



ANANDALAYA
PERIODIC TEST -3
Class: VII

Subject: Science
Date : 08-01-2025

MM : 40
Time: 1 Hr. 30 min.

General Instructions:

1. There are 21 questions in this question paper. All questions are compulsory.
2. Q. No. 1 to 12 are objective type questions and carry 1 mark each.
3. Q. No. 13 to 15 are short answer type questions and carry 2 marks each.
4. Q. No. 16 to 19 are also short answer type questions and carry 3 marks each.
5. Q. No. 20 and 21 are long answer questions and carry 5 marks each.

1. The heating element in a geyser has _____. (1)
(A) low melting point (B) high melting point (C) low boiling point (D) high boiling point
2. The heat produced in a conductor depends on _____. (1)
(A) the current flowing through the conductor only
(B) the resistance of the conductor only
(C) the nature of material of the conductor only
(D) all (A) , (B) and (C)
3. Sanjana read in the newspaper that the Asháninka people, who live in the Amazon rainforest, have faced habitat loss due to illegal logging, coca cultivation, and infrastructure projects like dams and roads. How does the loss of forest habitat specifically impact the daily lives and traditions of tribal communities? (1)
(A) Increases access to modern technology and amenities
(B) Reduces availability of traditional resources and disrupts cultural practices
(C) Enhances opportunities for urban employment
(C) Improves access to new forms of education and healthcare
4. Which of the following best describes the role of microorganisms in the formation of humus? (1)
(A) They consume humus, reducing its quantity
(B) They help decompose organic matter into humus
(C) They replace humus with inorganic material
(D) They inhibit the formation of humus
5. The doctor examined the throbbing of an unconscious patient at his neck. What did the doctor check for? (1)
(A) Heartbeat (B) Breathing rate (C) Blood pressure (D) Pulse rate
6. Explain why there is no waste in a forest. (1)
7. Herbs form the _____ layer in the forest. (1)
8. What is the role of a switch in an electric circuit? Draw its symbol. (1)
9. The muscular tube through which stored urine is excreted out of the human body is called _____. (1)

For question numbers 10 and 12, 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 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 and R is also false.

10. A: Fuse wire will blow off if current exceeds the safe limit in an electric circuit. (1)
R: Fuse wire works based on the heating effect of electric current.
11. A: Urbanization has no impact on forest ecosystems. (1)
R: Urbanization can lead to habitat destruction, pollution, and fragmentation of forest ecosystems, which negatively impacts forest health and biodiversity.
12. A: Transpiration helps in the upward movement of water in plants. (1)
R: Transpiration causes leaves to release stored water directly into the roots, pulling water upward.
13. Explain why: (2)
 - (i) Tungsten filament in an electric bulb is coiled.
 - (ii) The magnetic compass deflects when it is kept near a current carrying wire.
14. List four products we get from forests. (2)
15. Name two main components of vascular tissue in plants. How are they different from each other in their functions? (2)
16. (i) What is an electromagnet? How is it different from a permanent magnet? (3)
(ii) Write any two methods to increase the strength of the electromagnet.
17. In the news Bhoojho heard that Chennai people's life is disturbed by floods. Bhoojho was wondering even though it rains heavily in his village which is situated near forest it doesn't stagnate. What might be the reason for water stagnation in cities? (3)
18. Explain the role of forest in maintaining the balance between oxygen and carbon dioxide in the atmosphere. (3)
19. Classify the following animals based on their appropriate excretory products: (3)
Frog, Pigeon, Cat, Fish, Cow, Sparrow
20. Explain the principle and working of an electric bell with the help of a neat labelled diagram. (5)
21. Observe the given diagram of a longitudinal section of the human heart and answer the following questions. (5)
 - (a) Name the parts labelled as 1 and 5 in the diagram.
 - (b) What is the function of the right ventricle in the circulatory system?
 - (c) Which type of blood is carried by the blood vessel marked as 2?
 - (d) How does the septum contribute to the proper functioning of the heart?
 - (e) Identify the chamber of the heart that receives deoxygenated blood from the body.

