

chemistry

General chemistry origin quantum theory, electromagnetic radiation photoelectric effect, atomic spectra .

Interpreting atoms behaviour by bohrs' theory, minute structures

and sommerfeld theory, fundamental rules for wave mechanic,

heisenberg principle in uncertainty , physical concept of quantum

numbers .

Analytical chemistry :-

Types of quantitative analysis, types of solution, concentration units for solutions and soluble materials, methods of soluble materials that is mathematically unknown , applications .

Electric conductivity for solutions and applications :-

Electric conductivity concept of solutions, electrochemical disintegration , Faraday laws in electrical chemistry ,concentration effect on electric conductivity, electrochemical cells, Nernst equation and applications, corrosion and methods of precaution , electric precipitation and applications .

Physical organic chemistry :-

Nature of carbon atom and its' electronic configuration , types of hybridization in carbon atom , bonding and molecular structure chemical and physical behaviour for single , double and triple bonds steric and electric factors and their effect on physical properties and chemical reactions .

Organic compounds application :-

Nomenclature of organic compounds , alkanes (paraffins) preparation and reactions , alkenes (olefins) , aromatic compounds benzene and derivatives .

Applications in organic chemistry :-

Types of reactions (homolysis and heterolysis cleavage polymers concept , types of polymers according to their connections of units , industrial applications for polymers .