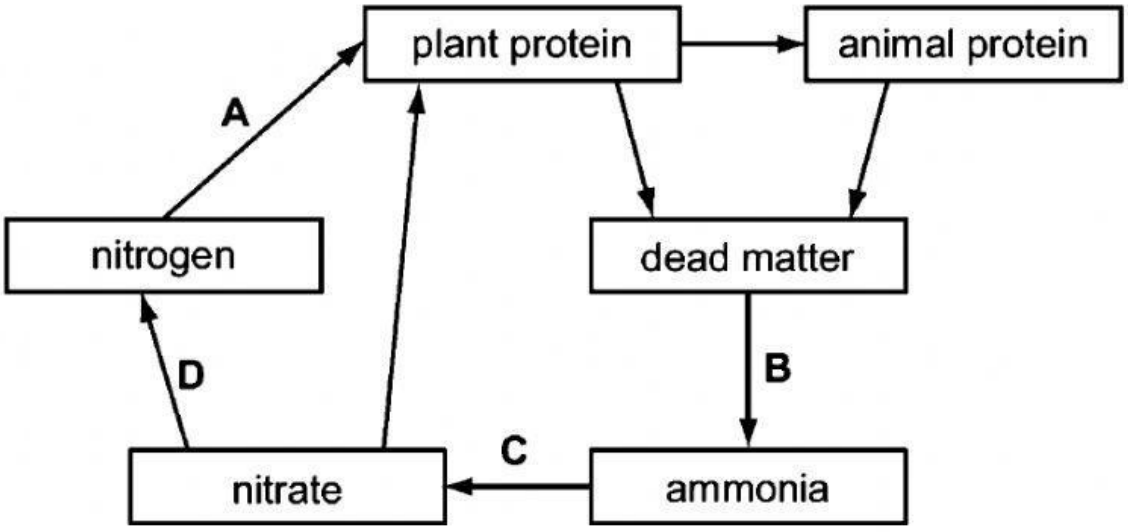
**NITROGEN CYCLE**

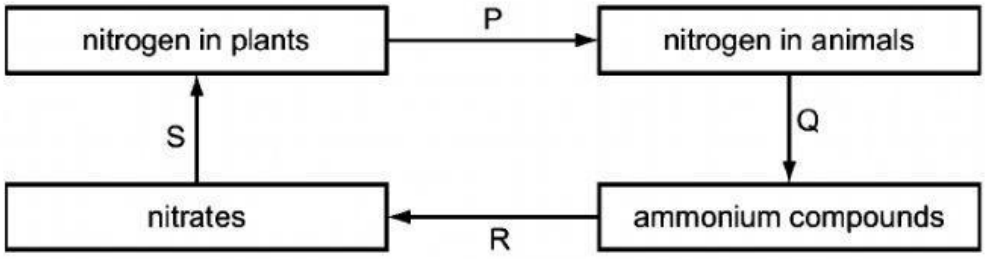
1. Which group of bacteria convert ammonia into nitrates in the nitrogen cycle?
   - **A** anaerobic bacteria
   - **B** denitrification bacteria
   - **C** nitrifying bacteria
   - **D** nitrogen- fixation bacteria

2. The change of nitrite ion ($NO_2^-$) to nitrate ion ($NO_3^-$) takes place by the action of___
   - **A** bacteria in the root nodules of leguminous plants
   - **B** denitrifying bacteria
   - **C** nitrifying bacteria
   - **D** nitrogen-fixation bacteria in the soil

3. The diagram shows part of the nitrogen cycle. Which stage depends on nitrifying bacteria?



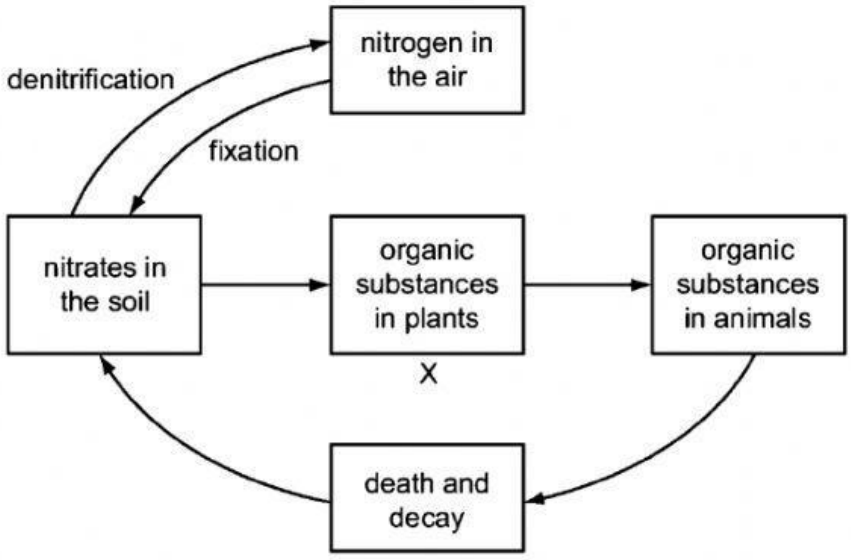
4. The diagram shows part of the nitrogen cycle.




Which stages depend on bacteria?

