

Cambridge International AS & A Level

BIOLOGY (9700) PAPER 2

Past Paper Questions By Topic
+ Answer Scheme

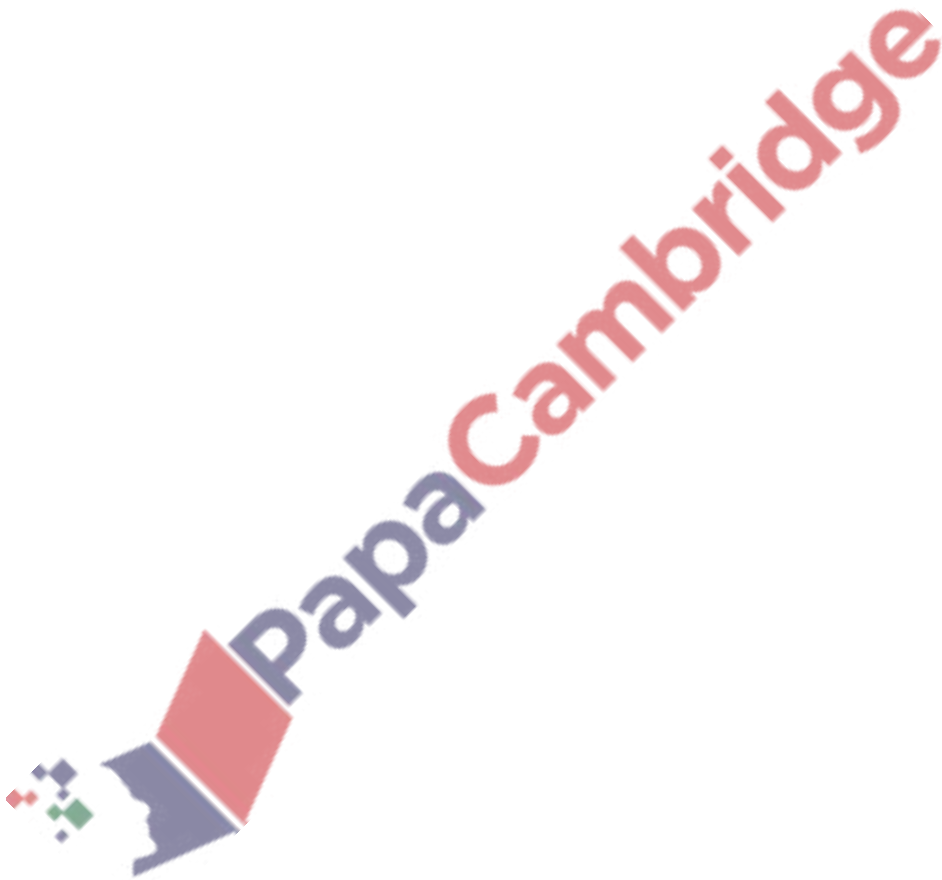
2015 - 2020

Complete Syllabus



Chapter 14

Biodiversity, classification and conservation



- (ii) Most crops have a PE of 1% to 4%. Sugar cane, an important crop plant for food production and for the production of biofuel, has a PE of 7% to 8%.

Suggest the advantages of growing crops with high PE for food production or for biofuel.

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.....
.....[2]

- (iii) Fertilisers containing nitrate are added to improve or maintain yield of crops such as sugar cane.

Name two organic compounds containing nitrogen that are made by plants and state one function of each in plant growth.

organic compound 1

function

.....

