

Mark schemes

Q1.

(a) (1) carrying

(2) niche

(3) abiotic

(4) community;;

*All 4 correct = **two** marks.*

*2 or 3 correct = **one** mark.*

*1 correct = **zero**.*

(3) Accept physical, chemical, physicochemical or non-living.

2

(b) 1. Conserve/protect species/plants/animals/organisms

OR

For (bio)diversity;

2. Conserve/protect habitats/niches

OR

Provides/many habitats/niches;

Accept conserving land (and ways of life) for indigenous communities.

3. Reduces climate change;

Accept 'reduces global warming', 'reduces greenhouse effect', 'removes/takes up carbon dioxide' or 'produces/provides oxygen'.

4. Source of medicines/drugs/wood;

5. Reduces erosion/eutrophication;

6. (For) tourism;

2 max

- (c) 1. Heat (loss) from respiration;
 2. (Food) not digested

OR

Not all eaten;

Accept faeces for not digested.

3. Excretion;
 Accept urine/urea for excretion.

3

[7]

Q2.

- (a) Automarked question – ☒ $N = I - (F + R)$;
(Box 2)

1

- (b) 21.6
OR
22;

1

- (c) Correct answer of $88500/89000 = 2$ marks;;

Incorrect but shows $1.8975/1.898/1.9/1.90$ (million) / $1897500 = 1$ mark

OR

Incorrect but shows $1.809/1.81/1.8/1.80$ (million) / $1809000 = 1$ mark

OR

Incorrect but shows $885/89/90$ with incorrect position of decimal point = 1 mark

Accept 90000 for 2 marks.

Accept any of the answers in any correct mathematical form e.g., shows 1.8 (million) as 1800000.

2

- (d) 1. Energy lost between/at trophic/feeding levels;
Accept description of trophic levels e.g., food chain.
2. Energy lost via respiration/excretion/faeces;
Accept energy lost via heat/metabolism/food not eaten/digested/muscle contraction/movement/maintaining temperature.
Reject energy used in respiration.
Reject energy produced/generated.

2

[6]