



विद्या सर्वार्थ साधिका

ANANDALAYA
PERIODIC TEST – 3
Class: VII

Subject: Science
Date : 05-01-2024

M.M.: 30
Time: 1 Hr. 30 min.

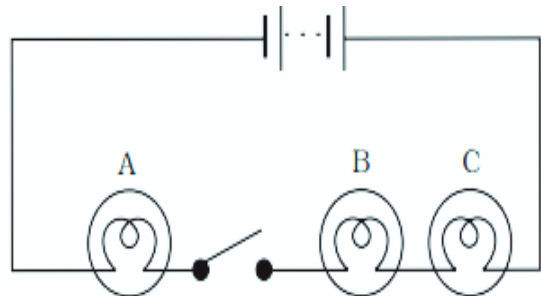
General Instructions:

1. All questions are compulsory. There are 17 questions in this question paper.
2. Q. No. 1 to 10 are objective type questions and carry 1 mark each.
3. Q. No. 11 to 13 are short answer type questions and carry 2 marks each.
4. Q. No. 14 to 16 are also short answer type questions and carry 3 marks each.
5. Q. No. 17 is a long answer question and carries 5 marks.

1. Heating effect of electric current depends on _____. (1)
(A) length of a conducting wire only (B) thickness of a conducting wire only
(C) nature of a conducting wire only (D) length, thickness and nature of a wire

2. The safety device in a domestic circuit works based on the heating effect of electric current is _____. (1)
(A) Geyser (B) Fuse (C) Filament bulb (D) Electric Iron

3. Three bulbs are connected in series with a battery and switch. What will be the order in which the bulbs A, B and C will glow when the switch is moved to the 'ON' position? (1)
(A) First A, second B, third C
(B) First C, second B, third A
(C) First C, second A, third B
(D) A, B and C glow at once

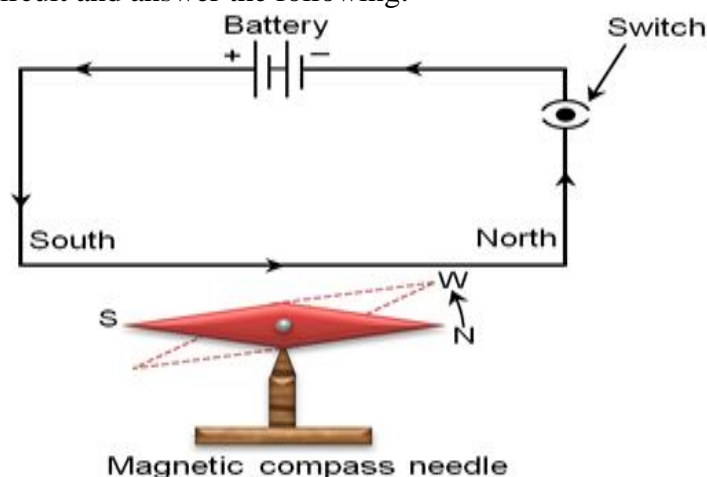


4. Identify the chemical used to disinfect water. (1)
(A) Chlorine (B) Washing soda (C) Silica (D) Coal
5. Which of the following options includes organic impurities present in sewage? (1)
(A) Phosphates and Nitrates (B) Urea and faeces
(C) Fruits and vegetables (D) Both (A) and (B)
6. In humans, right auricle receives _____ blood from _____. (1)
(A) oxygenated; pulmonary vein (B) deoxygenated; vena cava
(C) oxygenated; vena cava (D) deoxygenated; pulmonary artery

Q.7 and Q.8 are assertion and reasoning type questions. Select the appropriate option from the below.

- (A) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
(B) Both Assertion and Reason are true but Reason is NOT the correct explanation of Assertion.
(C) Assertion is true but Reason is false
(D) Assertion is false and Reason is also false.
7. Assertion (A) : Tungsten filament is coiled, so that it occupies less space inside the bulb. (1)
Reason (R): Tungsten filament has a low melting point.
8. Assertion (A) : Typhoid is caused due to contaminated water. (1)
Reason (R) : Sewage consists of a network of underground pipes that transfers the contaminated water from the point of being produced to the point where it is treated.

9. Distinguish between open circuit and closed circuit. (1)
10. Name two useful substances which are produced by the treatment of sewage. (1)
11. Observe the given circuit and answer the following: (2)



- (i) Why does a magnetic needle show deflection?
- (ii) What will happen to the magnetic needle if the terminals of a battery are interchanged?
12. (a) In human blood circulatory system veins have valves which allow blood to flow only in one direction. Most of the arteries do not have valves, yet the blood flows in one direction only. Explain why? (2)
- (b) Which instrument is used in our school dispensary to measure blood pressure?
13. (a) How does the water get transported from root to leaves? (2)
- (b) Write any one difference between transpiration and translocation.
14. Explain the working of an electric bell with the help of a neat labelled diagram. (3)
15. (a) Name two inorganic impurities present in sewage. (3)
- (b) Why should we not throw
- (i) used tea leaves to sink?
- (ii) cooking oil and fats down the drain?
16. Arrange the following steps of wastewater treatment in the correct order: (3)
- Treatment in sedimentation tank
- Treatment in aerators
- Treatment with chlorine
- Treatment in bar screens
- Treatment in grit
- Sand removal tank
17. (a) Read the given paragraph carefully and replace 'A', 'Q', 'S' and 'T' with appropriate words or terms: (5)
- Human have specialized organs in animals to purify the blood. Organ 'A' is bean-shaped and dark red in colour lie just above the waist. It helps in removal of 'Q', a waste material from blood. The organ 'S' is the opening at the end of the sac like structure 'T' through which the waste material is eliminated.
- (b) Write scientific reason for the following statements:
- (i) When you get a cut on your finger, the wound bleeds for sometimes and then stops.
- (ii) The atria of the human heart are thin walled than the wall of the ventricles.
- (iii) Sponges and hydra lack circulatory system.