

BCM SCHOOL
BASANT AVENUE, DUGRI ROAD, LUDHIANA
Class VII SCIENCE
Assignment

Date: September 3, 2025

General Instructions:

1. Q. 1 to 3 are multiple choice type questions carries 1 mark each.
2. Q.4 to 5 are Assertion- Reason type questions carries 1 mark each.
3. Q.6 is very short answer type question carries 2 marks.
4. Q. 7 is short answer type question carries 3 marks.
5. Q. 8 to 9 are long answer type questions carries 5 marks each.
6. Q. 10 is Case Study based question.

Tick the correct option

1. If a pendulum completes 20 oscillations in 10 seconds, what is its time period?
 - a) 0.2 s
 - b) 0.5 s
 - c) 1 s
 - d) 2 s
2. If the kidneys stop functioning, which process will be most affected?
 - a) Digestion of proteins
 - b) Excretion of nitrogenous wastes
 - c) Circulation of oxygen
 - d) Absorption of nutrients

3. Riya tasted two solutions. Solution A was sour, and Solution B was bitter and soapy. She wanted to check them with litmus paper.

Which observation will she get?

- a) Solution A turns red litmus blue, Solution B turns blue litmus red
- b) Solution A turns blue litmus red, Solution B turns red litmus blue
- c) Both solutions turn red litmus blue
- d) Both solutions turn blue litmus red

The questions (17-20) below consist of an assertion and a reason. Use the following key to choose the appropriate answer.

(a) Both A and R are true and R is the correct explanation of A.

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

4. Assertion (A): Small intestine is the site of complete digestion of food in humans.

Reason (R): Bile and pancreatic juices are secreted into the small intestine to help in digestion.

5. Assertion (A): Forests support herbivores and carnivores.

Reason (R): Omnivores and decomposers are not part of the forest food chain.

6. A' got her gall bladder removed surgically as she was diagnosed with stones in her gall bladder. After the surgery, she faced problems in digestion of certain food items when consumed in bulk. Can you tell which kind of food items would they be and why?

7. A steel glass filled with hot milk becomes difficult to hold, while a plastic cup with the same hot milk is easier to hold. Explain.

8. Riya went to a coastal town during her summer vacation. She noticed that in the daytime, cool air always blew from the sea towards the land, but at night, the direction of wind was reversed.

A. What are these winds called?

B. Explain scientifically how they occur with the help of the concept of uneven heating with diagram.

9. Rohan kept a potted plant in a dark room for three days. After that, he placed the plant in sunlight, covered one of its leaves with black paper, and then tested the leaves for starch using iodine solution.

a. What was the purpose of keeping the plant in the dark before the experiment?

b. What do you expect to observe in the leaf covered with black paper after the iodine test?

c. What conclusion can be drawn from this experiment?

d. Which mode of nutrition does this experiment prove in plants?

10. Case Study

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 is dialysis process and why does grandpa needs it. Her father smiles and tells her all the facts associated with this process.

- a. Why is there a need for dialysis in some people?
- b. Excretion is an important life process. How?
- c. Which is the major excretory organ in humans?