

GREENLAWNS SCHOOL, WORLI

TERMINAL EXAMINATION: 2016-17

General Science

Std: VII

Marks: 80

Date:06/10/2016

Time: 1½ hrs

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Carefully read this paper in the first ten minutes. Your answers should be concise and contain scientific terms. All answers have to be written on the answer script.

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Q.1) Name the following: [10]

- a. A large muscular sheet that forms the floor of the chest cavity.
- b. S.I. unit of heat.
- c. Image that can be captured on a screen.
- d. Formation of a brown flaky layer on iron.
- e. Instrument used for measuring rainfall.
- f. Product of anaerobic respiration in plants.
- g. The band of seven colours formed on a white screen when a beam of white light is passed through a glass prism.
- h. Voice box located at the entrance of trachea.
- i. The study of weather.
- j. Tiny openings on the bark of woody plant that bring about respiration.

Q.2) Fill in the blanks: [10]

- a. In the reaction between copper sulphate and iron nails, the blue colour of the solution changes to \_\_\_\_\_ due to the formation of a new substance called \_\_\_\_\_
- b. \_\_\_\_\_ mirror cannot form magnified image.
- c. The \_\_\_\_\_ of birds are modified into wings for flying.
- d. All metals are \_\_\_\_\_ conductors of heat.
- e. Normal breathing rate is about \_\_\_\_\_ times per minute.
- f. The distance that light travels in a year is called a \_\_\_\_\_
- g. Conduction happens only in \_\_\_\_\_
- h. \_\_\_\_\_ are instruments used for measuring humidity.
- i. Lime water turns \_\_\_\_\_ when it comes in contact with carbon dioxide.

Q.3) Define the following: [5]

- |                        |                        |
|------------------------|------------------------|
| a. Radiation           | d. Reflection of light |
| b. Enamelling          | e. Adaptation          |
| c. Aerobic respiration |                        |

Q.4) State whether the following statements are true or false. If false, rewrite the correct statement: [5]

- a. Dark coloured clothes are preferred during summer.
- b. Bicycle handles and car bumpers are coated with nickel or chromium.
- c. The exhaled air has more carbon dioxide and water vapour than the inhaled air.
- d. Einstein as the first to obtain the spectrum of sunlight by passing it through a prism.
- e. Mountains and hilly areas record higher temperature than at sea level.

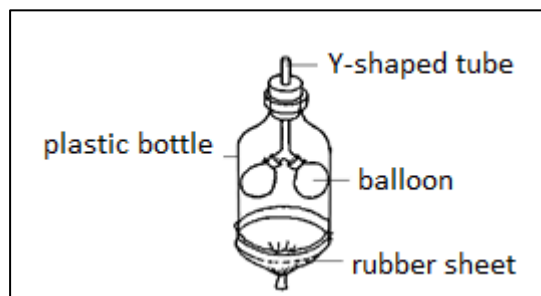
- Q.5) Give one difference between the following pairs on the basis of what is indicated in the brackets: [5]
- Inspiration and expiration (shape of diaphragm)
  - Convection and radiation (direction of heat transfer)
  - Physical and chemical change (mass)
  - Temporary and permanent adaptation (example)
  - Concave and convex mirror (use)

- Q.6) Give scientific reasons for the following: [5]
- Asbestos sheets are preferred over iron sheets for roofing.
  - We must always breathe through our nose.
  - Spoiling of food is a chemical change.
  - Red eyed frog has sticky pads on its feet.
  - Human eye is actually a lens.

- Q.7) Answer in short: [10]
- What is the function of epiglottis and alveoli in respiration?
  - Mention any two salient features of weather report.
  - Why are rooms provided with ventilators near the ceiling?
  - Name any two parts of a vacuum flask and give their functions.
  - How will you distinguish between a concave and convex mirror without actually touching it?

Q.8) Answer the following diagram based questions:

- a. The figure given below represents an apparatus which is used to demonstrate the process of breathing:



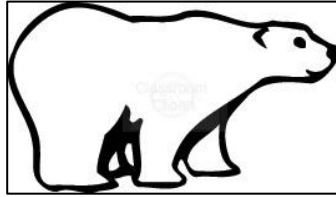
- What is the aim of this experiment? [1]
  - What do the balloons, plastic bottle and rubber sheath represent? [1½]
  - Which breathing movement is indicated in this figure? [½]
  - What will happen when the rubber sheet is pushed upwards? [1]
- b. Observe the object given below and answer the questions that follow:



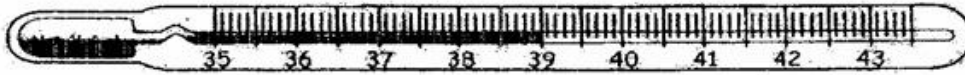
- Name the type of lens used in this object. [1]
- What kind of image is produced by such a lens? [1½]
- Give two other uses of the lens mentioned by you in (i). [1]
- What is the other name of this lens? [½]

c. Describe the adaptations found in the following species:

[6]



d. Observe the figure given below and answer the questions that follow:



- i. What type of thermometer is this? [1]
- ii. Why do you need to jerk the thermometer before use? [1]
- iii. How is this thermometer different from its other type? [1]
- iv. List any 2 precautions to be observed while reading this thermometer. [2]
- v. What is the liquid used in this type of thermometer and why? [3]

Q.9) Answer in brief:

- a. Draw and explain sea breeze. [4]
- b. Complete the equations:
  - i. Glucose + Oxygen  $\rightarrow$  \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ [4]
  - ii. Glucose  $\rightarrow$  \_\_\_\_\_ + energy

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