

Vidya Prasarak Mandal's  
**ADVANCED STUDY CENTRE**  
C/o. B.N.Bandodkar College of Science, Thane.

**POST GRADUATE DIPLOMA IN APPLIED ANALYTICAL CHEMISTRY**  
( 1<sup>st</sup> Sem. Examination 2004-05 )

Date: 01/11/2004

**PAPER-I**

Marks: 50

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- 1) Write in brief: 10  
1. What is quality  
2. What is quality control  
3. What is quality assurance  
4. What is TQM
- 2) What is ISO 9000, ISO 14000 and Kaizen? 09
- 3) Define normality, molarity, mole fraction, stoichiometry. 06
- 4) What will be the pH of ammonium chloride solution and sodium chloride solution? 03  
a) less than 7      b) 7      c) more than 7  
Give reason.
- 5) What is analyte and matrix? 02
- 6) In comparison of pH value of 0.1N HCl and 0.1N acetic acid, the pH value will be same or different, give reason. 04
- 7) How will you prepare 100ml of 220 ppm manganese solution from 0.1 molar KMnO<sub>4</sub> solution (K=39, O=16, Mn=55) 04
- 8) What is normality of 10 % H<sub>2</sub>SO<sub>4</sub> solution? 04
- 9) If one gram of sodium bicarbonate is decomposed at high temperature and the CO<sub>2</sub> evolved is absorbed in lime solution, what will be the amount of CaCO<sub>3</sub> formed? 04
- 10) One gm of mixture contains equal proportion of NaCl and KCl. It was dissolved in water and treated with excess AgNO<sub>3</sub> solution. What will be the weight of AgCl formed? 04