

Date Planned : __ / __ / __	Daily Tutorial Sheet - 2	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	JEE Advanced (Archive)	Exact Duration : _____

16. On hybridization of one s and one p -orbital we get (1984)
 (A) two mutually perpendicular orbitals (B) two orbitals at 180°
 (C) four orbitals directed tetrahedrally (D) three orbitals in a plane
17. SnCl_2 is a non-linear molecule. (1985)
18. The hybridization of sulphur in sulphur dioxide is: (1986)
 (A) sp (B) sp^3 (C) sp^2 (D) dsp^2
- *19. CO_2 is isostructural with (1986)
 (A) HgCl_2 (B) C_2H_2 (C) SnCl_2 (D) NO_2
20. The bond between two identical non-metal atoms has a pair of electrons (1986)
 (A) unequally shared between the two
 (B) transferred fully from one atom to another
 (C) with identical spins
 (D) equally shared between them
21. sp^3 hybrid orbitals have equal s and p character. (1987)
22. In benzene, carbon uses all the three p -orbitals for hybridisation. (1987)
23. The $\text{Cl}-\text{C}-\text{Cl}$ angle in 1, 1, 2, 2-tetrachloroethene and tetrachloromethane respectively will be about (1988)
 (A) 120° and 109.5° (B) 90° and 109.5° (C) 109° and 90° (D) 109.5° and 120°
24. The molecule that has linear structure is: (1988)
 (A) CO_2 (B) NO_2 (C) SO_2 (D) SiO_2
25. The species in which the central atom uses sp^2 - hybrid orbitals in its bonding is: (1988)
 (A) PH_3 (B) NH_3 (C) CH_3^+ (D) SbH_3
26. The molecule which has pyramidal shape is: (1989)
 (A) PCl_3 (B) SO_3 (C) CO_3^{2-} (D) NO_3^-
27. Which of the following is paramagnetic? (1989)
 (A) O_2^- (B) CN^- (C) CO (D) NO^+
28. The molecule which has zero dipole moment is: (1989)
 (A) CH_2Cl_2 (B) BF_3 (C) NF_3 (D) ClO_2
29. The valence atomic orbitals on C in silver acetylide is _____. hybridized. (1990)
30. Between Na^+ and Ag^+ , which is stronger Lewis acid and why? (1990)