

Periodic Test II(2017-18)

Question Paper Science

Class X

Time:3Hrs

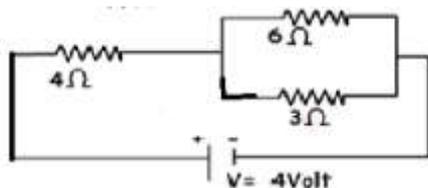
M.M.80

1. Why do we need to balance a chemical equation? (1)
2. How is 1 ohm related to Ampere and volt? (1)
3. Write one function of blood platelets in human beings. (1)
4. What is trophic level? (1)
5. What are the ill effects of ozone layer depletion? (2)
6. Name the reducing agent in the following reactions. (2)



State which is more reactive out of Mn and Al and why?

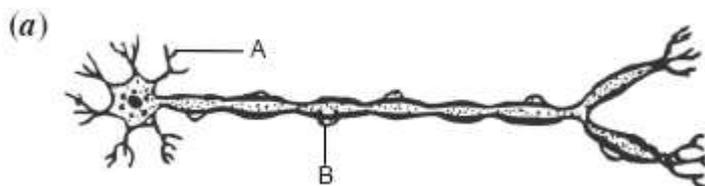
7. What is the chemical name and formula of washing soda? Mention only one of its use. (2)
8. Why lime water turns milky on passing carbon dioxide? write the chemical equation (2)
9. What is meant by saying that the electric potential difference between the two points is 1V? (2)
10. Two magnetic field lines never intersect each other .Why? (2)
11. Give the principle of Electric Motor .What acts as Commutator and Why? (2)
12. What is meant by ocean thermal energy? How can electricity be generated from ocean energy? (3)
13. .In the circuit given, calculate: (3)
 - a) Total effective resistance
 - b) Potential difference across 3 ohm resistor
 - c) Total current flowing through circuit.



14. With help of flowchart diagram explain how will you extract zinc from Zinc carbonate ore . Write chemical reactions involved. (3)
15. Discuss the importance of decomposition reactions in metal industry with three points (3)
16. Name the hormone which regulates carbohydrate, protein and fat metabolism in our body. Which gland secretes this hormone? Why is it important for us to have iodized salt in our diet? (3)
17. What is a reflex arc? Draw a neat labelled diagram of the components in a reflex arc. (3)
18. Consider the following food chains- (3)
 - (a) Plants \rightarrow mice \rightarrow snakes \rightarrow hawks
 - (b) Plants \rightarrow mice \rightarrow hawksIf energy available at the producer level in both the food chains is 100J. In which case will hawks get more energy and how much?

19. a) What are magnetic field lines? (5)
b) Draw magnetic field pattern around a current carrying circular coil.
c) Write the factors on which magnetic field strength depends in current carrying coil
20. a) Distinguish between renewable and non-renewable sources of energy. (5)
b) Mention any two advantages and two limitations of wind energy.
c) Give the composition of slurry fed into the digester of gobar gas plant.
21. Explain the process of digestion of food in mouth, stomach and small intestine in human body. (5)
22. What is 'phototropism'? How does it occur in plants? Describe an activity to demonstrate phototropism. (5)
23. An oxide of metal X with valency 2 reacts with both acid HCl as well as base NaOH (5)
a. What is the name given to such oxides.
b. Identify the metal X and give the formula of its oxide.
c. Write the relevant chemical equation of metal oxide with acid as well as base.
24. With the help of activity show that hydrochloric acid solution conducts electricity. (5)

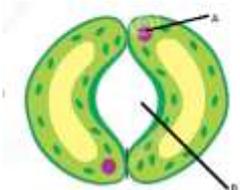
25.



- (i) Name the parts labelled A and B in the neuron drawn above. (5)
(ii) Which part acquires the information in the neuron?
(iii) Through which part does the information travel?
(iv) In what form does this information travel?
(v) Where is the impulse converted into a chemical signal for onward transmission?

Practical based Questions

26. Identify the parts labelled A and B in the given diagram of stomata (2)



27. In the ohm's law experiment, it is advised to take out the key from the plug when the observations are not being taken. Why it is essential? (2)
28. what happens if few pieces of granulated Zinc is warmed with NaOH solution in the test tube? Write observation and chemical equation. (2)