



Give the marks for the points in the marking scheme; an answer in other words that says the same is right.

1 Key words

1. biodiversity
2. natural resource
3. non-renewable
4. wetland
5. depletion
6. biodegradable
7. reduction
8. recycling

K • 4

Each carries 0.5 mark.

2 Label the diagram

1. Living (biotic) e.g.
2. Non-living (abiotic) e.g.

3. Renewable
4. Non-renewable

U • 2

Each carries 0.5 mark.

3 Multiple choice

- i. b. coal

K • 1

Coal took millions of years to form from buried plants, so the coal we burn can't be replaced. Air, water and soil are renewed by nature.

- ii. b. by conserving wetlands

U • 1

Wetlands beside rivers soak up flood water like a sponge and release it slowly, so floods downstream are smaller. That protects the people, houses and fields on the banks.

- iii. c. recycle

K • 1

The old plastic is melted and molded into a new article: that is recycling.

- iv. a. the presence of different kinds of living things, suited to their environments

K • 1

Biodiversity is the **variety of life**: many different kinds of organisms, each living in the environment it is suited to.

- v. c. a polythene bag

U • 1

Bacteria and fungi can break down peels, paper and dung in weeks or months. They can hardly break down polythene at all: it stays in the soil and water for hundreds of years.

4 Very short answers

- a. MARKING SCHEME

K • 1

✓ Koshi Tappu (or Ghodaghodi, Bishazari Lake).

- b. MARKING SCHEME

K • 1

✓ Reduce, reuse, recycle (all three).

- c. MARKING SCHEME

U • 1

✓ Any one correct water reserve named.

- d. MARKING SCHEME

A • 1

✓ Reuse.



5 Short answers

a. MARKING SCHEME

K · 2

- ✓ Natural resources: everything in nature that is useful to living things (water, air, soil, forests, minerals).
- ✓ Classified by origin (living and non-living) and by whether they can be replaced (renewable and non-renewable).

b. MARKING SCHEME

U · 2

- ✓ Any one difference, e.g. in reuse a thing is used again as it is; in recycling it is broken down, melted or pulped to make a new thing.
- ✓ Any second difference, e.g. reuse needs no factory and almost no energy, recycling is done in a factory with energy (or an example of each: a jar for salt; old paper made into new paper).

c. MARKING SCHEME

U · 2

- ✓ It soaks up and holds the flood water like a sponge.
- ✓ So less water rushes downstream (and it is let out slowly later).

d. MARKING SCHEME

A · 2

- ✓ It is renewable only if used no faster than nature replaces it.
- ✓ Cut faster than it grows back, the forest disappears.

e. MARKING SCHEME

U · 2

- ✓ Any one harm, e.g. it breeds flies, mosquitoes and rats that spread disease.
- ✓ Any second harm, e.g. it pollutes drinking water, burning it gives poisonous smoke, or cattle swallow plastic bags.

6 Long answer

ANSWER

U · 4

1. **Overpopulation:** more people need more food, water, land, fuel and houses, so forests are cleared and resources overused.
2. **Unmanaged agriculture:** too much chemical fertilizer and pesticide ruins the soil and pollutes the water; farming steep slopes without terraces washes soil away.
3. **Deforestation and forest fires:** forests are lost faster than they grow back, with their wildlife, soil and springs.
4. **Pollution:** wastes from homes, vehicles and industries make air, water and soil unfit to use.
5. **Natural disasters:** floods, landslides, droughts and earthquakes destroy forests, farmland and water sources.

Others: overconsumption, unplanned industrial and technical development, unbalanced migration.

MARKING SCHEME

- ✓ Any one cause explained, e.g. overpopulation: more people need more food, water, land and fuel.
- ✓ Any second cause, e.g. unmanaged agriculture: too much chemical fertilizer and pesticide ruins soil and water.
- ✓ Any third cause, e.g. deforestation and forest fires.
- ✓ Any fourth cause, e.g. pollution, overconsumption, careless development or natural disasters.



7 Think

ANSWER

HA - 2

They dry up. Without the forest, rain runs off the bare ground quickly instead of soaking in, so the groundwater that feeds the springs and wells is not refilled.

MARKING SCHEME

- ✓ The springs and wells dry up (or give less water).
- ✓ Rain runs off the bare slope instead of soaking in, so the groundwater isn't refilled.

8 Activity: The 3Rs at home and at school (Activity 4.4)

(not marked)

WHAT STUDENTS SHOULD FIND

House: a cloth bag for shopping, buying loose food (reduce); jars for storing food, old clothes passed on (reuse); old newspapers, bottles and tins sold to the kawadi (recycle). School: both sides of the paper (reduce); bottles as pen stands and pots (reuse); waste paper sent to a paper mill (recycle).

Biodegradable kitchen waste (vegetable and fruit peels, tea leaves, dry leaves) can be made into compost.

Marks by level	Knowledge	Understanding	Application	Higher ability	Total
Marks	11	15	3	2	31

