

**Core Subject Syllabus for OMR Based Written Examination for  
Recruitment of Laboratory Assistant in APGCL.**

**Total Marks: 60**

- Atomic structure, periodicities of elements, chemical bonding, acid based concept and Redox Chemistry.
- Chemical Thermodynamics, The Gaseous State, Liquid and Solids
- Recapitulation of Basic Organic Chemistry, Stereochemistry, Reaction Intermediates and Types of Organic Reactions, Chemistry of Aliphatic Hydrocarbons, Aromatic Hydrocarbons.
- Chemistry of Halogenated Hydrocarbons, Alcohols, Phenols, Ethers and Epoxides; Carbonyl Compounds, Carboxylic Acids and their Derivatives.
- Chemistry of s-block Elements, Chemistry of p-block Elements, Nuclear Chemistry, Symmetry and Point Group Molecules, Theoretical Principles in Qualitative and Quantitative Analysis.
- Transitional and Inner Transitional Elements, Chemistry of Coordination Compounds, General Principles of Metallurgy, Organo-metallic Compounds
- Nitrogen Containing Functional Groups, Polynuclear Hydrocarbons, Pericyclic Reactions, Heterocyclic Compounds, Alkaloids, Terpenes, Steroids and Hormones
- Phase Equilibria, Electrochemical Conduction, Ionic Equilibrium, Chemical Kinetics.
- Introduction to Quantum Mechanics, Molecular Reaction Dynamics, Surface Chemistry and Catalysis, Colloids

**GENERAL SYLLABUS FOR OMR BASED WRITTEN EXAMINATION FOR  
RECRUITMENT OF LABORATORY ASSISTANT IN APGCL**

Subjects/Topics		Marks
General English	Sentence Completion, Sentence Improvement, Ordering of words in a sentence, Synonyms, Antonyms, Idioms & Phrase, Direct & Indirect Speech, Active & Passive Voice, Degree of Comparison, Para jumbles	10
Test of Reasoning	Seating Arrangement, Blood Relations, Order & Ranking, Syllogism	10
General Awareness	Current Affairs (National), Static General Knowledge, Who's Who, Sports, Books & Authors, Awards & Honour	10
Computer Knowledge	MICROSOFT WORD: MS Word: Insert, Mailing, Page Layout.  MICROSOFT EXCEL: MS Excel Formula & Functions (Text to Column Function), COUNT IF, SUM IF, VLOOK UP, ROUND UP, CEILING, MINIMUM, MAXIMUM, MATCH, PIVOT TABLE	10
Total Marks		40