Unit 16 · Vegetation

WORKSHEET

Full marks 39

Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 39

1 Key words [4]

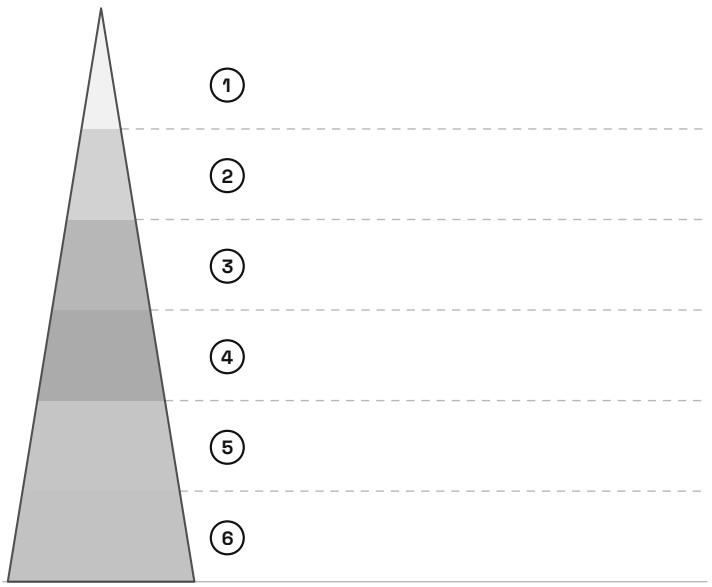
Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

afforestation	agroforestry	deforestation	ex-situ	germplasm	in-situ	Ramsar	recalcitrant	tree line	virgin

Vegetation that has never been disturbed at all is _____ vegetation. The height above which trees stop growing, around 4,000 m in Nepal, is the _____. Protecting species in their own natural habitat is _____ conservation; protecting them outside it is _____ conservation. Wetlands of international importance are listed as _____ sites. Any living material that can grow a new plant, such as seeds, cuttings or tissue, is _____. Growing trees together with crops on less productive farmland is _____. The loss of forest, when its land is turned to other uses or left bare, is _____.

2 Label the diagram [3]

The diagram shows Nepal's vegetation belts by altitude. For each belt 1 to 6, write its name and its height. Each carries 0.5 mark.



1. _____ **2.** _____

3. _____ **4.** _____

5. _____ **6.** _____

3 Multiple choice [5]

Choose the correct option for each of the following questions.

i. Which of these is a Ramsar site? [1]

a. Shivapuri Nagarjun National Park
b. Rara Tal
c. Dhorpatan Hunting Reserve
d. the National Botanical Garden, Godawari

ii. Above about 4,000 m in the Everest region you see only low shrubs and meadows, no trees. Which vegetation belt is this? [1]

a. subalpine forest
b. alpine vegetation
c. temperate forest
d. tropical forest

iii. Why are seeds in a seed bank kept dry and very cold? [1]

a. to kill the seeds so they don't rot
b. to slow down the life of the resting seed, so that it ages very slowly
c. to make them germinate faster when sown
d. to stop insects from finding them

iv. FRA Nepal (2010–2014) found 40.4% of Nepal under forest and 4.4% under other wooded land. What does the figure "about 44%" describe? [1]

a. the forest alone
b. forest and other wooded land together
c. land under agriculture
d. forest inside protected areas only

v. A hill slope above a village is cleared of its forest. In the next monsoon, which change is most likely? [1]

a. more rain soaks into the soil and the springs flow longer
b. more water runs off over the surface, carrying soil with it
c. the soil becomes deeper and richer in humus
d. less rain falls on the slope

4 Very short answers [3]

Write very short answers to the following questions.

a. Which was Nepal's first national park, and in which year was it set up? [1]

b. Name the oldest and largest botanical garden in Nepal. [1]

c. Why can't the seeds of mango and litchi be stored in an ordinary seed bank? [1]

5 Short answers [9]

Write short answers to the following questions.

a. Name three factors that decide the natural vegetation of a place in Nepal, and say how one of them works. [2]

b. Why does a sal forest not grow at Daman, at 2,300 m? [2]

c. A vulture chick bred at the Vulture Conservation and Breeding Center at Kasara is released over Nepal's hills. Explain how this uses both ex-situ and in-situ conservation. [2]

d. What role does vegetation play in erosion control? [3]

6 Numerical problems [4]

Solve the following problem. Show your working.

FRA Nepal (2010–2014) found that forest covered 40.4% of Nepal, which is 5.96 million hectares. In 2022, forest and other wooded land covered 46.1%. On test plots in the Middle Hills, forest lost about 0.1 tonne of soil per hectare a year and bare slopes about 15 tonnes. i. Use the FRA figures to find Nepal's area in hectares. ii. How many hectares did forest and other wooded land cover in 2022? iii. How many times more soil does a bare slope lose than a forested one? iv. How much soil would a 4-hectare slope above a village lose in a year if its forest were cleared?

Answer: _____

7 Long answers [8]

Write long answers to the following questions.

a. Explain the concept of seed banks and their importance. [4]

b. In the 1970s experts warned that Nepal's hill forests would be largely gone by 1990, yet forest and other wooded land now cover nearly half the country. Explain how community forests helped, and suggest two other measures that keep forests growing. [4]

8 Think [3]

A company offers to plant a fast-growing foreign tree in neat rows on a grassy hillside above your village. Give three questions you would ask before agreeing, and why each matters.

9 Activity: A vegetation walk (not marked)

Walk from the lowest to the highest point you can reach near your home or school, or look at the trees along a road you know that climbs a hill. Write down the main trees you see and roughly how high each place is (a phone map can tell you).

Place	Height (m)	Main trees or plants	Belt

Did the trees change as you climbed? Were they the same on a slope facing south and one facing north?