

DWARKA INTERNATIONAL SCHOOL (Session 2022-2023)

Class – XII

Subject – (Chemistry)

Holiday Homework

Titration:

1. Define: (a) end point. (b) Titrand (c) titrant (d) standard solution
(e) Indicator (f) volumetric analysis
2. Differentiate, with examples, between primary and secondary solutions.
3. Give reasons:
 - (a) The burette and pipette must be rinsed with the solution they are filled.
 - (b) The last drop of the solution must not be blown out of pipette.
 - (c) We do not rinse the titration flask with the respective solution.
 - (d) We make sure that there are no air bubbles in the burette before carrying out titration.
 - (e) Titration is always repeated thrice.
4. What is the least count and maximum reading of the burette?
5. Which meniscus is read in colored and colorless solutions? Give reason.
6. Write the formula to calculate the strength, with unit, of the solution.
7. Suggest some sources of error in titration.

Salt Analysis:

1. Define: (a) solubility product (b) common ion effect (c) salt hydrolysis
2. What is the role of common ion effect and solubility product in group II, IV and V analysis?
3. What is the difference between solubility product and ionic product?
4. Write the formula for the following complexes:
 - (a) Nessler's reagent
 - (b) Chromyl chloride
 - (c) Brown ring in NO_3^- test
 - (d) Yellow precipitate in PO_4^{3-} test
 - (e) Purple coloration in S^{2-} test
 - (f) Blue color in NO_2^- test
 - (g) White precipitate in PO_4^{3-} test
 - (h) Ammonium molybdate
 - (i) Brown precipitate in Cu^{2+} test
 - (j) Prussian blue colouration in Fe^{3+} test
 - (k) Blood red colouration in Fe^{3+} test
 - (l) Red precipitate in Ni^{2+} test

Do Solution of NCERT

1. Chapter 2(Solutions)
2. Chapter 12(Aldehydes,Ketones,Carboxylic Acid)

Complete You Project File And Practical File