



DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2017-18)

Class:- VIII
Time- 3 Hrs.

Subject:- General Science
F. M:- 80

PHYSICS

1. Fill in the blanks with $>$, $<$ or $=$
Limiting friction _____ kinetic friction _____ rolling friction [1]
2. Define SI unit of pressure. [1]
3. Does pure water conduct electricity? If not how it can be made conducting? [1]
4. How does bat catch its prey? [1]
5. A tuning fork vibrates 500 times in 2sec. What is its frequency and time period? [$\frac{1}{2} + \frac{1}{2} = 1$]
6. Calculate the pressure exerted by a metallic cube of side 10cm and mass 1kg placed on a wooden table. [2]
7. 'Friction is a necessary evil' justify the statement. [2]
8. What is the advantage of using LED in testing the electrical conductivity in liquids? Write full form of LED. [1+1=2]
9. If amplitude of a sound wave is increased by two times how does loudness of sound will change? Name the unit used to measure loudness of sound. [1+1=2]
10. Sketch larynx and explain its function in your own words. [3]
11. One day Rina found her younger brother's bicycle was not running smoothly. He was finding difficulty while riding on it. She discussed the problem with her teacher. Her teacher suggested her to put some oil on the moving parts and by doing so it started to run smoothly.
(a) By putting oil the bicycle started to run smoothly, why?
(b) What are the moral values shown by Rina? Write at least two. [1+2=3]
12. Show classification of different kind of forces. What is the relation between SI unit of force and cgs unit of force. [2+1=3]
13. What is electroplating? Explain an activity how is it used in refining impure copper? Write two applications of electroplating in our day to day life. [5]

OR

Explain an activity to show, sound needs medium for its propagation. Draw wave forms of (i) loud sound and flat sound (ii) high pitch sound and low pitch sound.

CHEMISTRY

1. Name a synthetic fibre used to make sweaters and shawls. [1]
2. Define : [1/2 + 1/2 = 1]
(a) Malleability
(b) Ductility
3. Why coal is known as buried sunshine ? [1]
4. (a) Write word equation for the reaction which takes place when SO_2 is dissolved in water .
Is SO_2 acidic or basic in nature ? [1 + 1/2 = 1 1/2]
(b) Which metal is present in our blood ? [1/2]
5. Why coke is better fuel than coal ? [2]
6. (a) Write differences between thermosetting and thermoplastics. [1+1+1=3]
(b) What are biodegradable and non biodegradable substances?
(c) Write uses of (i) Teflon (ii) Bakelite
7. Give reasons ; [3]
(a) Aluminium foils are used to wrap food items.
(b) Lemon pickles cannot be stored in aluminium utensils.
(c) Phosphorous is stored in water.

8. What happens when : [1½+1½=3]
- (a) Iron nails are placed in CuSO₄ (Copper Sulphate) solution. Write word equation for the reaction involved.
- (b) Copper develops a green coating on its surface when exposed to air .Write the name of the green material and the reaction involved .
9. How petroleum is formed ? Can coal , petroleum , and natural gas be prepared in the laboratory ? Give reason. [1½+1½=3]
10. What are exhaustible and inexhaustible natural resources ? Why fossil fuels should be used when absolutely necessary ? [2+1=3]
11. (a) What is a polymer ? Name the monomers of cellulose and polyester . [2+1+2=5]
- (b) Describe an activity to show that synthetic fibres soak less water .
- (c) Should the handles and bristles of a tooth brush be made of same material . Explain your answer .

OR

- (a) How plastics are harmful for animals if they swallow it ? [2+ 1+2=5]
- (b) Describe an activity to show that thermoplastic is a poor conductor of electricity .
- (c) Avoid plastics as far as possible . Comment on this advice.

BIOLOGY

1. Give very short answers for the following questions: [1x3 = 3]
- a) What is a vaccine?
- b) In multicellular organisms why do cells have different shapes and sizes?
- c) Why is drip irrigation the best method of watering plants?
2. Answer the following questions in short. [2 x 3 = 6]
- a) What is nitrogen fixation? Name two nitrogen fixing microorganism.
- b) Give one difference between
- (i) Cell wall and cell membrane.
- (ii) Prokaryotic cell and eukaryotic cell.
- c) What are weeds? How can we control them?
3. Answer the following questions in brief : [3 x 4=12]
- a) Define manure. List two advantages of manure.
- b) Draw a labeled diagram of a nerve cell.
- c) Write the function of
- (i) Chloroplast
- (ii) Gene
- (iii) Vacuole
- d) What are antibiotics? What precautions must be taken while taking antibiotics?
4. Answer any one of the following questions in detail. [5x1=5]
- A. (i) Write any three advantages and two disadvantages caused by micro organism.

OR

- B. (i) What are communicable diseases? Give an example.
- (ii) Name the carrier of malaria parasite and dengue virus.
- (iii) List three methods of preserving food. Explain with example.