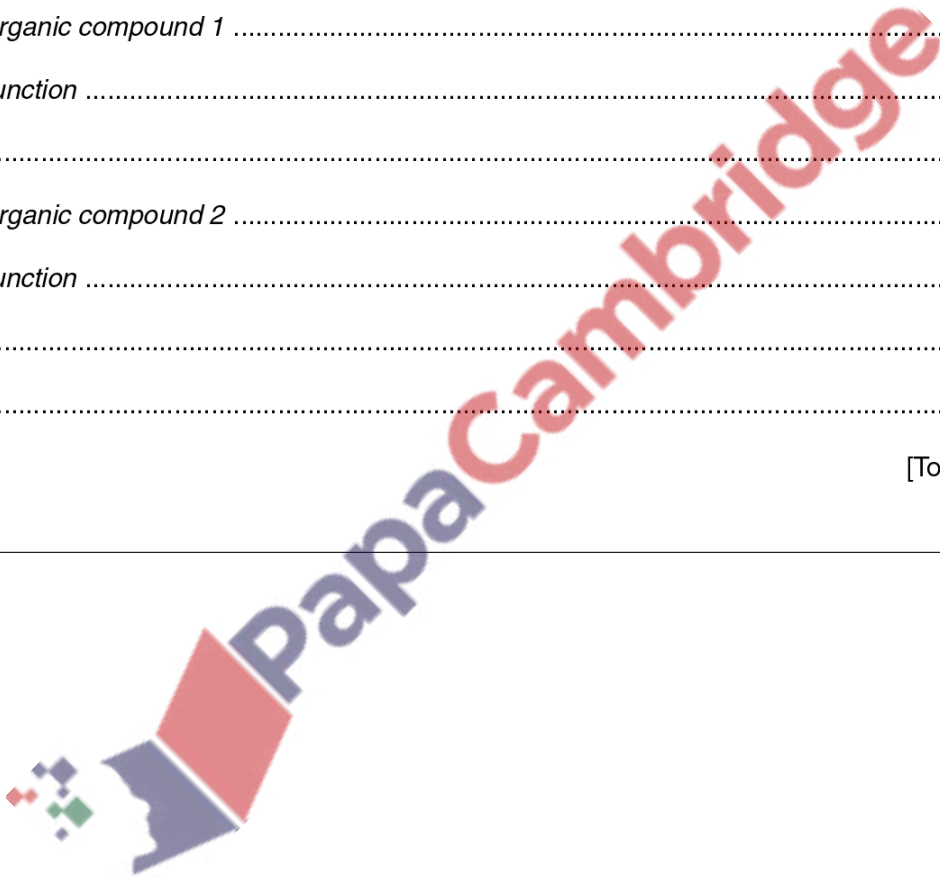
organic compound 2

function

.....

.....[2]

[Total: 12]

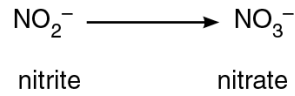


14.2 Conservation

245. 9700_s15_qp_23 Q: 6

In the oceans, parts of the nitrogen cycle involve different bacteria from those that are involved on the land.

A bacterium found in oceans is *Nitrococcus mobilis*, which carries out the following step in the nitrogen cycle:

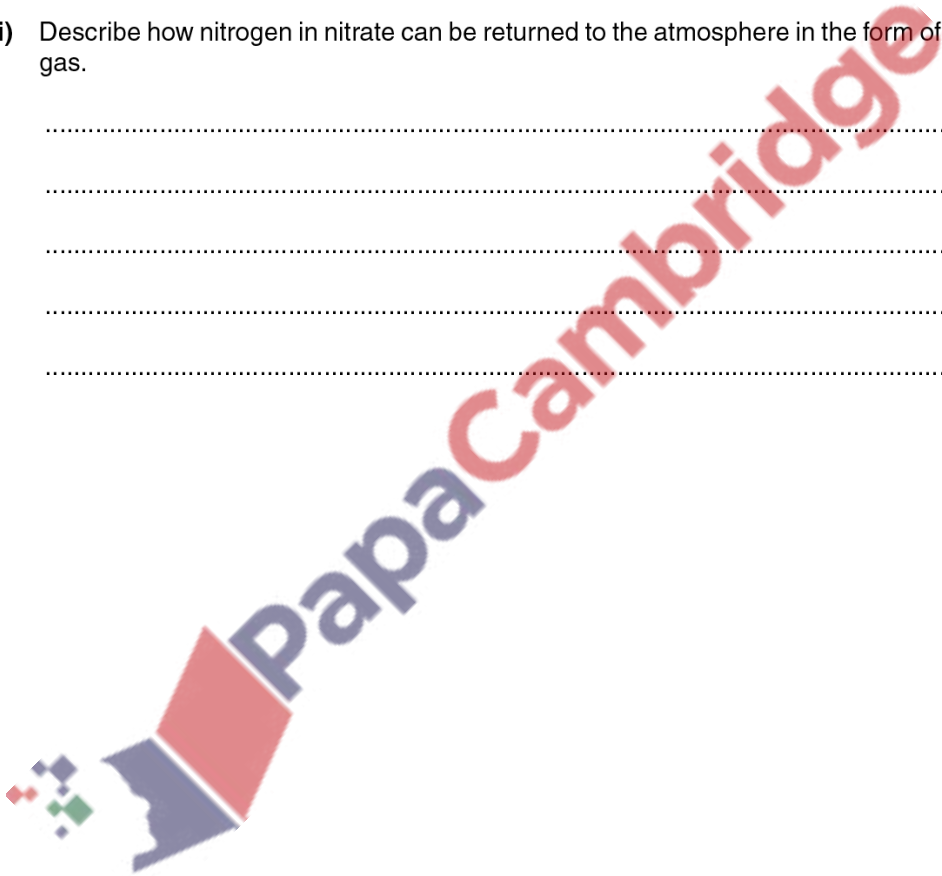


- (a) (i) Name the stage in the nitrogen cycle in which this step occurs.

.....[1]

- (ii) Describe how nitrogen in nitrate can be returned to the atmosphere in the form of nitrogen gas.

.....
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.....
.....[2]



- (b) Phytoplankton are microscopic photosynthetic organisms that are the main producers in ocean ecosystems. Their habitat is the upper layers of the oceans where sunlight can penetrate through the water.

Define the terms:

- (i) ecosystem

.....
.....
.....[2]

- (ii) producer


.....
.....
.....[1]

- (iii) habitat.

.....
.....
.....[1]

[Total: 7]

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