

SRM Institute of Science and Technology College of Engineering and Technology

DEPARTMENT OF CHEMISTRY

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

Academic Year: 2021-2022 ODD SEMESTER

ONLINE

Mode of Exam

Test: CLAT-1 Date: 22.10.2021
Course Code & Title: 18CYB101J Duration: 50 Mins
Year & Sem: I Year & I Semester 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) $[Mn(C1)_6]^{2-}$
 - c) [Ni(Cl)₄]²⁻
 - d) $[Co(NH_3)_6]^{3+}$
- 9. List your understanding on few assumptions of Crystal Field Theory
- 10. Apply your knowledge on the final equation of Schrodinger wave equation