

## Chemistry

Q1	29
Q2	23
Q3	21

1. Physical Chemistry [29 Marks]
- (a) What is Physical Chemistry? [4 Marks]  
Solution: Study of Physical Behaviour of chemical elements
- (b) Nuclear Chemistry [25 Marks]
- i. Does Decay constant depend on the number of atoms of the element? [25 Marks]  
Solution: No, it does not
2. Inorganic Chemistry [23 Marks]
- (a) Describe Coordination Chemistry [7 Marks]  
Solution: Study of interaction of 2 chemical Compounds
- (b) Chemical Bonding [16 Marks]
- i. Give Different Hybridisation [16 Marks]  
Solution: sp, sp<sup>2</sup>, sp<sup>3</sup>, dsp<sup>2</sup>
3. Organic Chemistry [21 Marks]
- (a) List out different Functional Groups [12 Marks]  
Solution: Alkanes, Alkenes, Ethers, Alkynes
- (b) General Organic Chemistry [9 Marks]
- i. Mention 3 different effects [9 Marks]  
Solution: Inductive, Resonance, Mesomeric