**Karan Arora** **R.L. Institute M: 9416974837**

**Max Time : 1 hr** **Class = 11th Chemistry Test**  **Max Marks : 20**

**STRUCTURE OF ATOM**

[Based on Quantum Numbers]

1. Give the electronic configuration of the following ions and calculate their magnetic moment :

[ 1 x 5 = 5 ]

(a) Cu2+ (b) Cr3+ (c) Fe3+  (d) H –  (e) S2 –

1. Write the electronic configurations and the names of the elements having the atomic numbers :

15 , 12 , 26 , 19 and 20. [ 1 x 5 = 5 ]

1. Using s , p , d , and f notations, describe the orbitals with the following quantum numbers : [ 2 ]

(a) n = 3 , l = 1 (b) n = 4 , l = 2 (c) n = 5 , l = 3 (d) n = 6 , l = 2

1. Give the electronic configurations of the ions : Mn2+ , Na+ , N – 1  , N2+  [ 2 ]
2. Which of the following orbitals are not possible ? 1p , 2s , 3f , 4d , 7s , 2d , 3f and 1p. [ 3 ]
3. How many orbitals are present in the subshells with : [ 3 ]

(a) n = 3 , l = 2 (b) n = 4 , l = 2 (c) n = 5 , l = 2 .

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