

12/2/24

B.Sc Part III

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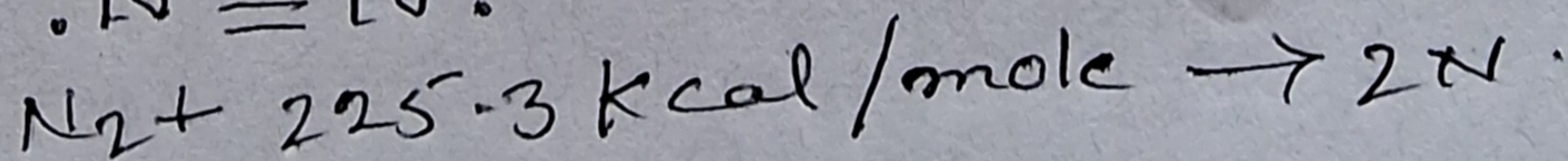
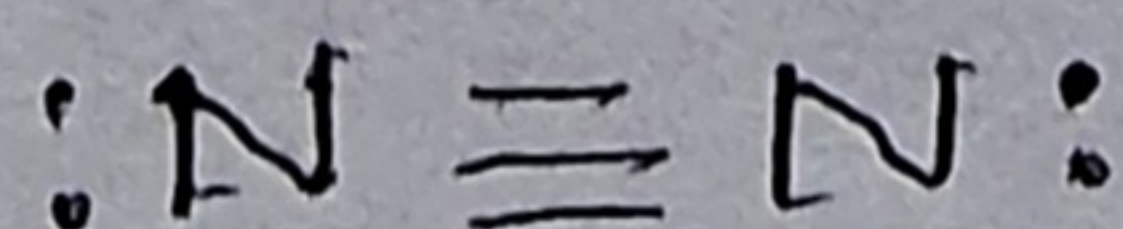
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Properties of Nitrogen: - (Physical)

- (i) Nitrogen is a colourless, odourless and tasteless gas.
- (ii) It is very slightly soluble in water. Solubility is less than that of ~~water~~ oxygen.
- (iii) boiling point and melting point are -196°C and -210°C .
- (iv) It is not a poisonous gas. Animals who ever die in an atmosphere of nitrogen because of want of oxygen.

Chemical Properties: →

Nitrogen molecule is diatomic and triple co-valent bond between its atom. It is an inert element.



- (v) Combustion: - magnesium and calcium, ^{continuous} burns in it forms nitrides.
 $3\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$ (magnesium nitride)
 $3\text{Ca} + \text{N}_2 \rightarrow \text{Ca}_3\text{N}_2$ (calcium nitride)
To be continued.