D.A.V. PUBLIC SCHOOL, THANE
(2022-2023)
PERIODIC TEST-2
SCIENCE

STD:VIII **TIME: 3HOURS**
DATE:19.09.2022 **MAX. MARKS: 80**

General Instructions:
The question paper comprises four sections-A, B, C and D.
There are 36 questions in the question paper. All questions are compulsory.
Section -A consists of question number 1to 20.
These questions are very short answer questions, MCQs and Assertion -Reason questions, which should be answered in one word or one sentence. They carry **one mark each.**
Section -B consists of question numbers 21-26.
These are short answer questions, which **carry two marks each.**
Section -C consists of question number 27-33.
These are also short answer questions, which carry **three marks each.**
Section -D consists of question number 34-36.
These are long answer questions and carry **five marks each.**
There is no overall choice in the question paper. However internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

SECTION A

1. Name the part of the cell that stores excess of water and waste products. 1
2. When do viruses show the characteristics of living organisms? 1
3. Where is pressure greatest and the least inside the bottle filled with water? 1
4. What is limiting force of friction? 1
5. Name any two cleaner fuels. 1
6. Identify the type of combustion that takes place when sodium is exposed to air. 1

   OR

   What is the other name of ignition temperature?

7. When electricity is passed through distilled water the bulb doesn't glow. 1
   Suggest a method that can make the bulb glow.

8. State the extension present on the cell membrane of Paramoecium. 1

   OR

   Mention the components that represent the reserve food material in the cytoplasm of hen's egg.

9. Which bacteria converts milk into curd. 1

   OR

   Which disease is caused by bacteria in plants?

10. When does the net force become zero? 1

    OR

    Define thrust.

11. Write any two methods of reducing friction. 1

12. Name the lowest grade of coal. Mention the total percent of carbon present in it. 1

OR

What is the other name of petrol? Give its one use.

13. A tester is used to check the conduction of electricity through two liquids, named A & B. it is found that the bulb of the tester glows brightly for liquid A while it glows very dimly for liquid B. Why?

For question number 14 to 16, two statements are given -one labelled Assertion (A) and the other Labelled Reason (R). Select the correct answer to these questions from the codes(i), (ii), (iii) and (iv) as given below:

i) Both A and R are true and the R is the correct explanation of A.
ii) A and R are true but R is not the correct explanation of A.
iii) A is true but R is false.
iv) A is false but R is true.

14. Assertion (A): Amoeba is a living organism consisting of a single cell. 1
Reason(R): Amoeba has no definite shape.

15. Assertion (A): Balanced forces do not change the state of rest or motion of an object. 1
Reason(R): Unbalanced forces may change the state of rest or motion of an object.

16. Assertion (A): Natural gas has low calorific value. 1
Reason(R): It is used in the manufacture of fertilizers and chemicals.

17. Read the following information and answer any four questions from 17 (i) to 17(v) on the basis of information given below: 4

Micro-organisms are harmful to us in many ways. They can cause diseases in humans, plants and animals. Microbes can enter a healthy body through air, water, contaminated food and infected person by direct or indirect contact or by carrier. Microorganisms that grow on our food sometimes produce toxic substances and cause serious illness and even death.

(i) Microorganisms that cause diseases are also known as:
(a) Pathogens (b) Fungi
(c) Antigen (d)Microbes

(ii) The fungus that is commonly used in bakery and beverage industries is:
(a) Penicillium (b) Yeast
(c)Agaricus (d) Rhizopus

(iii) Chicken Pox is caused by:
(a) Bacteria (b) Fungi
(c)Viruses (d) Protozoans

(iv) A bacteria responsible for food poisoning is____
(a) Lactobacillus (b) Rhizopus
(c) Staphylococci (d) Aspergillus

(v) Pick the odd one out:
(a) Erythromycin (b) Streptomycin
(c) Tetracycline (d) Penicillium notatum

18. Read the following information and answer any four questions from 18 (i) to 18(v) on the basis of information given below: 4

Friction plays an important role in our daily life. Many of our daily activities depend on the presence of frictional force. In some cases, friction is useful and necessary. In other cases, friction causes a wastage of energy and damage moving parts of machinery etc. In many situations, friction is undesirable and we would want to minimize it.

(i) A toy car released with the same initial speed will travel farthest on:
(a) Muddy surface (b) Cemented surface
(c) Glass block (d) Polished Marble surface

(ii) A boy rolls a rubber ball on a wooden surface. The ball travels a short distance before coming to rest. To make the same ball travel longer distance before coming to rest, he may:
(a) Spread a carpet on the wooden surface
(b) Cover the ball with the piece of cloth
(c) Sprinkle talcum powder on the wooden surface
(d) Sprinkle sand on the wooden surface

(iii) If we apply oil on the door hinges, the friction will:
(a) Increase (b) Decrease
(c) Disappear altogether (d) Will remain unchanged

(iv) Which of the following statement is incorrect:
(a) Friction does not act on a ball moving through air.
(b)Friction acts on a ball rolling along the ground.
(c) Friction acts on a boat moving on water.
(d) Friction acts on a bicycle moving on a smooth road.

(v)Fluids are:
(a) Liquids (b) Gases
(c) both a and b (d) None of these

19. Read the following information and answer any four questions from 19 (i) to 19(v) on the basis of information given below: **4**

During a class discussion on 'Fuels for household', Kiran suggested petrol but her teacher said it is not a safe fuel for household activity and ask her to sit. Kiran wondered why petrol can't be used as a fuel for household activity though its calorific value is high.

