



17. Mention the structures of (a)  $\text{XeF}_2$  and (b)  $\text{XeF}_4$
18. Which compound in each of the following pairs will react faster in  $\text{S}_\text{N}2$  reaction with  $-\text{OH}$ ? Reason.
- (i)  $\text{CH}_3\text{Br}$  or  $\text{CH}_3\text{I}$       (ii)  $(\text{CH}_3)_3\text{CCl}$  or  $\text{CH}_3\text{Cl}$

**SECTION - C**

**Note :** Answer any two questions.

2x8=16

19. (a) Describe the salient features of the collision theory of reaction rates of bimolecular reactions.
- (b) State and explain Kohlrausch's law of independent migration of ions.
20. (a) Write the chemical reactions that occur in the manufacture of nitric acid. (Ostwald's Method)
- (b) How is ozone prepared from oxygen? Explain its reaction with :
- (i)  $\text{C}_2\text{H}_4$       (ii)  $\text{KI}$

1. Describe the following reactions.
- (a) Carbylamine reaction
- (b) Gattermann reaction
- (c) HVZ reaction
- (d) Aldol condensation