

**DELHI PUBLIC SCHOOL, CHANDIGARH**

Summative Assessment-II, Session 2012-13

Class : VIII, Subject : Science (Sample Paper)

Time : 3 hours

MM : 90

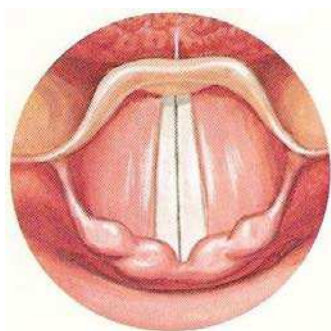
**Section – A (Physics)**

- Q1 Choose the correct answer (1 x 4= 4)
- (i) A ball is rolled on different surfaces. Where will friction be the least?
    - a) grass
    - b) sand paper
    - c) marble floor
    - d) wooden floor
  - (ii) Which of the following friction is maximum :
    - a) static friction
    - b) sliding friction
    - c) rolling friction
    - d) fluid friction
  - (iii) Sound can travel through :
    - a) gases only
    - b) solids only
    - c) liquids only
    - d) solids , liquids and gases.
  - (iv) Which of the following cannot be charged by friction
    - a) plastic scale
    - b) copper rod
    - c) inflated balloon
    - d) woollen cloth
- Q2 Give one word for the following: (1x4= 4)
- a) The frictional force exerted by fluids
  - b) The unit used to express frequency of sound waves
  - c) An animal that can hear ultrasonic sound waves
  - d) An instrument used to detect whether a body is charged or not:
- Q3 Give reasons: (2x2= 4)
- a) A crackling sound is heard while taking off a sweater during winters.
  - b) Sports men use shoes with spikes
- Q4 Answer the following: (2x2= 4)
- a) Give two ways to increase and reduce friction.
  - b) Charging can be done by induction. Show with the help of a labelled diagram.
- Q5 Answer the following: (3x3= 9)
- a) Give three situations where friction is a foe.
  - b) A pendulum oscillates 60 times in 4 seconds. Find its time period and frequency.
  - c) Suggest three methods to protect ourselves from lightning.

Q6 Answer the following:

(1+2+2)

a) Identify the given figure and write its name.



b) How is sound produced in human beings?

c) How do bats find their way?

### Section – B (Chemistry)

Q1. Choose and write the correct option:

(1×4 = 4)

a) Acid rain is caused by oxides of

(i) Sulphur, Nitrogen

(ii) Sulphur, Carbon

(iii) Carbon, Nitrogen

(iv) Phosphorous, Carbon

b) The force that is responsible for the rotation of planets around the sun

(i) Magnetic force

(ii) Nuclear force

(iii) Gravitational force

(iv) Electrostatic force

c) The brightest planet that is visible to the naked eye is

(i) Jupiter

(ii) Venus

(iii) Mars

(iv) Neptune

d) Which of the following affect(s) the ozone layer?

(i) Carbon dioxide

(ii) CFCs

(iii) Soot

(iv) Dust

Q2 Give the one word / name / example

(1×4 = 4)

a) Name the process of slow conversion of wood to coal

b) The decreasing size of the moon from a full moon to new moon

c) This planet is also called red planet

d) Water fit for drinking

Q3 Give reasons:

(2×2 = 4)

a) Petrol does not catch fire on its own at room temperature

b) A paper cup containing water does not burn when placed over a flame

Q4 Answer the following questions:

(2×2 = 4)

a) Explain how carbon dioxide is able to control fires.

b) Explain 'Greenhouse effect'.

- Q5 Answer the following questions (3×3 = 9)
- a) Mention three advantages of gaseous fuels over solid or liquid fuels.
  - b) Why is earth considered a unique planet of the solar system?
  - c) What is water pollution? How do industries cause water pollution? Name two diseases caused by pollution of water.

Q6. Long Answer Questions:

- a) What is light year? Why is the distance of stars from the earth measured in light years and not in kilometres? (3)
- b) Calculate the value of one light year in kilometres. (2)

### Section – C (Biology)

Q.1 Choose the correct option (1×4= 4)

- i) \_\_\_\_\_ is a rabi crop.
  - (a) wheat (b) maize
  - (c) cotton (d) paddy
- ii) Which is the modern system of irrigation?
  - a) dhekli b) rahat
  - c) sprinkler d) moat
- iii) Which of the following micro-organism has the ability to fix nitrogen?
  - a) Virus b) Euglena
  - c) Rhizobium d) Amoeba
- iv) Malaria is caused by
  - a) virus b) bacteria
  - c) protozoa d) bacteria

Q.2 Name/Give one word/Example (1×4= 4)

- a) Carrier of parasite of dengue.
- b) A microorganism that forms a link between living and nonliving.
- c) Chemicals used to control weeds.
- d) Organic substance obtained from the decomposition of plants and animals.

Q.3 Give reason (2×2= 4)

- a) Salt is a preservative.
- b) Microorganisms can render food harmful.

Q.4 Answer the following (2×2= 4)

- a) Why should the grains be dried before storage?
- b) Explain how does a vaccine work.

Q.5 a) i) Name the two diseases caused in animals by microorganisms. (3×3= 9)  
ii) Who discovered the vaccine for small pox?

- b) Observe the diagram and answer the questions given below:



- i) Identify the microorganism and name the major group under which it is placed.
- ii) Label part a and b.
- c) Explain the drip system of irrigation. Draw a diagram to support your answer.
- Q6 i) Write the mode of transmission and causative organism of the following diseases
- a) Rust of wheat
- b) Measles
- c) Polio
- ii) Draw a neat diagram of the algae that has ribbon shaped chloroplast. Label any two parts in it. (3+ 2= 5)