

5.

Class - X

sub - Science.

① During electrolysis of brine, a gas 'G' is liberated at anode. When this gas 'G' is passed through slaked lime, a compound 'C' is formed which is used for disinfecting drinking water.

(i) Write formula of 'G' and 'C'

(ii) State the chemical equation involved.

(iii) What is common name of compound 'C'? Give its chemical name.

② A teacher asks her students to identify a metal, M. She gives them the following clues to help them:

(P) Its oxide reacts with both HCl and NaOH.

(Q) It does not react with hot or cold water but reacts with steam.

(R) It can be extracted by electrolysis of its ore.

(a) Identify the metal.

(b) Write the chemical equations for the reaction of the metal with HCl and NaOH respectively.

(c) What would happen if the metal is reacted with iron oxide?

③ Medical termination of pregnancy after being legalised in 1971 has resulted in the increased cases of illegal sex and has reduced the fear of bearing illegal child.

Suggest three measures to reduce the cases

of illegal sex / medical termination of pregnancies.

- ④ "A trait may be inherited, but may not be expressed." Justify this statement with the help of suitable example.
- ⑤ Draw a labelled diagram of a common type of bifocal lens. State the function of each of its parts. Name the defect for the correction of which it is used and state its main cause.
- ⑥ An object of 5 cm height is placed at a distance of 20 cm from the optical centre of a concave lens of focal length 18 cm. Calculate image distance and the magnification in this case.