1. Answer the following questions.

(i) Which are the two main climatic factors responsible for soil formation?

Answer: Two main climatic factors responsible for soil formation are temperature and rainfall, in which rainfall influences the rate of weathering and humus formation.

(ii) Write any two reasons for land degradation today.

Answer: The overuse of chemical fertilizers and deforestation are the two main reasons for land degradation. The growing population and their ever-growing demand has led to large scale destruction of forest cover and arable land and has created a fear of losing this natural resource.

(iii) Why is land considered an important resource?

Answer: Land is considered an important resource because it can be put to use for various purposes like agriculture, forestry, mining, building houses, roads and setting up of industries.

(iv) Name any two steps that the government has taken to conserve plants and animals.

Answer: Two major steps taken by the government to protect and conserve plants, animals and natural vegetation are as follows:

- National parks, wildlife sanctuaries, biosphere reserves are made to protect our natural vegetation and wildlife.
- Awareness programmes like social forestry and tree plantation- 'Vanamahotsava' are organised to conserve forests, which are a valuable natural resource.

(v) Suggest three ways to conserve water.

Answer: Three main ways to conserve water are:

a. Increasing forest cover and other vegetation to slow the surface runoff

b. Replenishing underground water through rainwater harvesting

c. Reducing the loss of water in irrigation and shifting to less water-intensive methods of agriculture

2. Tick the correct answer.

(i) Which one of the following is NOT a factor of soil formation?

(a) Time

(b) Soil texture

(c) Organic matter

Answer: b. Soil Texture

(ii) Which one of the following methods is most appropriate to check soil erosion on steep slopes?

(a) Shelterbelts

(b) Mulching

(c) Terrace cultivation

Answer: c) Terrace cultivation

(iii) Which one of the following is NOT in favour of the conservation of nature?

(a) switch off the bulb when not in use

(b) close the tap immediately after using

(c) dispose poly packs after shopping

Answer: c) Dispose poly packs after shopping

3. Match the following.

Column A	Column B
Land use	prevent soil erosion
Humus	narrow zone of contact between the lithosphere, hydrosphere and atmosphere
Rock Dams	productive use of land
Biosphere	organic matter deposited on top soil

	contour ploughing

Answer:

Column A	Column B
Land use	productive use of land
Humus	organic matter deposited on top soil
Rock Dams	prevent soil erosion
Biosphere	narrow zone of contact between the lithosphere, hydrosphere and atmosphere

4: **State whether the given statement is true or false. If true, give the reasons.**

(i). Ganga–Brahmaputra plain of India is an overpopulated region.

True: River valley and plains offer suitable land for agriculture. Hence, they are densely populated.

(ii) Water availability per person in India is declining.

True: Increasing population, increasing urbanization, the rising standards of living and the rising demands for food and cash crops are leading to shortages in the supply of freshwater. The shortages are either due to drying up of water sources or water pollution.

(iii) Rows of trees planted in the coastal areas to check the wind movement are called intercropping.

False: Rows of trees are planted to check the wind movement and protect soil cover. These are called shelterbelts.

(iv). **Human interference and changes of climate can maintain the ecosystem.**

False: Climate change and human interferences can cause the loss of natural habitats, and hence destroy the ecosystem.