

Question 1

Q1

(b) only Q.

= Cu^{2+} at cathode (reduction at cathode)

Q2

(d) Ammonium Sulphate

= Due to NH_4^+ ions

Q3

$$S = 32$$

$$O = 16$$

$$\text{He} = 4$$

neither

(d) Both P and Q

$$\frac{\text{given mass}}{\text{molecular mass}} = \frac{\text{no. of atoms}}{NA}$$

$$\bullet S = \frac{32}{32} = \frac{\text{no. of atoms}}{NA}$$

$$S = NA$$

$$\bullet O = \frac{16}{16} = \frac{\text{no. of atoms}}{NA}$$

$$= NA$$

$$\bullet \text{He} = \frac{4}{4} = \frac{\text{no. of atoms}}{NA}$$

$$= NA$$

All contains $NA (6.023 \times 10^{23})$ no. of atoms.

Q4

The reaction involves liberation of ammonium hydroxide which is basic in nature and a salt.

(a) H.

Q5

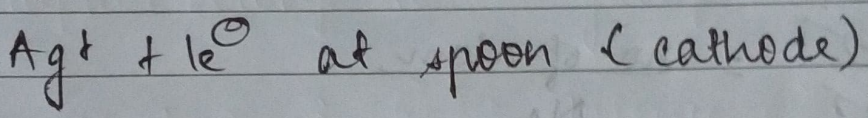
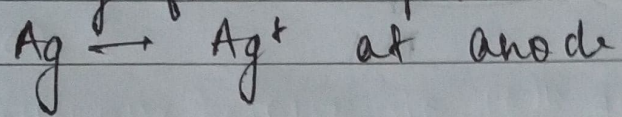
(c) Dehydration.

Sulphuric acid is a dehydrating agent.

Q6

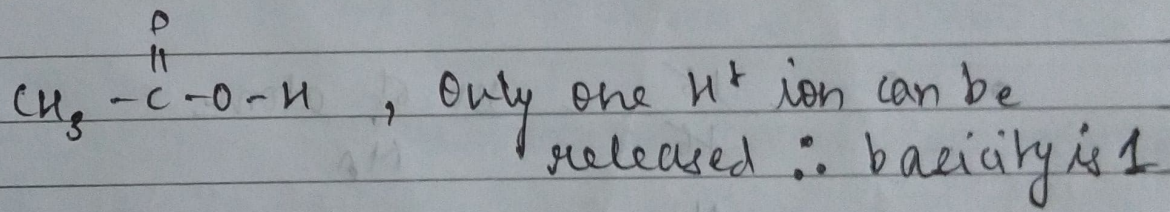
(b) 9

Ag from the plate will deposit on spoon.

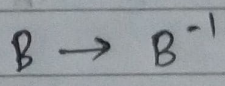
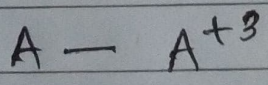


Q7

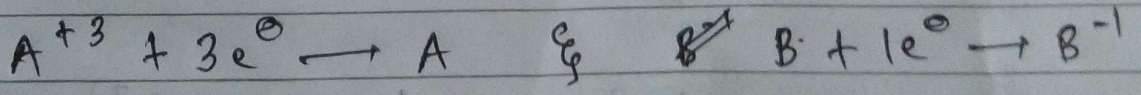
(a) 1



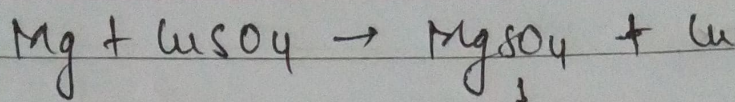
Q8



~~(c) 3, 1~~



\therefore (b) 3, 1.

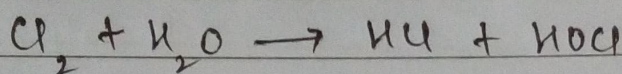
Q9

white.

Q10

(b) 17

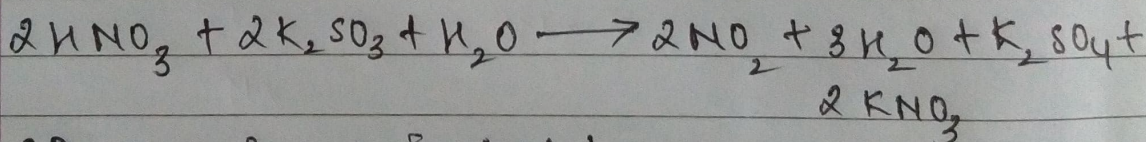
Chlorine has an atomic number of 17



(acidic in nature)

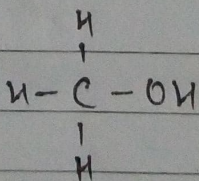
Q11~~(a) Nitric acid is a reducing agent.~~~~= Nitric acid cannot act like a reducing agent~~

(d) It liberates sulphur dioxide gas when treated with potassium sulphite.

= NO, the following reaction takes place when HNO_3 reacts with K_2SO_3  SO_2 gas is not involved here.12

(b) -OH

Methanol structure



The functional group is Alcohol.

13

(c) Redox.

Reduction as well as oxidation, both takes place simultaneously.

RED CAT → reduction at cathode

AN OX → oxidation at anode.

14

(d) Platinum.

→ It decreases the value of activation energy, thus increasing the rate of reaction.

15

(c) 6

Sulphur belongs to 16th group and 3rd period.

$S_{16} \rightarrow 2, 8, \underline{6} \rightarrow$ valence e^- .