

**PON VIDYASHRAM**

**HALF YEARLY WORKSHEET 2017—2018**

**STD VIII**

**SUBJECT: SCIENCE**

**BIOLOGY:** Crop production

**CHEMISTRY:** Metals and non-metals

**PHYSICS:** Friction

**ANSWER IN ONE OR TWO SENTENCES:**

1. What happens when a rod of zinc metal is dipped into a solution of copper sulphate?
2. Identify the acidic and basic oxides from the following:  
 $P_2O_5$ ,  $SO_3$ ,  $Na_2O$ ,  $MgO$
3. Silver is the best electrical conductor. Why is it not used for making electrical wires and cables?
4. Name a non - metal which is used as a part of common salt.
5. Name a non- metal that acts as a reducing agent.
6. Name the reaction in which more reactive metal displaces a less reactive metal from its salt solution.
7. What are pesticides?
8. Define Broadcasting.
9. What is Lodging?
10. What leaves are added to storage bins to prevent pests?
11. Define animal husbandry.
12. \_\_\_\_\_ is a self adjusting force
13. Name the force of friction which does not allow one body to slide upon another.
14. Frictional force of a ceiling fan is reduced by using \_\_\_\_\_
15. A meteor burns on entering the earth's atmosphere. Give reasons.
16. Why is it difficult to walk on slippery surfaces?
17. What is streamlining?
18. With increase of temperature, the frictional force acting between two surfaces \_\_\_\_\_

**ANSWER IN BRIEF:**

1. Define weeding. What tools are used for weeding?
2. What is transplantation of crops? Name few plants that are transplanted.
3. Why should the harvested crops be protected from moisture?
4. Define hybridization.
5. What are acidic and basic oxides? Explain with examples.
6. Metals are good conductors and non-metals are bad conductors of electricity. Give reasons.
7. How do the alloys Brass and Bronze differ in its composition?
8. It is easier to move a box which is already moving than one which is at rest. Give reasons.
9. Why are tyres of racing cars smooth?
10. One boy is pushing a small desk and another a heavy desk. Who will experience more frictional force ? Give reasons.
11. A man is pushing a heavy truck on the floor. Finding it difficult he turns the truck vertical. Will he need less effort now?
12. Why most of the aircrafts and ships have their front shape pointed?

**GIVE DETAIL ANSWER:**

1. Identify the metals and non-metals used in the following:
  - a. Non-metal used in fertilizers to enhance growth of plants.
  - b. Non-metal used in purple-coloured solution which is applied on wounds and used as an antiseptic.
  - c. Non-metals used in crackers.
2. What are the advantages of ploughing the soil?
3. What is humus? How is it formed?
4. What safety measures are to be taken while handling pesticides?
5. Write a note on threshing and winnowing.
6. Prepare a table to show various agricultural practices and implements used in agriculture.
7. Explain the causes of friction
8. What are the advantages and disadvantages of friction?

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**STD: VIII**

**SUBJECT: SCIENCE**

**Biology:** Micro-organisms

**Chemistry:** Pollution of air and water, Coal and Petroleum

**Physics:** Light, Sound

**ANSWER IN ONE SENTENCE:**

1. Name some non-biodegradable pollutants.
2. Why is chlorine added to the filtered water before supplying it to the people in a city?
3. Name two metals which are extremely harmful to human beings.
4. What is PCRA?
5. Why Petroleum is called Black-Gold?
6. What is crude oil?
7. Which is the best form of coal?
8. What is Amorphous Carbon?
9. Which type of coal has the least Carbon content?
10. What is the role of Coke in metallurgical processes?
11. A variety of coal contains 38% Carbon, 19% volatile substances and 43%moisture. Name the variety.
12. How can a virtual image larger than the object be produced?
13. When the angle between two plane mirrors is  $30^\circ$ , how many images will be formed by the mirror?
14. The distance between the object and mirror is 8 cm, then the distance between the object and image is\_\_\_\_\_
15. What is a medium?
16. .Name the bacteria that helps in the formation of milk products like curd and cheese.
17. Name the fungai that yields antibiotic chlorellin.
18. Who discovered vaccine for smallpox?

19. What is the name of the sea weed used as fodder for sheep?

20. Name a denitrifying bacteria.

22. Where can you locate microorganisms?

**GIVE BRIEF ANSWERS:**

1. Explain the effect of increased concentration of carbon -dioxide in the air.

2. What is Ganga Action Plan? Why was it a failure?

3. How will you differentiate the three types of coal on the basis of C content?

4. What are Petro-chemicals? Mention some uses.

5. What are the products obtained from the residue of the fractional distillation of Petroleum?

6. How are fossils converted into fuels?

7. What is the angle of incident ray if the reflected ray is at an angle of  $90^\circ$  to the incident ray?

8. How many images of a candle will be formed if it is placed between two parallel mirrors separated by 40 cm?

9. Why do we need a shiny surface for reflection?

10. A clear glass does not make a good mirror. Why?

11. An incident ray makes an angle of  $30^\circ$  with the surface of plane mirror. What is the angle of reflection?

12. How are Loudness and Amplitude related?

13. The flash of lightning is seen first and the sound of thunder is heard a little later. Give reasons.

14. How do the astronauts talk to one another on the surface of the moon? Why?

15. How are fungi used in baking and brewing industry?

16. .Name some preservatives.

17. What is denitrification?

18. Suggest some methods to prevent the growth of moulds.

19. What is the importance of nitrogen fixing bacteria in agriculture?

20. Name the microorganisms causing the following diseases:

a. Sleeping sickness    b. Plague    c. Malaria    d. Anthrax

**ANSWER IN DETAIL:**

1. How UV filters purify water for domestic use?
2. How sea water is purified by the process of RO system?
3. The usage of CNG in automobiles has reduced air pollution. How?
4. What is destructive distillation of coal?
5. What are the constituents of coal gas?
6. Coal has high caloric value. Give reasons.
7. Draw and label the diagram of the human eye.
8. Draw a ray diagram and explain the formation of virtual image of point source of light in the plane mirror.
9. Name three diseases caused by bacteria in humans and in plants.
10. Name some edible fungi.
11. What do you mean by food poisoning? Explain.
12. Explain Nitrogen cycle with a diagram.
13. What are food preservatives? Write about some of them.
14. Draw some forms of protozoa.