Chapter 9: Environmental management

Question 1: Fill in the blanks:
(1) Of the abiotic factors that affect biodiversity by far the most important is **geographic favourability**.
(2) A description of the climatic conditions of short duration in a particular area is **weather**
(3) Irrespective of the progress of human beings, we have to think about **climate**
(4) Establishments where various climatic factors are recorded are called **observatory**

Question 2. Find the odd one out:
(1) Spoilt vegetables, Broken C D player, Empty sauce bottle, Worn out nails.
Answer: Spoilt vegetables. (Others are nonbiode- gradable wastes.)
(2) Paint residue, Sludge, Ash, Dead rat.
Answer: Dead rat. (Others are industrial wastes.)
(3) Amputated limb, Cotton bandages, Plastic carry bag, Syringe.
Answer: Plastic carrybag. (Others are biomedical wastes.)
(4) Cow dung, Fish pieces, Rotten raisins, Resin.
Answer: Resin. (Others are wet or biodegradable solid waste materials.)

Question 3. Answer the following questions:
(1) Which articles are included in dry and wet waste?
Answer. (1) Articles such as used plastic bags, plastic packing materials, rubber, metals, glass, resins and synthetic materials, etc. are dry solid wastes.
(2) Articles such as unusable vegetables, fruits, eggs, fish and meat, waste food, plant leaves, agricultural waste, cow dung, etc. are wet solid wastes.
(2) Write a short note on Spead of diseases:
Answer:

(i) Many infectious diseases such as typhoid, bacillary dysentery, amoebic dysentery, diarrhoea, cholera, etc. are spread near the waste disposal area.
(ii) Open dumping of wastes creates unhygienic environment which affects public health.
(iii) Disease spreading vectors such as mosquitoes, flies and rodents breed at the site of waste disposal areas, causing unhygienic and hazardous effects.
(iv) Waste food, rotten vegetable matter or plastic carry bags are directly eaten by stray animals. This results in serious disorders like stomach cancer in them.

(5) Write a short note on Environmental pollution.

Answer: Toxic and harmful gases are released, when the decomposition and burning of solid wastes take place. In order to reduce the volume of solid wastes, burning is done but it releases toxic smoke and suspended particulates along with toxic gases.

(6) Write a short note on water pollution.

Answer: Leachate and percolation of waste water from the solid waste dumping site causes problems. The toxic substances get mixed with groundwater reserves, rivers, lakes, etc. and cause contamination of nearby water sources. Pathogenic organisms may contaminate the water and can further cause spread of hazardous diseases.

(7) Write a short note on soil pollution.

Answer: Various beneficial micro- organisms present in the soil bring about the decomposition process. But due to dumping of the synthetic materials, plastic bags, etc. micro- organisms die. The process of decomposition is thus hampered. Soil either becomes acidic or alkaline due to such waste dumped callously.

(8) RICE remedy.

Answer.

RICE is an acronym of four words. R-Rest; I Ice; C Compression; E Elevate

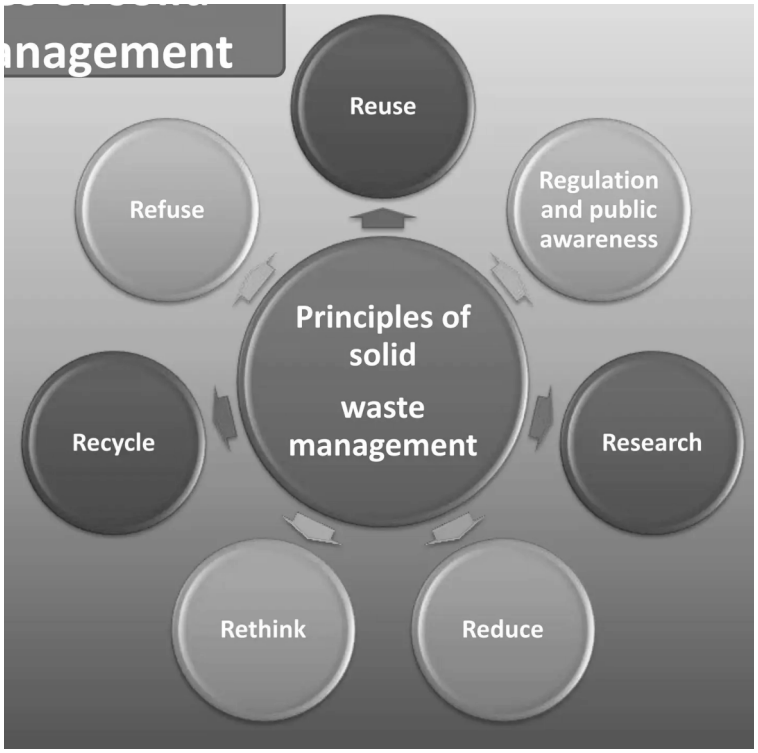
- The 'RICE' remedy should be applied at the time of injuries such as sprains, twisting and contusion, the 'RICE' remedy should be applied.

