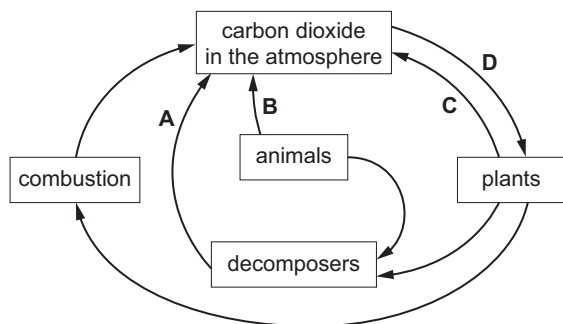


34 Which process in the nitrogen cycle is involved in the breakdown of amino acids in living organisms?

- A deamination
- B decomposition
- C denitrification
- D digestion

35 The diagram shows part of the carbon cycle.

Which arrow represents photosynthesis?



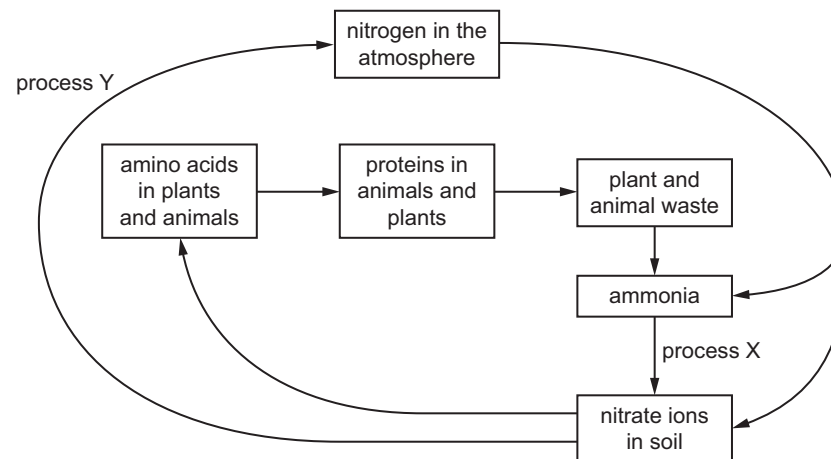
36 Which process needs microorganisms to break down protein to produce ammonium ions?

- A decomposition
- B denitrification
- C nitrification
- D nitrogen fixation

35 Which process removes carbon dioxide from the atmosphere?

- A combustion
- B decomposition
- C photosynthesis
- D respiration

36 The diagram shows part of the nitrogen cycle.



What are the names of process X and process Y?

	X	Y
A	deamination	denitrification
B	nitrogen fixation	deamination
C	nitrogen fixation	nitrification
D	nitrification	denitrification

3 Fig. 3.1 is a diagram of the nitrogen cycle.

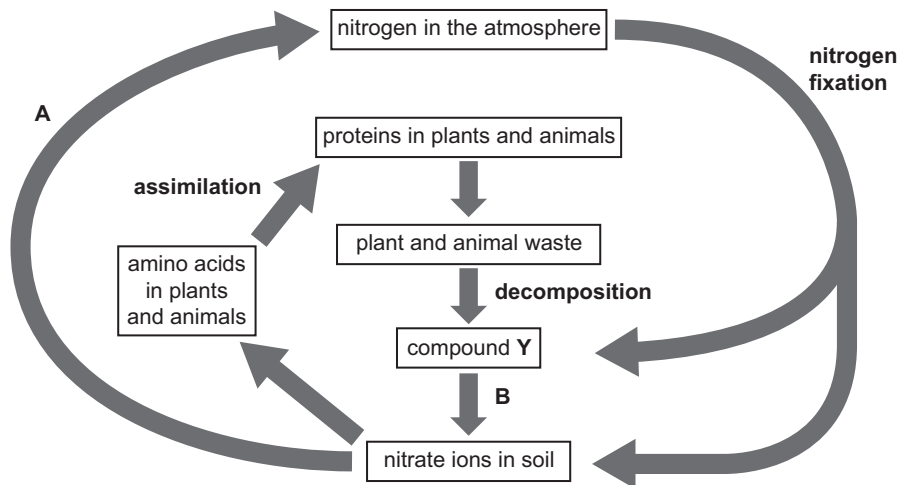


Fig. 3.1

(a) (i) State the names of processes **A** and **B** in Fig. 3.1.

A

B

[2]

(ii) State **two** ways that nitrogen fixation can occur.

1

2

[2]

(iii) State the name of compound **Y** in Fig. 3.1.

..... [1]

(iv) State the name of an organ in animals, where assimilation **and** deamination of amino acids occurs.

..... [1]

(v) Describe the process of deamination.

.....

 [2]

(b) Complete the sentences about pollution of the air by writing the appropriate words or phrases in the spaces provided.

Methane is a pollutant gas that contributes to the enhanced
 and climate change. Methane is released into the atmosphere from cattle and from the
 farming of crops.

..... is a gas that is absorbed by trees in the process
 of This gas is released into the atmosphere by the
 of fossil fuels, where it also contributes to climate change. [5]

[6]

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organic material
↓
ammonium ions →^X nitrate ions
↑
nitrogen gas

A decomposition
B denitrification
C nitrification
D nitrogen fixation