ARJUNA (NEET)

STRUCTURE OF ATOM

DPP-10

1. Which one of the following orbitals is spherical in shape?
   (A) 4s (B) 3p
   (C) 3d (D) 4f

2. The number of electrons present in 3d of $Cu^{\oplus}$ is
   (A) 20 (B) 10
   (C) 16 (D) 24

3. The maximum number of electrons that can be accommodated in $dx^2 - y^2$ orbital is
   (A) 10 (B) 5
   (C) 2 (D) 1

4. The number of unpaired electrons in magnesium atom is
   (A) 0 (B) 1
   (C) 2 (D) 3

5. The correct sequence of energy of orbitals of multielectron species is
   (A) 4p < 3d < 4s (B) 4s < 4p < 3d
   (C) 4s < 3d < 4p (D) 3d < 4s < 4p

6. The maximum number of unpaired electrons present in p_x orbital is
   (A) 2 (B) 1
   (C) 2 (D) 3

7. The number of electrons present in 'M' shell of silicon is
   (A) 2 (B) 4
   (C) 6 (D) 8

8. The ion that is isoelectronic with CO is
   (A) CN^- (B) N_2^+
   (C) O_2^- (D) N_2^-

9. Which of the following configuration is correct for iron?
   (A) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^7$
   (B) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^5$
   (C) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5$
   (D) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$

10. Which of the following has maximum number of unpaired *d*-electrons?
    (A) N^{3+} (B) Fe^{2+}
    (C) Zn^+ (D) Cu^+

ANSWERS KEY

1.	(A)	**6.**	(B)
2.	(B)	**7.**	(B)
3.	(C)	**8.**	(A)
4.	(A)	**9.**	(D)
5.	(C)	**10.**	(B)

Note - If you have any query/issue

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