. Melting of wax
- e. Beating aluminium to make aluminium foil
- f. Digestion of food

25. A train is running at speed of 50 km/h. How long will it take to cover a distance of 250 km? [3]

26. The following statements describe the five steps in animal nutrition. Read each statement and give one word for each statement. Write the terms that describe each process. [5]

- i. Transportation of absorbed food to different parts of the body and their utilisation.
- ii. Breaking of complex food substances into simpler and soluble substances.
- iii. Removal of undigested and unabsorbed solid residues of food from the body.
- iv. Taking food into the body.
- v. Transport of digested and soluble food from the intestine to blood vessels.



27. [5]

Label the following parts in figure and name them.

- a. The largest gland in our body.
- b. The organ where protein digestion starts.
- c. The organ that releases digestive juice into the small intestine.
- d. The organ where bile juice gets stored.

28. How does the heat travel in air? Explain the sea breeze and land breeze in coastal areas in this reference. [5]

OR

State similarities and differences between the laboratory thermometer and the clinical thermometer. Also, draw a suitable diagram.

29. You are given some acids like acetic acid, formic acid, citric acid, lactic acid, oxalic acid, ascorbic acid (vitamin [5]

C), tartaric acid and some bases like calcium hydroxide, sodium hydroxide, ammonium hydroxide, potassium hydroxide and magnesium hydroxide. Name the substances in which these acids and bases are found.

30. If you leave a piece of iron in the open for a few days, it acquires a film of brownish substance, called rust. [5]
- Do you think rust is different from iron?
  - Can you change rust back into iron by some simple method?
  - Do you think the formation of rust from iron is a chemical change?
  - Give two other examples of a similar type of change.
31. i) Plants lack a specialised respiratory system. How do they carry out respiratory process? Explain. [5]  
ii) The plant roots being underground respire by using which mechanism?
32. The odometer of a car reads 57321.0 km when the clock shows the time 08:30 am. What is the distance moved [5] by the car, if at 08:50 am, the odometer reading has changed to 57336.0 km? Calculate the speed of the car in km/min during this time. Express the speed in km/h also.

OR

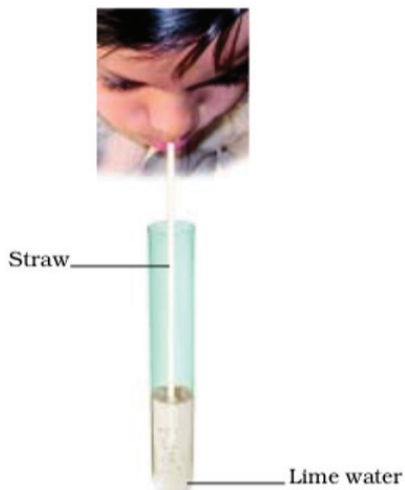
Describe various steps to construct a graph using the data given in the following table:

S.No	Time	Distance
1	0	0
2	1 min	1 km
3	2 min	2 km
4	3 min	3 km
5	4 min	4 km
6	5 min	5 km

**Question No. 33 to 37 are based on the given text. Read the text carefully and answer the questions:**

Activity is performed by the student of class 7.

- Take a slender, clean test tube or a glass/plastic bottle. Make a hole in its lid and fix it on the bottle.
- Pour some freshly prepared lime water into the test tube. Insert a plastic straw through the hole in the lid in such a way that it dips in lime water.
- Now blow gently through the straw a few times.
- Note is there a change in the appearance of lime water.



33. What changes occur in the appear of lime water after blowing into it? [1]
- a) It remains same
  - b) It became pink
  - c) It became yellow
  - d) it became milky white
34. Which process is been tested in the above activity ? [1]
- a) Exhalation
  - b) None of these
  - c) inhalation
  - d) Both exhalation and inhalation
35. Percentage of  $\text{CO}_2$  exhale from the lungs [1]
- a) 24.4%
  - b) 00.4%
  - c) 23%
  - d) 4.4%
36. When we exhale from the lungs mixture of gases with  $\text{CO}_2$  comes out. [1]
- a) True
  - b) False
37. We exhale about \_\_\_\_\_% of  $\text{CO}_2$ . [1]