

Unit 12: Nitrogen and sulfur

Subunit 12.1: Nitrogen and sulfur

Topical Question No: 1

- 13 Which reagent, when mixed with ammonium sulfate and then heated, liberates ammonia?
- A aqueous bromine
 - B dilute hydrochloric acid
 - C limewater
 - D potassium dichromate(VI) in acidic solution

Topical Question No: 2

- 36 In which different forms does nitrogen exist in compounds?
- 1 bonded by a triple covalent bond
 - 2 as part of a cation
 - 3 in an oxidation state of +5

Topical Question No: 3

- 19 Ammonia, NH_3 , and hydrazine, NH_2NH_2 , are two compounds of nitrogen, N_2 .

Which statement is correct?

- A The N–N bond in NH_2NH_2 is polar.
- B NH_3 and NH_2NH_2 have lone pairs of electrons but N_2 does not.
- C The oxidation number of each nitrogen in NH_2NH_2 is +2.
- D The reaction of nitrogen with hydrogen has a high activation energy.

Answer Key

1. Error
2. Error
3. Error