Enrollment No. _____

Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous)
Affiliated to Saurashtra University, Rajkot

SEMESTER END EXAMINATION APRIL – 2017

B.Voc. Pharmaceutical Analysis & Quality Assurance

BVPAQA-201 – PHARMACEUTICAL ANALYSIS (PA-II)

Duration of Exam – 2.30 hrs ***Semester – II*** ***Max. Marks – 70***

Que. 1(A) – Answer the following Questions **[10]**

1. Give full form of E.M.F and define it.
2. Define Pharmaceutical analysis.
3. Define specific rotation. Give its equation.
4. _____ is the degree of agreement between the replicate measurements of same quantity.
5. If there is a mixture of strong acid and weak base then at the starting point of process the conductance is _____ (high or low)
6. 'Only qualitative analysis can be performed by Polarographic method'. [True or False]
7. Reference electrodes of potentiometry are dependent on concentration of test solution. [True or False]
8. Give full form of DME and RPME.
9. Comment: Racemic mixtures are optically inactive.
10. What are signal and noise in instrumental analysis?

Que. 1 (B) – Answer the following Questions **[20]**

1. Enlist different factors affecting conductance.
2. What are the reasons behind adding supporting electrolyte and keeping shunt in the Polarograph?
3. Comment: conductance decreases with increase in dissociation of ions.
4. Explain Amperometric titration in which only titrate is electroreducible.
5. What is EMR?
6. Draw a typical Polarogram.
7. Give any 2 examples for each of Reference electrode and indicator electrode in pH meter.
8. Draw a schematic diagram of basic instrumental components.
9. Give brief account on any 4 applications of polarimetry.
10. What are the advantages provided by Polarography?

Que. 2 – Answer the following Questions (Any Four) **[20]**

1. Give a schematic representation of Polarograph. Explain in detail the Polarographic analysis with reference to its instrumentation.
2. What is Validation? Give a detailed note on various characteristics of method validation.
3. Give advantages and disadvantages of Amperometric titration.
4. Give applications of Polarography and Amperometry.
5. What are the various currents associated with Polarogram? Give detailed account on id.
6. Write a note on various benefits and drawbacks of instrumentation in pharmaceutical analysis.

Que. 3 – Answer the following Questions (Any Four) **[20]**

1. What is conductometric titration? Give its basic principle & its types.
2. Give a detailed note on Standard Hydrogen electrode.
3. Describe Calomel electrode in detail.
4. Draw the simple diagram of polarimeter. Give detailed account of all parts of polarimeter.
5. Write the Instrumentation of Conductometry including Conductivity cell, conductivity water, and Electrodes used in it.
6. Write the statement of kohlrausch's law with equation. Give a brief account on transport number and its equation with relation to kohlrausch's law.