## 7. Structure of Atom

| Ι.  | The electronic configuration of cu (29)                                    |                    |                    |                    |           |  |  |  |  |  |
|---|--|--------------------|--------------------|--------------------|-----------|--|--|--|--|--|
| 2.  | Elliptical orbits are introduced by  |                    |                    |                    |           |  |  |  |  |  |
| 3.  | The sub shell of the orbital for $l = 1$ is                                |                    |                    |                    |           |  |  |  |  |  |
| 4.  | is a group of wavelength.  |                    |                    |                    |           |  |  |  |  |  |
| 5.  | Splitting of spectral lines due to magnetic field is called                |                    |                    |                    |           |  |  |  |  |  |
| 6.  | Splitting of spectral lines in the presence of electric field is called    |                    |                    |                    |           |  |  |  |  |  |
| 7.  | Stationary orbits are introduced by  |                    |                    |                    |           |  |  |  |  |  |
| 8.  | The electronic configuration of Cr is                                      |                    |                    |                    |           |  |  |  |  |  |
| 9.  | The elements in which outermost orbital's are completely filled are called |                    |                    |                    |           |  |  |  |  |  |
| 10.Short notation of electron configuration is                        |  |                    |                    |                    |           |  |  |  |  |  |
| 11  | .Shape of s-orbital  | is                 |                    | (                  | )         |  |  |  |  |  |
|   | a) Spherical   | b) Dumbbell        | c) Square d) Do    | ouble D            | umbbell   |  |  |  |  |  |
| 12  | .Shape of p-orbital  | (                  | )                  |                    |           |  |  |  |  |  |
|   | a) Double Dumbb  | ell b) Dumbbel     | ll c) Spherical    | -                  | d) Circle |  |  |  |  |  |
| 13  | .Shape of d-orbital  | (                  | )                  |                    |           |  |  |  |  |  |
|   | a) Spherical   | b) Dumbbell        | c) Double Dumbbe   | ell                | d) Square |  |  |  |  |  |
| 14.In VIBGYOR which color having higher wavelength or lower frequency |  |                    |                    |                    |           |  |  |  |  |  |
|   |  |                    |                    | (                  | )         |  |  |  |  |  |
|   | a) Red   | b) Violet          | c) Indigo          | d) Ora             | ange      |  |  |  |  |  |
| 15  | .Which of the follo  | (                  | )                  |                    |           |  |  |  |  |  |
|   | a) 2p <sup>6</sup>   | b) 3s <sup>1</sup> | c) 2d <sup>3</sup> | d) 4f <sup>1</sup> | 2         |  |  |  |  |  |
| 16  | .Stable elements   | (                  | )                  |                    |           |  |  |  |  |  |
|   | a) Alkali  | b) Alkali Metals   | c) Inert           | d) No              | ne        |  |  |  |  |  |
| 17  | .The sub shell of th   | (                  | )                  |                    |           |  |  |  |  |  |
|   | a) s   | b) p               | c) d               | d) f               |           |  |  |  |  |  |
|   |  |                    |                    |                    |           |  |  |  |  |  |

| 18. Short rotation of electron configuration is ( )                             |                    |                     |       |       |            |  |  |  |  |
|---|--------------------|---------------------|-------|-------|------------|--|--|--|--|
| a) nl <sup>x</sup>  | b) nl <sup>n</sup> | c) $ln^x$           | d) xn | l     |            |  |  |  |  |
| 19. Splitting of spectral lines in the presence of electric field is called ( ) |                    |                     |       |       |            |  |  |  |  |
| a) Zeeman Effect  | b) Stark Ef        | fect c) Dispersi    | ion   | d) Li | men Effect |  |  |  |  |
| 20. What is 'n' value   | for L shell        |                     |       | (     | )          |  |  |  |  |
| a) 1  | b) 2               | c) 3                |       | d) 4  |            |  |  |  |  |
|   |                    |                     |       |       |            |  |  |  |  |
| Answers   |                    |                     |       |       |            |  |  |  |  |
| 1) $[(Ar)4s^13d^{10}]$  |                    | 2) Sommerfeld       |       |       |            |  |  |  |  |
| 3) p  |                    | 4) Spectrum         |       |       |            |  |  |  |  |
| 5) Zeeman Effect  |                    | 6) Stark Effect     |       |       |            |  |  |  |  |
| 7) Neil's Bohr  |                    | 8) $[Ar]4s^13d^5$   |       |       |            |  |  |  |  |
| 9) Inert Gas  |                    | 10) nl <sup>x</sup> |       |       |            |  |  |  |  |
| 11) a   |                    | 12) b               |       |       |            |  |  |  |  |
| 13) c   |                    | 14) a               |       |       |            |  |  |  |  |
| 15) c   |                    | 16) c               |       |       |            |  |  |  |  |
| 17) b   |                    | 18) a               |       |       |            |  |  |  |  |
| 19) b   |                    | 20) b               |       |       |            |  |  |  |  |
|   |                    |                     |       |       |            |  |  |  |  |