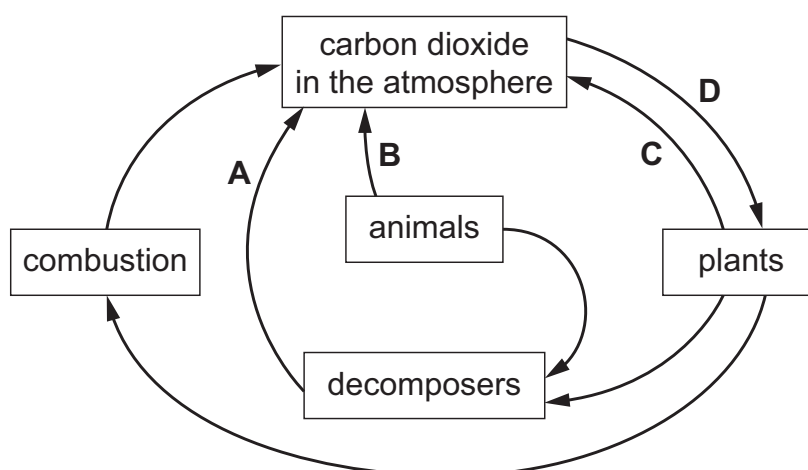


34 Which process in the nitrogen cycle is involved in the breakdown of amino acids in living organisms?

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

35 The diagram shows part of the carbon cycle.

Which arrow represents photosynthesis?



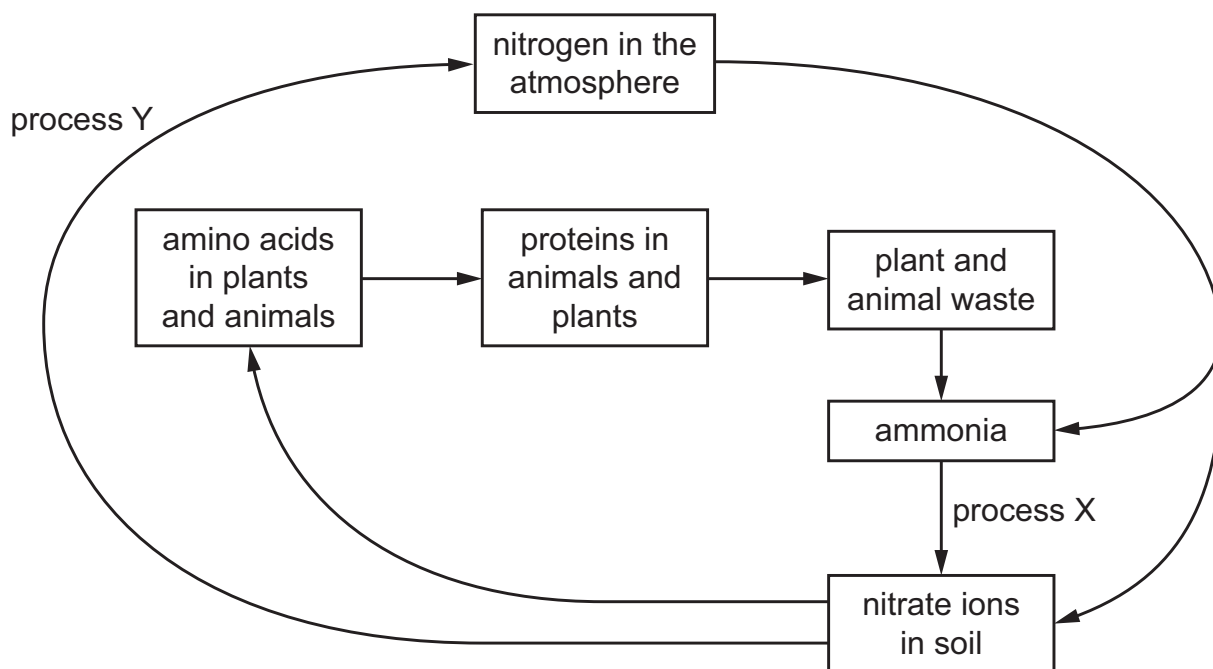
36 Which process needs microorganisms to break down protein to produce ammonium ions?

- 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.

