

Date Planned ://	Daily Tutorial Sheet-10	Expected Duration : 30 Min
Actual Date of Attempt : / /	Level-2	Exact Duration :



- (A)  $SiF_4 < SiCl_4 < SiBr_4 < SiI_4$
- **(B)**  $SiF_4 > SiCl_4 > SiBr_4 > SiI_4$
- (C)  $SiF_4 \gg SiCl_4 \ll SiBr_4 \ll SiI_4$
- (D)  $SiF_4 < SiCl_4 < SiBr_4 >> SiI_4$

**117.** Which of the following statements is true?



- (A) Dimethyl ether is a better Lewis base than disilyl ether  $(SiH_3 O SiH_3)$ .
- **(B)**  $(CH_3)_3C O H$  is less acidic than  $(CH_3)_3Si O H$
- (C) Both the statements (A) and (B) are true
- (D) Both the statements (A) and (B) are false
- \*118. Which of the following process is/are associated with no change of hybridisation of the underlined compound?
  - (A)  $\underline{B}_2H_6$  is dissolved in THF
  - **(B)**  $\underline{\text{Al}}(\text{OH})_3$  precipitate dissolved in NaOH
  - (C)  $\underline{S}iF_4$  vapour is passed through liquid HF
  - **(D)** Hydrolysis of SiCl<sub>4</sub>
- **119.** Which of the following is/are correct statement?



- (A) Zeolites are often used as ion exchange material
- **(B)**  $SiO_2$  is a linear molecule
- (C)  $C_{12}O_9$  is known but  $C_3O_2$  is not
- (D) Producer gas is less efficient fuel in terms of calorific value than water gas
- \*120. Which of the following statements is/are correct:



- (A) There are  $p\pi d\pi$  bonding in  $(SiH_3)_3 N$
- **(B)**  $\pi$  bond pair of e<sup>-</sup> of each ends are perpendicular to each other in CO<sub>2</sub>
- (C)  $\pi$  bond pair of e<sup>-</sup> of each ends are perpendicular to each other in  $C_3O_2$
- (**D**) Carbogen is mixture of carbondioxide and  $O_2$
- \*121. Choose the incorrect statement(s) from the following:



- (A) the anhydride of malonic acid is  $C_3O_2$
- (B) there are two sigma and one pi bond in  $CaC_2$  molecule
- (C) SiC is called carborundum
- **(D)** Trisilylamine is pyramidal
- \*122.  $SiO_2$  reacts with:

(C)



(A)  $Na_2CO_3$ 

HF

**(Β)** C/Δ

 $XeF_2$ 

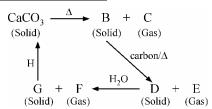
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**(D)** 



## Paragraph for Q. 123 to 125





- **123.** The compound E is:
  - **(A)** CO
- **(B)** CO<sub>2</sub>
- (C)  $C_3O_2$
- **(D)** oxide of metal

- **124.** The correct statement about F is :
  - (A) it has  $3\sigma$  and  $2\pi$  bond
- **(B)** it has  $3\sigma$  bond and one  $\pi$  bond

(C) it has angular shape

(D) it is CO gas

- **125.** The compound H is:
  - (A)  $CO_2$
- **(B)** CO
- (**C**) CaO
- **(D)**  $Ca(OH)_2$