

Notes:

		Selected-response questions (approx.)	Constructed-response assignments					
Test I (Test Code 028)	ATOMIC STRUCTURE AND THE PROPERTIES OF MATTER		36	1				
	0001	Understand the various models of atomic structure, the principles of quantum theory, and the properties and interactions of subatomic particles.						
	0002	Understand the organization of the Periodic Table.						
	0003	Understand the physical and chemical properties and changes of matter.						
	0004	Understand the factors that affect the solubility of a substance and the properties of solutions.						
	0005	Understand chemical formulas and the nomenclature of ionic and covalent compounds.						
	0006	Understand the processes of nuclear transformations.						
	CHEMICAL BONDING AND ENERGY		24	1				
	0007	Understand the different types of chemical bonds, the formation of these bonds, and the effect bond type has on the properties of substances.						
	0008	Understand the different types of intermolecular forces and the effects they have on the properties of substances.						
	0009	Understand the kinetic molecular theory and the gas laws.						
0010	Understand the laws of thermodynamics and the flow of heat in physical and chemical processes.							
Test II (Test Code 029)	CHEMICAL REACTIONS		36	1				
	0011	Understand the basic types and characteristics of chemical reactions.						
	0012	Understand factors that affect reaction rates and methods for measuring reaction rates.						
	0013	Understand the concept of chemical equilibrium.						
	0014	Understand the theories, principles, and applications of acid-base chemistry.						
	0015	Understand the mole concept and its relationship to chemical formulas.						
	0016	Understand molar relationships and stoichiometry.						
	CHARACTERISTICS OF SCIENCE		24	1				
	0017	Understand the characteristics of scientific knowledge and the process of scientific inquiry.						
	0018	Understand scientific tools, instruments, materials, and safety practices.						
0019	Understand the skills and procedures for analyzing and communicating scientific data.							
0020	Understand the unifying concepts of science and technology.							