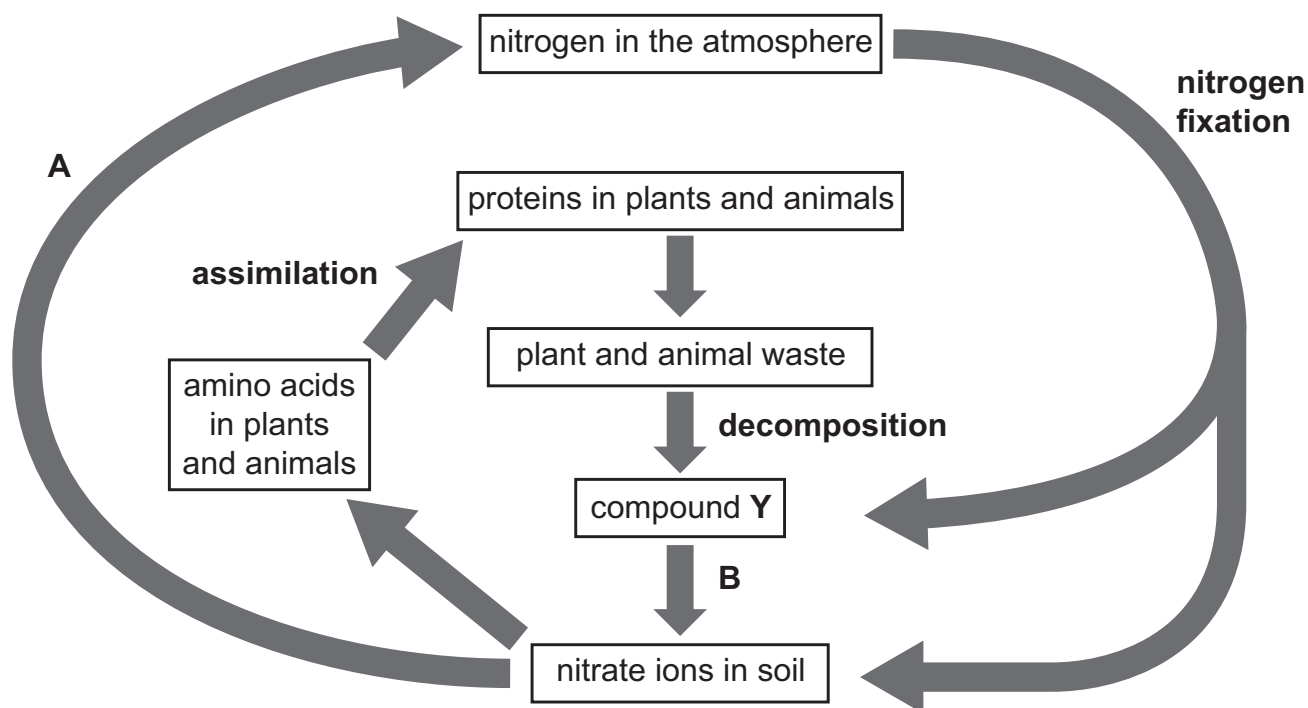


Fig. 3.1

(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]

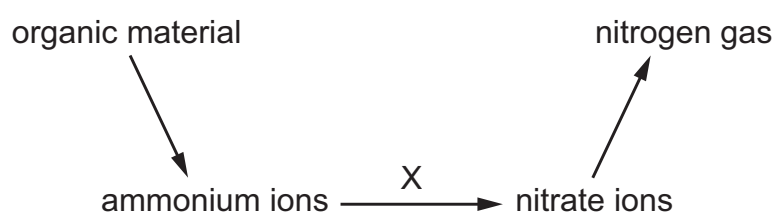
(c) Explain the process of eutrophication in aquatic ecosystems.

[6]

[6]

[Total:19]

37 The diagram shows part of the nitrogen cycle.



What is the process labelled X in the diagram?

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

37 Which process in the nitrogen cycle can be caused by lightning and bacteria?

- A** deamination
- B** denitrification
- C** nitrification
- D** nitrogen fixation

35 The processes listed affect the concentration of carbon dioxide in the atmosphere.

- 1 increased deforestation
- 2 increased tree planting
- 3 decreased fossil fuel combustion
- 4 increased fossil fuel combustion

Which processes increase the concentration of carbon dioxide in the atmosphere?

- A** 1 and 3 **B** 1 and 4 **C** 2 and 3 **D** 2 and 4