SECTION - A

1. Give one term for the following. (0.5 x 10 = 5)

a. The process of taking out threads from the cocoon for use as silk.

b. A bacterium which causes sorter’s disease.

c. Source from which litmus is extracted.

d. Reaction between an acid and a base to form salt and water.

e. In American continent cyclones are called by another name.

f. The calm centre area of a cyclone.

g. A thin wire in the bulb that gives off light.

h. A safety device which prevents damages to electrical circuits and possible fires.

i. The process involved in the formation of rainbow.

j. An image that can be obtained on the screen.
2. **Give reasons for the following:** (1 x 8 = 8)

   a. Shearing does not hurt the sheep.
   b. Caterpillars shed their skin when they grow bigger.
   c. Solid baking soda does not change colour of dry litmus paper.
   d. We should prepare solutions in distilled water.
   e. We feel warmer on a cloudy day.
   f. In summer winds blow from oceans towards the land.
   g. Electrical components are represented using symbols in circuit diagram.
   h. Nichrome is used to make filament of an electric bulb.

3. **Answer the following questions in one/two sentences.** (1 x 6=6)

   a. Why you would not like to buy a house with only window’s and no ventilators?
   b. How are winds generated?
   c. Name two things in which lenses are used.
   d. What type of sewage disposal system will be suitable for places where there is no sewerage system?
   e. Name two organic impurities in waste water.
   f. Name two diseases which are caused by bacteria present in waste water.

4. **Answer the following questions briefly:** (2 x 8=16)

   a. Explain how silkworm transforms into pupa.
b. The soil in a field is highly acidic. Suggest two substances that can be added to this soil to reduce the acidity. Give reason for your choice.

c. State two factors that cause generation of wind currents.

d. How is the element used in electrical appliances different from the wires normally used for making electric circuits?

e. Name four different naturally occurring acids and their source.

f. Why human excreta is a health hazard?

g) Write two uses of biogas produced during decomposition of sludge by anaerobic bacteria.

h) Explain the relationship between sanitation and disease.

5. Answer the following questions in 30-50 words (or as instructed) (3 x 5 = 15)

a. You have been provided with three test tubes containing distilled water, sulphuric acid and sodium hydroxide. If you are given only red litmus paper, how will you identify the contents of each test tube?

b. Give three examples showing high speed winds create low air pressure.

c) Design an activity to show the magnetic effect of electric current.

d) What is real image? Give one situation where a real image is formed and one situation where virtual image is formed.

e) Describe any three steps involved in getting clarified water from waste water?

6. Explain the construction and working of an electric bell with the help of well labeled diagram. (5)

OR

Explain the various stages in the life cycle of silk moth.

7. Design an activity to show that white light is made up of seven colours. What is the process of splitting of light into seven colours called?
OR

Explain the various steps involved in the processing of wool. Name any two breeds of sheep. (4 + 1 = 5)

SECTION – B

8. Give one term for the following. (0.5 x 10 = 5)

   a. The underlying layer of vegetation that grows beneath the forest canopy.
   b. Blood cells which helps in the formation of a clot.
   c. The flowers which contain either the pistil or the stamen.
   d. Conducting tissue which translocates prepared food from leaves to other parts of the plants.
   e. Red pigment present in the blood.
   f. Asexual reproductive structures protected by a thick covering.
   g. It influences climate, water cycle and air quality.
   h. The branchy part of a tree above the stem.
   i. It helps forests to grow and regenerate.
   j. It helps in maintaining the supply of nutrients to the growing plants.

9. Give reasons for the following: (1 x 8 = 8)

   a. Root hairs are present in abundance in a plant.
   b. Fall in platelet count can be fatal for the person.
   c. Arteries have thick and elastic walls.
   d. Forest is a purifier of air and water.
   e. The process of transpiration is useful for plants.
f. Single tuber of potato can form many plants.
g. Plants produced by sexual reproduction have characters of both the parents.
h. Healthy plants are not formed if many seeds fall at same place.

10. Answer the following questions in 20-30 words (or as instructed) (2 x 5 = 10)

a. Explain why there is no waste in the forest.
b. State two advantages of vegetative propagation.
c. What is pulse? Name one place in your body where you can feel pulse. What is the pulse rate of an adult person while resting?
d. Give two differences between arteries and veins.
e. How does fertilization take place in flowers?
f. Name any two methods of asexual reproduction with examples.

11. Answer the following questions in 30-50 words (or as instructed). (3 x 4 = 12)

a. Describe any three ways in which seeds are dispersed.
b. Sketch the reproductive parts of a flower.
c. What are unisexual flowers? Name two unisexual and two bisexual flowers.
d. Mention three functions of blood.

12. How does transport of water and minerals take place in plants. Draw the diagram to show the path of transport of water and minerals and label any two parts.

OR
If the forests disappear then what would be the consequences. Mention any five of them.