

SATAVAHANA UNIVERSITY  
Bsc IIIrd year (CBCS) CHEMISTRY –VII  
SEMISTER —VI Practical Examination

Time 2 hrs

Max marks 25

I. Identify the functional group of the given organic compounds by systematic analysis and prepare rational derivatives.

17 marks

- 1) Carbohydrates
- 2) Carboxylic acid
- 3) Phenols
- 4) Amines
- 5) Urea
- 6) Thio urea
- 7) Aldehydes
- 8) Ketones
- 9) Amides
- 10) Nitro hydro carbons
- 11) Naphthalene
- 12) Esters

II. Determine the structures from combined spectral data (UV, IR,  $^1\text{H-NMR}$  and mass )

03 marks

## SCHEME OF VALUATION

I. Experiment— ( Identification of functional group ) 17Marks

- a) Ignition test = 01
- b) Solubility Test = 02
- c) Physical constant (mp/bp) = 01
- d) Preliminary Test for functional group = 03
- e) Conformation Test for Funtional Group = 06
- f) Derivative = 03
- g) Result = 01

II. Spectral Anslysis—03

III. Viva—02

IV. Record— 03

Total = 25 marks

SATAVAHANA UNIVERSITY  
Bsc IIIrd year (CBCS) CHEMISTRY — VIII  
SEMISTER — VI Practical Examination

Time 2 hrs

Max marks 25

- I. a) Determine the hydrolysis of methyl acetate catalysed by Hydrogen ion (Acid) and determine the rate constant graphically .  
b) Determine the rate of the decomposition of hydrogen peroxide catalysed by  $\text{FeCl}_3$  ( $\text{Fe}^{+3}$ ) and determine the rate constant graphically.
- II.a) Determine the redox potential of  $\text{Fe}^{+2}/\text{Fe}^{+3}$  by potential metric titration using Ferrous Ammonium Sulphate solution .  
b) Determine the concentration of given Silver nitrate Solution from the potentiometric titration of  $\text{KCl}$  and  $\text{AgNO}_3$  .  
c) Determine the strength of unknown solution of  $\text{HCl}$  by potentiometric titration using  $\text{NaOH}$  solution.  
d) Determine the dissociation constant of weak acid with strong base by  $\text{pH}$  metric method.
- III. Determine the overall order of reaction of Saponification Ethyl Acetate with  $\text{NaOH}$  by conductance measurements.

SCHEME OF VALUATION

- I. Experiment — 20 marks
  - a) principle — 05
  - b) Calculation — 04
  - c) tabulation, graph. Units = 10
  - d) result = 01
- II. Viva = 02
- III. Record = 03

Total = 25 marks