

Sessional Examination
FYUGP B.Sc. 1st Semester
(Chemistry-I)
Paper Code: CHE0100104
Full Marks: 30
Time: 1 Hour 30 Minute

All questions are compulsory

1. Write the postulates of Bohr's atomic model. 2
2. Write the de Broglie's hypothesis equation and explain. An electron is accelerated by applying a potential difference of 1000V. What is the de Broglie wavelength associated with it. 2+2=4
3. What is the physical significance of Ψ and Ψ^2 ? Write the conditions of acceptable wave function of Ψ 2+2=4
4. Explain the Radial distribution function. Calculate the radial node, angular node and total node of 3d-orbital. 2+3=5
5. Draw the Born-Haber Cycle for the formation of NaCl. 5
6. What are ionic compound? Write the general properties/characteristics of such compound? 1+4=5
7. What is Mesomeric Effect? Why is phenol acidic in nature. 2+3=5