(i) The calorific value of a fuel is expressed in unit called:
(a) kJ / lt (b) kg / ml
(c) kJ / g (d) kJ / kg

(ii) Coal burns to produce:
(a) Calcium Carbonate (b) Magnesium
(c) Carbon dioxide (d) Oxygen

(iii) If a person's clothes catch fire, the best way to extinguish the fire is to:
(a)Throw water on the clothes
(b) Cover the person with the woollen blanket.
(c) Use fire extinguisher
(d) Cover the person with polythene sheet.

(iv) Choose the incorrect statement from the following:

A good fuel is one which;

(a) Is readily available. (b)Produces large amount of heat.

(c) Leaves behind many undesirable substances (d) Burns easily in air at a moderate rate.

(v) The most common element used as fire extinguisher is:

(a) Phosphorous (b) Nitrogen dioxide

(c) Oxygen (d) Carbon Dioxide

20. Read the following information and answer any four questions from 20 (i) to 20 (v) on the basis of information given below: 4

Electroplating also known as electrodeposition, is a process of depositing or coating a layer of desired metal on the surface of other material by means of electricity. It is a very useful process and is widely used in the industry for coating metal objects with the thin layer of a different metal. The layer of metal deposited has some desired property, which the metal of the object lacks.

(i) Electroplating is based on:

(a) Heating effect of electricity. (b) Physical effect of electricity

(c) Magnetic effect of electricity (d) Chemical effect of electricity

(ii) Electroplating prevents:

(a) Shining (b) Dissociation

(c) Corrosion (d) Passing of electricity.

(iii) The article to be electroplated should be made:

(a) Electrolyte (b) Cathode

(c) Anode (d) Electrode

(iv) Which of the following electrolyte/ electrolytes can be used as a suitable soluble salt?

(a) Copper sulphate (b) Silver nitrate

(c) Both of these (d) None of these

(v) Which of the following is not used for electroplating metal articles?

(a) Nickel (b) Platinum

(c) Chromium (d) Sodium

SECTION B

21. Vaccination is an important way to build immunity. 2

(a) How does a vaccine produce immunity to a disease?

(b) Name two methods of administering vaccine.

OR

(a) Name the organism that causes rust of wheat in plants.

(b) Write down the symptoms of rust of wheat?

22. The decrease in the pressure of a given force, through an increase in the surface area over which the force acts, finds many applications in our day to day life. List two such applications. 2

23. State two factors on which the force of friction depend. 2

24. List the names of any four petroleum products. 2

25. Sia has made two paper cups by folding a sheet of paper. She half fills one of the cups with water and keeps the other empty. She puts these two paper cups above the flame carefully. 2
With reference to the above activity, answer the following questions:
(a) Which zone of the flame is best for heating?
(b) What happens to the empty paper cup when it is heated?

OR

(a) Name the zone of the candle which has unburnt wax vapours.
(b) What is the other name of the middle zone?

26. Name the cathode and anode used in electrorefining of copper. 2

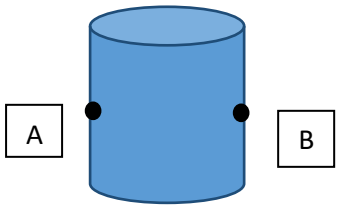
SECTION C

27. (a) Identify the given organism: 3



(b) What is the tail like structure also called?
(c). Write down its functions.

28. In a science club activity, Hamza made two holes at the same level in any empty tin can and labelled them as A and B. He covered them with an adhesive tape and filled the tin can with water. 3



(a)What would Hamza observe, when the adhesive tape is pulled off and why?
(b) Name any one device which is used in everyday life and does work on the existence of atmospheric pressure.

29. Give reason for the following: 3
(a) With a pencil we can write on paper but not on glass.
(b) Sport cars, aeroplanes & boats are designed to have a streamlined shape.
(c) Rollers are used for transporting luggage.

30. Give two examples each of solid, liquid and gaseous fuels. 3

31. What are the three conditions needed for combustion? 3

32. Write any three points of difference between plant cell and animal cell. 3

OR

Give the function of following types of plastids:

(a) Chloroplast (b) Chromoplast (c) Leucoplast

33. State any three effects of force. 3

SECTION D

34. Complete the following table: 5

Name of disease	Causative Organism	Organism infected
Rabies	a)	Dogs, Monkeys
Ringworm	Fungi	b)
c)	Virus	Tobacco Plant
Red rot	d)	Sugarcane
e)	Bacteria	Cattle, Poultry

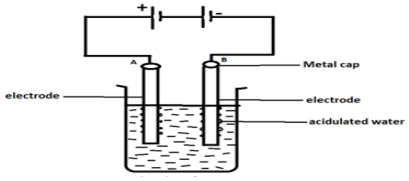
35. (a) Define fluid friction. 1
(b) What is the other name of fluid friction? 1
(c) State three factors on which fluid friction depends. 3

OR

(a) Meera was walking comfortably on the road. She stepped on a banana peel and had a fall.
i. How does friction enable Meera to walk? 2
ii. Why did Meera fall, when she stepped on a banana peel? 1

(b) Give any two disadvantages of friction. 2

36. Observe the given figure & answer the following:



1

(a) Name the above phenomenon.
(b) Name the gas produced at: 2
i. Positive Graphite electrode ii. Negative graphite electrode
(c) List any two common effects of chemical reaction taking place at the electrodes and within the solution. 2

OR

(a) Define electromagnetic induction. 1
(b) Name any two devices that work on the principle of electromagnetic induction. 1
(c) List any three observations made by Faraday and Henry for the phenomenon of electromagnetic induction. 3

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