1. Rest: Rest refers to making the victim to sit in a relaxed position.
2. Ice: An ice-pack is applied on the injured part of the victim.

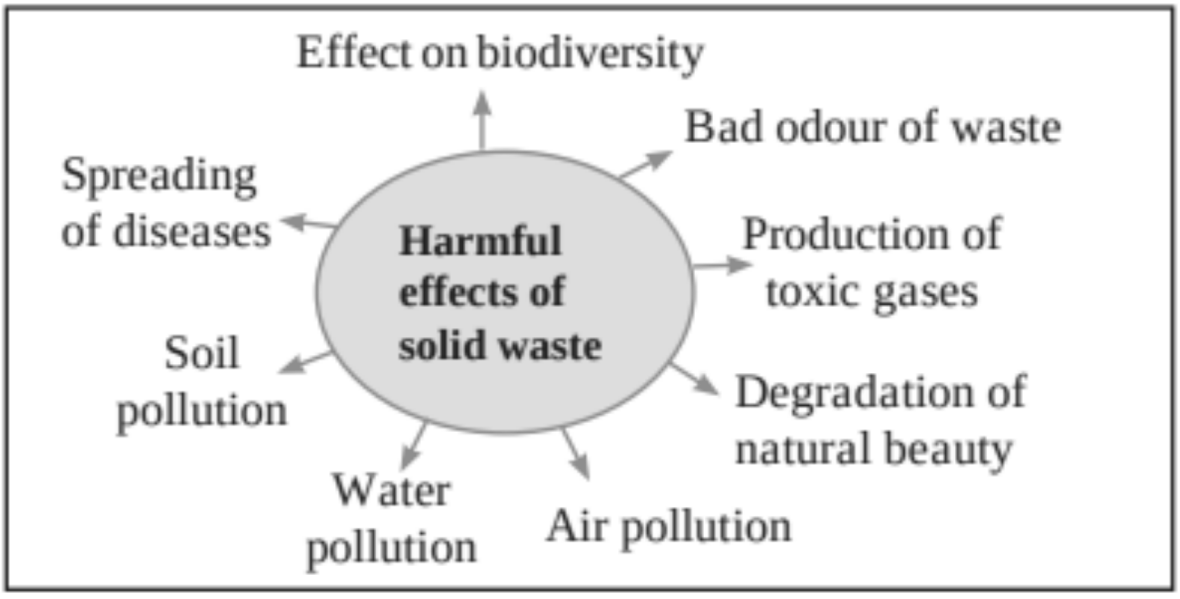
3. Compression: The injured part is gently- massaged. This is called compression.
4. Elevate: The injured part is kept in a raised or elevated position.

Question 4. Sketch neat and well labelled diagram of

(1) Principles of solid waste management



(2) Harmful effects of solid waste



Question 5. Write 2 waste of it:

Answer:

Classification	Source
Domestic waste	Waste food, paper, plastic paper, plastic bags, vegetable waste, fruit skins, glass and sheet metal articles, etc.
Industrial waste	Chemicals, pigments, sludge, ash, metals, etc.
Hazardous waste	Chemicals generated in various industries, radioactive materials, explosives, infectious materials, etc.
Farm/Garden waste	Leaves, flowers, branches of trees, crop residues like straw, animal urine and dung, pesticides, remains of various chemicals and fertilizers, etc.
Electronic waste	Non-functional TV sets, cell phones, music systems, computers and their parts, etc.
Biomedical waste	Bandages, dressings, gloves, needles, saline bottles, medicines, medicine bottles, test tubes, body parts, blood, etc. from clinics, hospitals, blood banks and laboratories.
Urban waste	Waste generated through household industries and large commercial and industrial establishments, carry bags, glass, metal pieces and rods, threads, rubber, paper, cans from shops, vegetable and meat markets, construction waste, etc.
Radioactive waste	Radioactive materials like Strontium-10, Cerium-141, Barium-140 and heavy water, etc. generated from atomic energy plants, uranium mines, atomic research centres, nuclear weapons testing sites, etc.
Mining waste	Remains of heavy metals like lead, arsenic, cadmium, etc. from mines.