FIRST TERM EXAMINATION, 2011–2012

Time Allowed : 3 hrs.

SCIENCE

CLASS–VIII

M.M. : 80

General Instructions :
1. All questions are compulsory.
2. Attempt the questions section-wise and neatly.

SECTION-A

1. Give one word answer :
   (a) Frictional force exerted by fluids.
   (b) Body part responsible for production of sound in human beings.
   (c) Characteristic of vibrating body which determines loudness.
   (d) Unit of pressure. 

\( \frac{1}{2} \times 4 = 2 \)

2. (a) Which property of metals makes them suitable for use in jewellery?
   (b) Why do we hear the sound of an approaching car before the car reaches us?
   (c) Classify the following as biodegradable/non-biodegradable substances : wood, metal cans, polybags, paper.
   (d) Give two examples which indicate that nylon fibres are very strong.
   (e) In a tug of war, side A applies 10 N force and side B applies 8 N force. Which side will the rope move? Why?
   (f) Suppose your writing desk is tilted a little. A pen kept on it starts sliding down. Show the direction of friction force acting on it.
   (g) Name a non-metal that is powdery and is yellow in colour. Write its symbol.
   (h) Name the type of force involved in the following cases:
      (i) Raindrops falling on earth.
      (ii) After running a comb through your dry hair, when it was brought near to some small pieces of paper, some of the pieces of paper got stuck on the comb.

\( 1 \times 8 = 8 \)

3. Answer the following questions briefly:
   (a) The bulb does not glow in the set up shown in the figure. List the possible reasons.

[Diagram of a simple electrical circuit]

P.T.O.
(b) What do you understand by the term 'synthetic fibre'?
(c) What happens when iron filings are dipped into a copper sulphate solution? Give a word equation to represent the reaction.
(d) We can't hear the sound of exploding the meteors although we can see them. Give the reason.
(e) Explain why plastic containers are favoured for storing food.
(f) Why do Kabbadi players rub their hands with soil?
(g) "Manufacturing of synthetic fibres is actually helping in conservation of forests." Comment. (2 × 7 = 14)

4. How would pressure change, if:
   (a) Area is doubled keeping force constant.
   (b) Force is doubled keeping area constant. (3)

5. "Avoid plastics as far as possible". Comment. (3)

6. A pendulum oscillates 40 times in 4 seconds. Find its time period and frequency. (3)

7. Ram burns a piece of charcoal and collects the gas evolved in a gas jar.
   (a) How will be find the nature of the gas?
   (b) Write down word equations of all the reactions taking place in this process. (3)

8. (i) Give two factors on which friction depends?
   (ii) Arrange the following in their increasing order of magnitude.
       Static friction, sliding friction, rolling friction.
   (iii) Differentiate between static and sliding friction. (1 × 3 = 3)

9. Give reason:
   (a) Melamine is used for making kitchenware and fabrics which resist fire.
   (b) A piece of coal breaks into pieces when hammered whereas an iron nail does not.
   (c) Rayon is obtained from wood pulp, but is still called a synthetic fibre. (1 × 3 = 3)

10. Complete the following reactions:
    (a) Copper sulphate (aq) + Zinc →
    (b) Sulphur dioxide + Water →
    (c) Magnesium oxide + Water →
    (d) Sodium + dil. nitric acid →
    (e) Copper + moist air → (1 × 5 = 5)
11. (i) Define Electroplating:
   (ii) Explain the process of electroplating of copper.
   (iii) Why are food storing cans electroplated with tin?  

\[ (1 + 3 + 1 = 5) \]

**SECTION-B**

(M.M. : 28)

1. What does 'sustainable utilisation' of natural resources mean?  

2. In her effort to be environmental friendly Anu separated some household waste into two bags.

![Diagram showing separation of waste]

- Paper cub
- Chicken bone
- Wooden stick

- Broken bottle
- Styrofoam can
- Ceramic plate

What property of materials did she use to separate them into two groups?  

3. Why is it necessary to reduce moisture in newly harvested grains before storage?  

4. Give two examples of microorganisms which act as nature's scavengers?  

5. Take a beaker and fill it up with water. Put a handful of seed in it and stir well. Some seeds may float on water. Separate them out and observe them from inside under a hand lens. What will you observe?  

6. Now-a-days, it is frequently reported the newspapers that wild animals attack people living in villages. Why do you think this happens?  

7. (a) If you are asked to grow maize and wheat, discuss the cropping pattern you will adopt to grow them and why?
   (b) How is paddy planted in the fields? Which season will be most suitable for cultivating paddy?  

8. Differentiate between:
   (a) Sanctuary and Zoo
   (b) Ecosystem and biosphere.  

9. Anurag picked up a packet of Sugar Syrup and saw that it was puffed. He turned the packet around and noticed the lines 'Discard if the packet is puffed'. Why was the packet puffed?  

10. Man has been clearing huge areas of forest to make way for urban development. This has led to negative effect which promoted international efforts to reduce human activity. State two positive impacts of conservation of forests.  

\[ (3) \]
11. What are weedicides? What precautions should be taken while handling the weedicides?  
(1 + 2 = 3)

12. How does a vaccine work? Which childhood diseases can be prevented by vaccination?  
(1 + 2 = 3)

13. How does deforestation cause:
   (a) Desertification,
   (b) Global warming,
   (c) Floods.  
(3)

14. (a) Name two diseases which can be prevented by drinking boiled water.
   (b) What are carriers? How do they spread diseases?
   (c) Microorganisms cause diseases to plants and animals. Mention two other ways in which they are harmful to mankind.  
(1 + 2 + 2 = 5)