

D.A.V. PUBLIC/ MODEL SCHOOLS, WEST BENGAL ZONE

ANNUAL EXAMINATION

SESSION: 2018 – 19

Class: VII

Maximum Marks:80

Subject: Science

Time: 3Hours

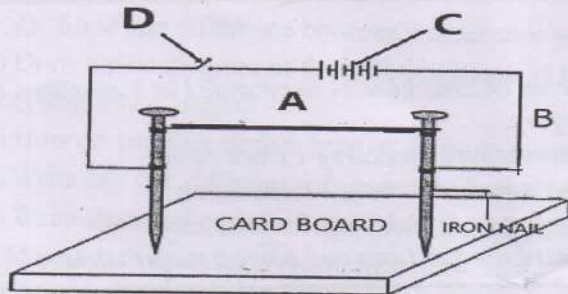
General Instructions:

1. All questions are compulsory.
2. There is no overall choice. However internal choices have been provided in 3 questions of 3 marks category and 3 questions of 5 marks category.
3. Question 1 to question 8 are very short answer type and carry 1 mark each.
4. Question 9 to question 17 are short answer type I and carry 2 marks each.
5. Question 18 to question 25 are short answer type II and carry 3 marks each.
6. Question 26 to question 31 are long answer type questions and carry 5 marks each.

1. What is the range of laboratory thermometer? 1
2. What are the two kinds of charges in nature? When an ebonite rod is rubbed with flannel what type of charge is produced on the flannel? 1
3. Fill in the blanks with appropriate words: $\frac{1}{2} \times 2 = 1$
 - a) A _____ contains two or more substances mixed in any proportion.
 - b) Positively or negatively charged particles are called _____.
4. Name the acids present in a) Sour milk b) Guava. $\frac{1}{2} \times 2 = 1$
5. Give the meaning of the term 'Sericulture'. 1
6. Name the white strong shining protective material that covers the teeth. 1
7. What are pseudopodia? 1
8. What are lenticels? 1
9. Draw the symbol of a plug key and an ammeter. State one factor on which heating effect of current depends upon. 2
10. Give reasons for the following: - 2
 - a) A clinical thermometer has a slight bend or kink in its capillary tube
 - b) Tea or coffee pots are often made shining bright.
11. What is earthing? Why metallic body of all electrical appliances should be earthed? 2
12. Give the meaning of the term 'short circuiting' and 'overloading' in an electric circuit. 2
13. Classify the following changes as physical or chemical: $\frac{1}{2} \times 4 = 2$
 - a) Baking of a cake
 - b) Making a sugar solution
 - c) Preparation of fruit salad
 - d) Burning of biogas
14. If someone is suffering from the problem of acidity after overeating, which of the following would you suggest as remedy? Justify your suggestion. 2
Lemon juice, Vinegar, Baking soda solution.
15. Write the name of the four chambers found in the stomach of the ruminants. 2
16. Lungs have no muscular tissues. Name the organs that control the movement of lungs in our body. 2
17. Differentiate between weather and climate. 2

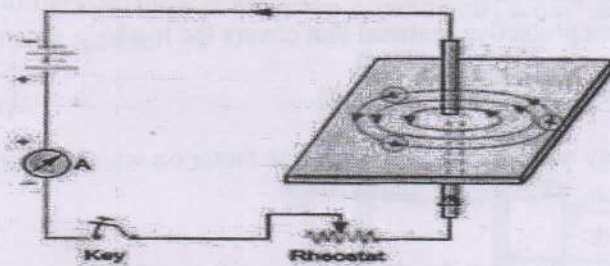
18. a) Draw the ray diagram of the image formed by a concave mirror when the object is between centre of curvature and focus of the mirror. 3
 b) Write the type of mirror used in i) ophthalmoscope ii) kaleidoscope.
19. a) Select the objects given below which will get charged up on rubbing: - 3
 Steel scale, drinking straw, metal pen, copper wire, plastic comb.
 b) Write two safety precautions that a person can take if he is present inside a house or a building during a lightning strike.

20. 3



- a) In the given diagram the wire A becomes hot when electric current passes through circuit. Identify A, B, C, D.
 b) How does a bulb convert electrical energy to light energy?

OR



- a) State the activity shown in the given diagram.
 b) Name the scientist who invented it.
21. Classify the following salts as acidic, basic or neutral. Also write their names:- 3
 a) KNO_3 b) NH_4Cl c) CuCl_2
22. a) Classify the following reactions into different types and also balance these equation:- 3
 i) $\text{H}_2\text{SO}_4 + \text{NaOH} \longrightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$
 ii) $\text{N}_2 + \text{H}_2 \longrightarrow \text{NH}_3$
 b) Write the chemical formula of Zinc oxide using criss cross method.

