Land use (deforestation, peat bogs)

Q1. (2020)

A)

03.2	any **one** from: • compost / fertiliser • (burned as) a fuel	 allow to grow food / crops / plants allow to improve soil texture	1	AO1 4.7.3.3

B)

03.3	decay / burning of peat releases carbon dioxide (into the atmosphere) which is increasing global warming	do **not** accept peat bogs release carbon dioxide into the atmosphere allow a description of global warming or consequences if no other mark awarded allow removal of a carbon sink / store for 1 mark	1 1	AO1 4.7.3.3 4.7.3.5

Q2. (2020)

07.1	**Level 2:** Scientifically relevant facts, events or processes are identified and given in detail to form an accurate account.	4–6	AO1 4.7.3.4 4.7.3.5 4.7.1.2 4.7.3.6 4.7.2.2
	Level 1: Facts, events or processes are identified and simply stated but their relevance is not clear.	1–3	
	No relevant content	0	
	Indicative content Reasons • tropical rainforests cleared for land • that land used to raise cattle, plant rice or plant crops such as coffee • land cleared for mining • that land used to grow biofuels or palm oil • (temperate) forests cut down for wood for building / paper • (temperate) forests cleared for farming (wheat / sheep) Effects • less trees to take in carbon dioxide for photosynthesis • decay by microorganisms respiring releases carbon dioxide • burning waste wood releases carbon dioxide • build-up of carbon dioxide in atmosphere leads to greenhouse effect • build-up of carbon dioxide in atmosphere leads to global warming • consequences of global warming • habitat loss • leading to reduced biodiversity • leading to soil erosion Must consider both reasons and effects for Level 2.		

Q3. (2020)

A)

07.2	(forests) involve gas exchange with the atmosphere		1	AO1 4.4.1.2

B)

07.3	(in forests) carbon dioxide is used and oxygen is released whereas in lungs it is oxygen used and carbon dioxide is released	allow gas exchange occurs by diffusion in the leaves of trees, but involves ventilation / breathing in the lungs of animals	1	AO1 4.4.2.1

Q4. (2021)

02.3	compost	allow improving soil (texture / drainage / quality) ignore farming unqualified ignore as fertiliser	1	AO1 4.7.3.3
	burning **or** as a fuel		1	

Q5. (2022)

01.4	climate change has increased the area of deserts		1	AO3 4.7.2.2
	more water is used to grow crops		1	