[PRC BOARD OF CHEMISTRY RESOLUTION NO. 08, s. 1994, September 13, 1994]

PROMULGATION OF SYLLABI OF THE SUBJECTS IN CHEMISTRY LICENSURE EXAMINATION

WHEREAS, Sec. 15, Art. II of R.A. No. 382, "An Act Regulating the Practice of Chemistry in the Philippines", states the subjects in the examination;

WHEREAS, the Professional Regulation Commission (PRC) issued Memo Cir. No. 08, Series of 1992; Memo. Cir. No. 93-03, Series of 1993; and Memo Cir. No. 94-01, Series of 1994, directing the Professional Regulatory Boards to prescribe and adopt a syllabus for every subject in the licensure examination;

WHEREAS, every syllabus of an examination subject containing the concepts/topics with the corresponding level of knowledge or proficiency shall be the basis for the questions that will be inputted into the question bank for computerization; and,

WHEREAS a syllabus for a subject will not bring about overlapping of subjects and will accordingly guide the Board Member, the examinee, and the reviewer,

NOW, THEREFORE, by virtue of its quasi-legislative (rule-making) power under R.A. No. 4209, the Board hereby RESOLVED, as it now so RESOLVES, to formulate, prescribe, adopt, and promulgate the syllabi of the subjects in the Chemistry licensure examination (Annex "A").

FURTHER, RESOLVED, that this Resolution, upon its approval by the Commission, shall be effective after fifteen (15) days following its publication in the Official Gazette or any newspaper of general circulation, whichever is earlier.

FINALLY, RESOLVED, that this resolution shall be widely disseminated and circularized to all colleges/schools offering the course of Chemistry.

Adopted: 13 Sept. 1994

(SGD.) JOSE O. JULIANO Chairman

(SGD.) ALUMANDA M. DELA (SGD.) CORAZON C. ROSA Member

BERNIDO Member

Approved:

(SGD.) HERMOGENES P. POBRE Commissioner

(SGD.) ARMANDO C. PASCUAL Associate Commissioner

1.0 Inorganic Chemistry

- 1.1 Atomic Structure; Periodicity
- 1.2 Chemical Equations; Stoichiometry
- 1.3 Chemical Compounds
- 1.4 Chemical Bonding
 - 1.4.1 Ionic Bond
 - 1.4.2 Covalent Bond
 - 1.4.3 Metallic Bond
- 1.5 Molecular Geometry; Molecular Orbitals
- 1.6 Gaseous State
- 1.7 Liquids and Solids
- 1.8 Chemical Behavior or Hydrogen, Oxygen and Water
- 1.9 Solutions; Electrolytes and Nonelectrolytes
- 1.10 Acids and Bases
- 1.11 Properties of Solutions; Colloidal State
- 1.12 Themochemistry; Thermodynamics
- 1.13 Chemical Kinetics
- 1.14 Chemical Equilibria
- 1.15 Ionic Equilibria I: Solutions of Acids and Bases
- 1.16 Ionic Equilibria II: Solubility and Solubility Product
- 1.17 Ionic Equilibria III: Redox and Electrochemistry
- 1.18 Nuclear Chemistry
- 1.19 Atomic and Molecular Spectroscopy
- 1.20 Metals I: Properties and Production
- 1.21 Metals II: Transition Metals
- 1.22 Halogens and Noble Gases
- 1.23 Sulfur Family and Nitrogen Family

- 1.24 Carbon, Silicon and Boron
- 1.25 Metals and Metallurgy
- 1.25 Complex Ions and Coordination Compounds

2.0 Analytical Chemistry

- 2.1 Basic Principles
- 2.2 Neutralization Titration Curves
- 2.3 Acidimetry and Alkalimetry
- 2.4 Oxidation-Reduction Processes
- 2.5 Redox Titrations
 - 2.5.1 Permanganate Process
 - 2.5.2 Dichromate and Ceric Processes
 - 2.5.3 Iodiometry and Related Methods
- 2.6 Precipitation Methods
- 2.7 Complex Formation Methods
- 2.8 Gravimetric Analysis
- 2.9 Solvent Extraction
- 2.10 Chromatographic Methods
- 2.11 Instrumental Methods

2.11.1 Electrometric Methods (Polarography, Potentiometry, Electro-deposition)

- 2.11.2 Spectrophotometry (IR, UV, Fluorescence)
- 2.11.3 Gas Chromatographic Methods
- 2.11.4 Atomic Spectrometry (Emission Spectrometry, AAS)
- 2.11.5 Nuclear and Related Techniques (XRF, NAA)
- 2.12 Miscellaneous Techniques
 - 2.12.1 NMR
 - 2.12.2 Mass Spectrometry
 - 2.12.3 Polarimetry
 - 2.12.4 Refractometry
 - 2.12.5 Turbidimetry