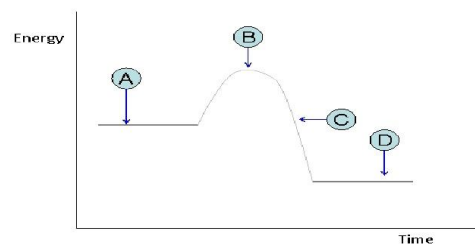


Question	Option1	Option2	Option3	Option4	CorrectAns
The percentage p-character in sp <sup>3</sup> hybridization is _____	25%	50%	75%	66.67%	3
Process in which catalyst has a different phase to a reaction mixture, this process is known as	homogeneous catalysis	heterogeneous catalysis	hypergeneous catalyst	hypogenous catalyst	2
What is the formal charge present on central atom of NH <sub>4</sub> <sup>+</sup> ?	1	2	-1	0	1
10 curies equal to ___ Bq	3.7*10 <sup>9</sup>	3.7*10 <sup>11</sup>	3.7*10 <sup>10</sup>	3.7*10 <sup>8</sup>	2
_____ is a metal chelating agent.	Dimercaprol	antimony potassium tartrate	Rontegen	RMgBr	1
In endothermic reaction, According to the Hammond Postulate, the structure of the transition state for this reaction would most resemble:	the reactant,	the product	it would be an equal hybrid of 1 and 2	the reaction intermediate	2
. _____ is related to metal ion catalysis.	Dimercaprol	Antimony potassium tartrate	Rontgen	RMgBr	4
Which one of the following inorganic compounds commonly used as an antioxidant in pharmaceutical formulations.	Molybdenum	Sodium bisulphate	Magnesium trisilicate	Calcium	2
Calamine is _____.	Zinc carbonate	EDTA	Aluminum chloride	BF <sub>3</sub>	1
An astringent is _____.	Promotes the secretion of sputum	Cause the contraction or shrinkage of tissues	Causes vomiting	Accelerates defecation	2

Look at the following diagram, which depicts the energy diagram for a chemical reaction. Which point on the diagram represents the point at which the transition state exists?



Which one of the following compound has planar geometry?

Zinc carbonate

EDTA

Aluminum chloride

$\text{BF}_3$

4

Simethicone is used as\_

Purgative

antiflatulant

Antimicrobial

astringent

2

Example of oxidative antimicrobial is\_.

Zinc peroxide

Isapgol

Silver nitrate

Potassium tartarate

1

Mercuric chloride is-.

Oxidative  
Antimicrobial

Antiflatulant

Protein precipitant  
Antimicrobial

Astringent

3

Which one of the following radiation has greater ionizing power?

Beta

Gamma

Omega

Alpha

4

Charge on alpha particle is-.

+2e

-2e

+1e

0

1

Addition of HBr to 1,3-butadiene gives 1,2-addition product at lower temperature 1,4-addition product at higher temperature. Mention underlying principle.

Kinetic vs  
thermodynamic  
control

Reactivity vs  
selectivity

Hammond postulate

Microscopic  
reversibility

1

Molecular dipole moment of methane is ____.	1	0	2	-1	2
The ____ quantum number describes the energy of an electron.	Magnetic	Principle	Azimuthal	Spin	2
The azimuthal quantum number describes the ____ of an electron.	Shell	Subshell	Orbital	Spin	2
Kinetic isotope effects that are greater than 1 are referred to as ____ kinetic isotope effects.	Normal	reverse	Zero	Inverse	1
Drug solution decomposes <i>via</i> first-order kinetics with a rate constant, $k$ , of $0.0077 \text{ days}^{-1}$ . What is the half-life of the drug in solution?	0.033 days	33 days	70 days	90 days	4
The primary intracellular electrolyte, potassium produces a ____ to maintain cell volume	high osmotic pressure	low osmotic pressure	excitability	no pressure	1
Which one of the following is used as antioxidant?	Selenium	Potassium	Hypophosphorus acid	Dil HCl	2