

Test: CLAT-1

Course Code & Title: 18CYB101J

Year & Sem: I Year & I Semester

Date: 22.10.2021

Duration: 50 Mins

Max. Marks: 25

QUESTION BANK FOR CHEMISTRY

PART -B QUESTIONS

1. Write a Short Note on Wave function
2. Comment on the symbol $|\Psi^2|$
3. The arrangement of Halide ions in **the spectrochemical series** in first position.
Comment your statement?
4. **The position and momentum are equal to $h/4\pi$** , Brief the Principle behind it.
5. Comment your answer on the Molecular orbital configuration upto 14 electrons take an example of N₂
6. Give the MO diagram for C₂
7. Arrange the splitting pattern energy level diagram in octahedral Complexes for d⁵ ,d⁴, d³ and d² systems in high spin complexes
8. Comment your answer on Magnetic Moment for the following molecules
 - a) [Fe(CN)₆]⁴⁻
 - b) [Mn(Cl)₆]²⁻
 - c) [Ni(Cl)₄]²⁻
 - d) [Co(NH₃)₆]³⁺
9. List your understanding on few assumptions of Crystal Field Theory
10. Apply your knowledge on the final equation of Schrodinger wave equation