

**BUDHA DAL PUBLIC SCHOOL PATIALA**  
**First Term Examination (12 September 2023)**  
**CLASS - VIII**  
**PAPER- SCIENCE (SET-A)**

M.M. 80

Time:3 hr.

**General Instructions:**

1. All questions are compulsory.
2. Attempt all questions section wise in the serial order neatly and leave one line after every answer.
3. Draw neat and labelled diagrams wherever required.

**Section – A**

I) Choose the correct option:

(1×3=3)

Q1. Siya has to pull a box. The static friction between its surface and the floor is 40N. Now, she puts two rollers between the surfaces of the block and floor. The rolling friction between these two surface is  
a) 50 N      b) 40 N      c) 60 N      d) 30 N

Q2. Which fibre is called artificial silk?

- a) Rayon      b) Nylon      c) Polyester      d) Acrylic fibre

Q3. Which of the following bacteria is used to convert lactose sugar present in the milk to lactic acid by fermentation?

- a) Lactobacter      b) Lactobacillus      c) Esherichia coli      d) Spirilla

II) Match the items given in column I with those in column II by choosing the correct option (2)

Column I	Column II
i) Anode	Substance that do not conduct electricity
ii) Electrolysis	Electrode connected to positive terminal
iii) Cathode	Electrode connected to negative terminal
iv) Non-electrolyte	Chemical effects of electric current

III) Give the answer of following questions in one word:

(1×4=4)

- a) Name the method in which seeds are scattered over the field by hand.
- b) Name the process by which artificial fibres are made.
- c) Where is coal mainly found in India?
- d) What is the S.I. unit of pressure?

IV) In the following questions, two statements are given – one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to this question from the codes (a), (b), (c) & (d) as given below: (1×1=1)

Assertion (A) : It is easier to walk on a rough surface than on a smooth surface.

Reason (R) : The interlocking between feet & surface is more on a rough surface.

A-1

- a) Both A and R are true and R is the correct explanation of the assertion.
- b) Both A and R are true but R is not the correct explanation of the assertion.
- c) A is true but R is false.
- d) A is false but R is true.

### Section - B

(2×10=20)

Answer the following questions.

- Q1. Why is the use of biofertilisers preferred over chemical fertilizers?
- Q2. What is food poisoning? Name a bacteria which causes food poisoning.
- Q3. Name the monomer of cellulose and write one use of Rayon fibre.
- Q4. Why does petroleum float on water?
- Q5. What are the two parameters that define pressure?
- Q6. Why do athletes wear spiked shoes?
- Q7. Does distilled water conduct electricity? If not, what should be done to make it conduct electricity?
- Q8. What is eutrophication?
- Q9. What are electrodes? Which gas will deposit on cathode during hydrolysis.
- Q10. What is Nitrification? Name a nitrifying bacteria.

### Section - C

(3×10=30)

Answer the following questions: (Do any 10)

- Q1. Name the effect of force in the following:
  - a) squeezing a toothpaste tube
  - b) kicking a stationary ball
  - c) stretching a spring
- Q2. Give reasons for the following:
  - a) Hands become warm when rubbed against each other.
  - b) It is difficult to hold a glass with oily hands
  - c) Why do we slip when we accidentally step on banana peel.
- Q3.
  - a) Discuss any two harmful effects of micro-organisms
  - b) Name the insect which carries malaria germs.
- Q4. Give reasons :
  - a) Why are electric plugs and switches made of thermosetting plastics?
  - b) Give two differences between thermosetting and thermoplastics.
- Q5.
  - a) Which is known as black gold & why?
  - b) Write the formula of producer gas.
- Q6. A rectangular glass slab is 30cm long, 10cm wide and 10cm thick. It weighs 48N and is lying on the ground. Find the pressure exerted by the glass slab on the ground.
- Q7. What is Acid Rain? List two damaging effects of acid rain.
- Q8.
  - a) Negatively charged ions are known as \_\_\_\_\_
  - b) What is voltameter?
  - c) Name any two electrolytes.



- Q9. a) Define Hybridisation.  
b) Write and explain any two natural methods of restore soil fertility.
- Q10. a) What is meant by 'destructive distillation of coal'?  
b) What are the products obtained by the destructive distillation of coal?
- Q11. Give reasons:  
a) Why the walls of a Dam is made thicker at the bottom?  
b) Why water supply tank is placed at high place in the building?

### Section - D

Do any three questions :

(5×3=15)

- Q1. What do you mean by electroplating? Explain the process of electroplating of copper on iron strip. Draw its well labelled diagram also.
- Q2. What is Nitrogen cycle? Describe with the help of diagram how Nitrogen cycle works. What is the percentage of Nitrogen in air?
- Q3. a) Write the full form of PVC, LED  
b) A synthetic fibre Z is made by dissolving wood pulp in an alkaline solution. The solution is then passed through tiny pores to convert it into fibres. These fibres are spun into yarn and then woven into fabric.  
(i) Identify Z  
(ii) State two uses of this fibre.
- Q4. a) What is carbonization?  
b) How much percentage of carbon is present in anthracite coal  
c) Name a fuel that is used as a domestic fuel.  
d) Give one use of Natural gas

### Case Study

(5)

When an object is pulled over another object the tiny hills & valleys present on surfaces in contact get entangled with one another. The interlocking of two Surfaces opposes the motion of one object over another & give rise to frictional force. Friction can be reduced by using lubricants. Friction can act as both friend or foe for us. Sometimes friction Causes immense loss in Energy. Friction is mainly of three types!- static, limiting & Kinetic. Further Kinetic friction is divided into two parts Rolling & Sliding friction

- Sprinkling of powder on the carom board \_\_\_\_\_ friction. (1)
- Sliding friction is \_\_\_\_\_ than static friction. (1)
- Give examples to show that friction is both a friend and a foe. (2)
- Four children were asked to arrange forces due to rolling, static & sliding frictions in a decreasing order. Their arrangements are given below. Choose the correct arrangement : (1)
 

a) rolling, static, sliding	b) rolling, sliding, static
c) static, sliding, rolling	d) sliding, static, rolling