

ST ARNOLD'S CENTRAL SCHOOL, PUNE
PERIODIC TEST- 1, 2018-2019
SUBJECT –SCIENCE

STD : X

M.M:50

Section A

1. What is the mode of nutrition in Amoeba? (1)
2. Why is the series arrangement not used for domestic circuits? (1)
3. Why does the colour of copper sulphate solution change when an iron nail is dipped in it? (1)
4. How are the alveoli designed to maximize the exchange of gases? (2)
5. How is the amount of urine produced regulated? (2)
6. Explain any two factors on which the resistance of the conductor depends. (2)
7. What is balanced chemical equation? Why should chemical equations be balanced? (2)
8. Sohan went to his town Agra 200 Km away from Delhi with his father in a car. On the way there was lot of traffic jam. Sohan while reaching his town felt nausea and headache. He had inhaled lots of toxic polluted gases.
 - i. Which system/part of his body gets affected?
 - ii. What steps could be taken to reduce air pollution?
 - iii. What will be the associated value? (3)
9. a. Name the site of exchange of material between the blood and surrounding cells.
b. Draw a schematic representation of transport and exchange of oxygen and carbon dioxide in human body. (3)
10. Two identical wires one of nichrome and other of copper are connected in series and a current I is passed through them. State the change observed in the temperature of two wires. Justify our answer. State the law which explains the above observation. (3)
11. Two lamps rated 60W at 220V and the other 40W at 220V, are connected in parallel to the electric supply at 220V
 - a. Draw a circuit diagram to show the connections
 - b. Calculate the current drawn from the electric supply.
 - c. calculate total energy consumed by the two lamps together when they operate for 1 hour.(3)

12. State the type of chemical reaction with balanced chemical equations that takes place in the following:
- a. Magnesium ribbon is burnt in air.
 - b. The solutions of lead (II) nitrate and potassium iodide are mixed
 - c. Hydrogen gas is passed over heated copper oxide. (3)
13. Describe an activity to show electrolytic decomposition of water. (3)
14. a) Draw a neat labeled diagram depicting Human Alimentary Canal.
- b) State the roles of Liver and Pancreas.
 - c) Name the organ which performs the following functions in humans:
 - (i) Absorption of digested food
 - (ii) Absorption of water. (5)
15. a. Explain the term rancidity. Give any two ways to prevent it.
- b. Explain the following chemical reactions with an example each
 - i. precipitation reaction
 - ii. exothermic reaction
 - iii. oxidation reaction (5)
16. a. Write three points of difference between electric energy and electric power.
- b. An electric iron of 1kW is operated at 220V. Find which of the following fuses that respectively rated as 1A, 3A and 5A can be used in it.
 - c. What is the commercial unit of electric energy? Convert it into joules (5)

Section B

17. Why is the number of stomata greater on the lower surface of a leaf? (2)
18. Should the resistance of an ammeter be low or high? Give reason for your answer. (2)
19. 2 g ferrous sulphate crystals are heated in a dry boiling tube.
- a. List any two observations.
 - b. Write the chemical equation for the reaction. (2)