OR

The school principal told her students that she would like them to follow a 'special practice' of Japanese schools. Their schools do not keep staff members for cleaning as such. The students, themselves, work as a team and take pride in maintaining the cleanliness of their school. She went on to say that she would like them to replace their old habits by new, better habits in a way similar to a 'displacement reaction'.

- a) State two values displayed by the students of Japanese schools.
 b) Define displacement reaction.
23. The hair of an animal A is cut from its body in one piece along with a very thin layer of its dead skin which is known as B. This process of removal of B is called C. The B of this animal is then cleaned by using detergent and a lot of hot water by the process called D. The clean B is then converted into E by the process of sorting, dyeing and spinning. 3
- a) What could be i) A and ii) B?
 b) Name the process i) C and ii) D.
 c) Identify E.
 d) State one use of E.
24. Sunita was trying to summarise the details of the gases released by plants at different times of the day in a tabular form. Help her to complete the table: 3

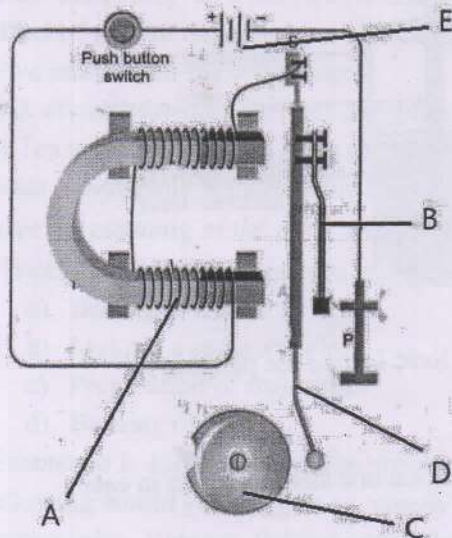
	Conditions	Photosynthesis/Respiration	Overall result
1	_____	Respiration, no Photosynthesis	_____
2	_____	Rate of photosynthesis equals to the rate of respiration	_____
3	_____	_____	Carbon di oxide taken in and oxygen given out.

25. 'Transpiration is a necessary evil'. Define transpiration. Write two reasons highlighting the necessity of transpiration. 3

OR

Write the name of the cell components of human blood. State one function of each cell component.

26. 5



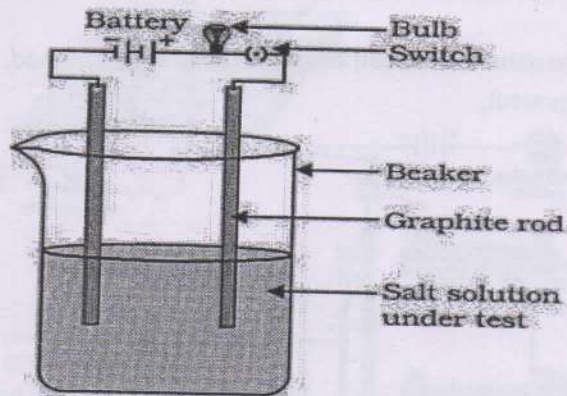
- a) Identify A, B, C, D.
 b) State two uses of A.
 c) Write any two ways by which the strength of A can be increased.
27. 5
- a) What is an 'electric discharge'?
 b) Why do we hear thunder few seconds after lightning?
 c) Draw a lightning conductor and explain it.

OR

- a) Like charges repel and unlike charges attract. How can this basic rule be used to decide the nature of an unknown charge?
- b) When a glass rod and silk after rubbing with each other are simultaneously brought near tiny pieces of paper they do not show attraction. Explain the phenomena.
- c) State one difference between a conductor and an insulator.
28. a) Draw a neat diagram of the different stages in the life cycle of a silk moth and label it. (Label any 4 stages) 5
- b) How do woollen clothes keep us warm in winter?
29. a) Write any two differences between acids and bases. 5
- b) Write chemical equations for the following reactions:
- i) Magnesium hydroxide reacts with nitric acid.
- ii) Acetic acid reacts with calcium hydroxide.
- c) Which acid is known as 'King of chemicals' and why?

OR

- a) A shopkeeper has few bottles of soft drinks in his restaurant which are not labelled. One customer wants acidic drink, another wants basic drink and the third one wants neutral drink. How will the shopkeeper decide which drink is to be served to whom (by the help of any one indicator)? Explain.
- b) Will the bulb glow in the given experimental setup? Justify your answer with suitable reason.



30. What is adaptation? Write any four adaptations that have helped the penguin to survive in the polar region. 5

OR

What are the four climatic zones found in India? Mention one state that falls in each climatic zone. What do you mean by meteorology?

31. Draw a well labelled diagram of human excretory system. 5