

Prabhat Kumar College, Contai

SEM II (Chemistry Hons)

Paper C3T

Part A :

Answer any one question of the following

1. What do you mean by radial distribution function? Draw the radial distribution function for 2p and 3d orbital. Write the physical significance of Ψ .
2. Explain: the first IP of B is lower than Be but in case of 2nd the incident is reverse. Why N shows abnormal electron affinity.
3. Explain why electron cannot stay in nucleolus. How electro negativity can be calculated by Allred-Rochow method?
4. How formal potential is affected by pH of the medium. Give an example of disproportionation reaction.
5. Explain: All Arrhenius acids are Bronsted acid but all the All Arrhenius base are not Bronsted base.
6. Write the concept of LUX theory for acid and base. Shows H_2SO_4 can act as a base or acid.

Part B :

Answer any one question of the following

1. Write the method of separation of Fe(II) and Fe(III) in a mixture using $\text{K}_2\text{Cr}_2\text{O}_7$.
2. Write the method of separation of Fe(III) and Cr(III) in a mixture using $\text{K}_2\text{Cr}_2\text{O}_7$.

The scanned Copy of answer script should be sent to the following email
madurgapkc@gmail.com