**A** P, Q, R and S
**B** P and S only
**C** Q and R only
**D** R and S only

5. The diagram shows part of the nitrogen cycle.

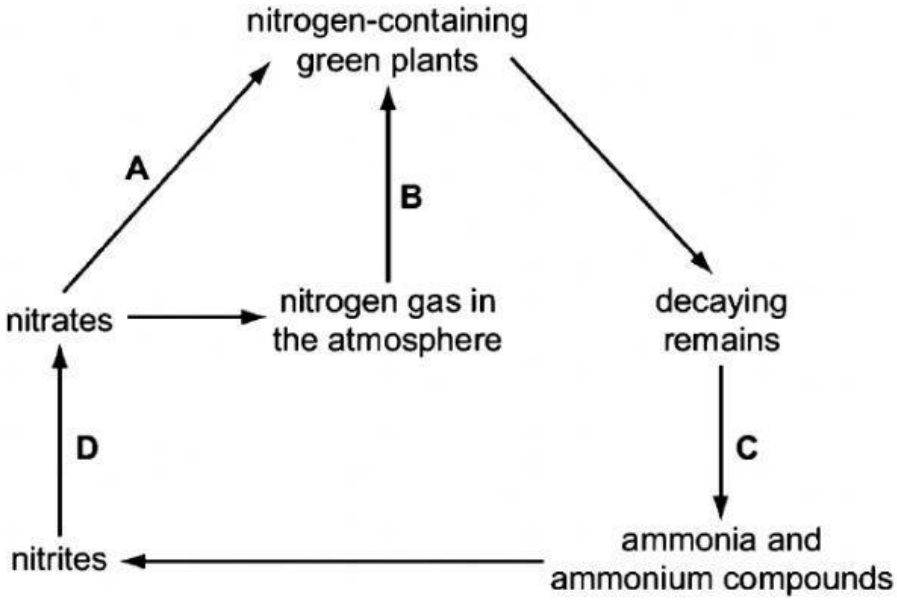



Which substance at X forms part of this cycle?

**A** cellulose
**B** fat
**C** protein
**D** starch

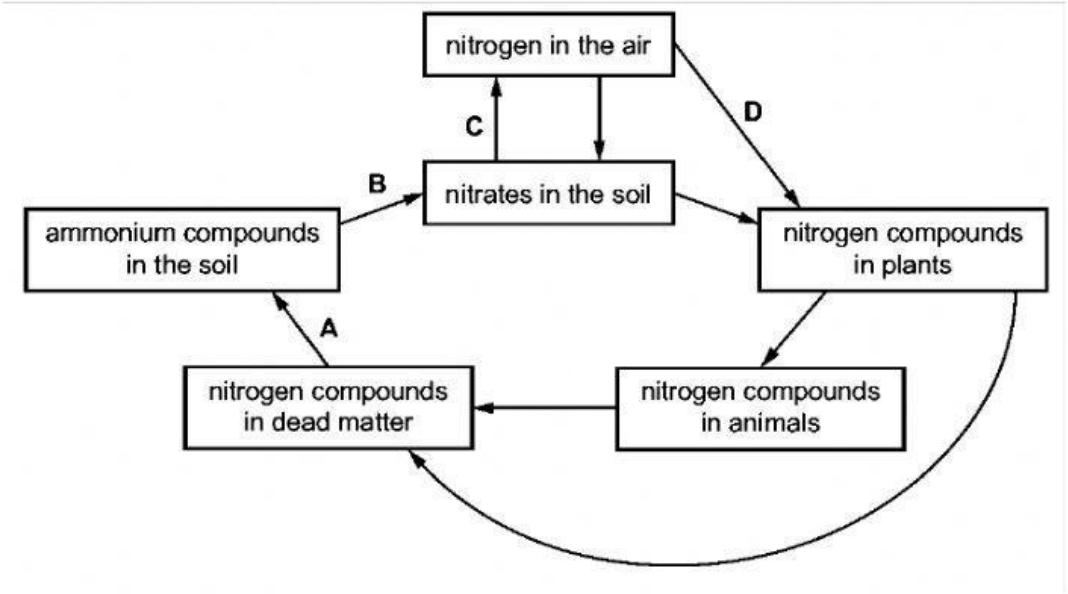
6. Nitrogen is cycled in ecosystem. In what form is most of the nitrogen in animals?
   - **A** amino acids
   - **B** nitrogen gas
   - **C** proteins
   - **D** urea

7. The diagram shows part of the nitrogen cycle. Which arrow represents the action of the root nodule bacteria of leguminous plants?




8. How do nitrogen-fixation bacteria improve soil fertility?
   - **A** They convert nitrates to nitrites
   - **B** They convert nitrites to nitrates
   - **C** They release nitrogen gas from nitrates
   - **D** They use nitrogen gas to make nitrogen-containing compounds

9. The diagram shows the nitrogen cycle. Which stage is carried out by nitrifying bacteria?




10. Some bacteria survive best in waterlogged soils where they are able to obtain oxygen for respiration by breaking down nitrates. Nitrogen gas released as a waste product.

**A** decomposing bacteria

**B** denitrifying bacteria

**C** nitrogen-fixation bacteria

**D** root-nodule bacteria