

Date Planned : __ / __ / __	Daily Tutorial Sheet-1	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	JEE Advanced Archive	Exact Duration : _____

- Carbon acts as an abrasive and also as a lubricant, explain. (1981)
- Moderate electrical conductivity is shown by : (1982)  
(A) silica (B) graphite (C) diamond (D) None of the above
- Give reason for the following in one or two sentences : (1983)  
"Solid carbon dioxide is known as dry ice."
- Carbon tetrachloride burns in air when lighted to give phosgene gas. (1983)
- Give reasons for the following in one or two sentences : (1985)  
"Graphite is used as a solid lubricant"
- Graphite is a better lubricant on the moon than on the earth. (T/F) (1987)
- All the Al – Cl bond in  $\text{Al}_2\text{Cl}_6$  are equivalent. (T/F) (1989)
- Each entry in column X is in some way related to the entries in columns Y and Z. Match the appropriate entries. (1989)

X		Y		Z	
1	Yeast	a	Fermentation	p	Ethanol
2	Mica	b	Graphite	q	Abrasive
3	Superphosphate	c	Crystallin	r	Insulator
4	Carbon fibres	d	Layer structure	s	Fertiliser
5	Rock salt	e	Diamond	t	Reinforced plastics
6	Carborundum	f	Bone ash	u	Preservative

- Write the balanced equation for the preparation of crystalline silicon from  $\text{SiCl}_4$ . (1990)
- The hydrolysis of alkyl substituted chlorosilanes gives \_\_\_\_\_. (1991)
- The tendency for catenation is much higher for C than for Si. (T/F) (1993)
- The basic nature of hydroxide of group 13 (group III A) decreases progressively down the group. (T/F) (1993)
- Diamond is harder than graphite. (T/F) (1993)
- The recently discovered allotrope of carbon (e. g  $\text{C}_{60}$ ) is commonly known as \_\_\_\_\_. (1994)
- The hydrolysis of trialkyl chlorosilane  $\text{R}_3\text{SiCl}$ , yields \_\_\_\_\_. (1994)