Dumkal College

<u>Basantapur, Dumkal</u>



Model questions

Topic: Microstates

Course Code : CHEMHT-1

Semester-I (Hons)

Name of the teacher: Saleha Khatun

- 1. Determine the total number of microstates and ground state term Symbol for a d²-system.
- 2. What do you mean by Microstate?
- 3. Deduce ground state term symbol for atom having atomic number 22.
- 4. State Hund's rules and hence find out the ground state term for Carbon atom.
- 5. The different possible energy states for d²-configuration are ³F,³P,¹G,¹D and ¹S. Predict the ground state term with necessary arguments.
- 6. How many microstates exist for the electron configuration i) P³ ii) f² iii) d³