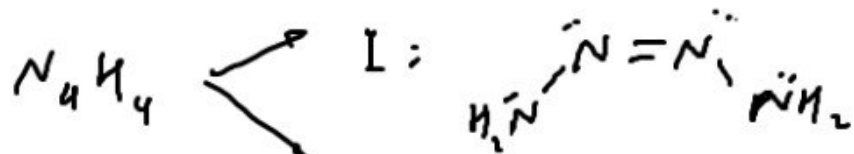
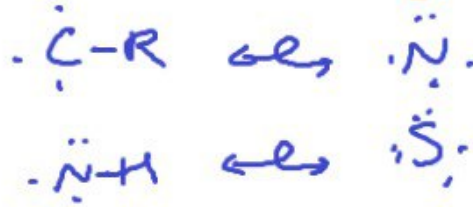
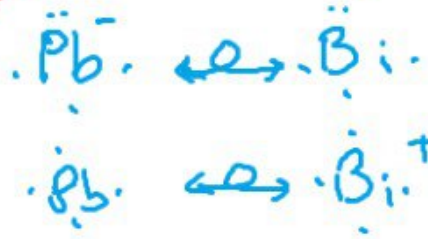


11 → ب



12 → ب

عمومی:



13 → د

14 → 2

15 → ب

کے ساتھ اس میں متبادل لاتا نیلے +3



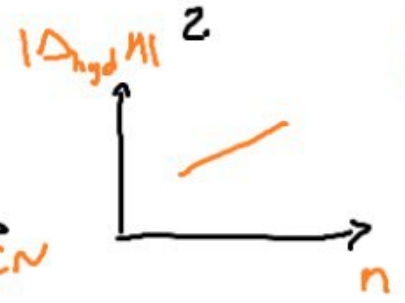
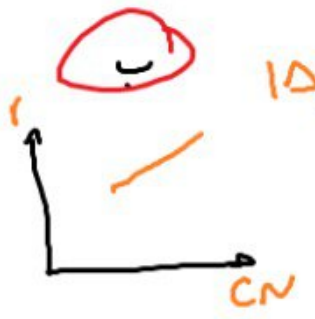
1

ب → 16



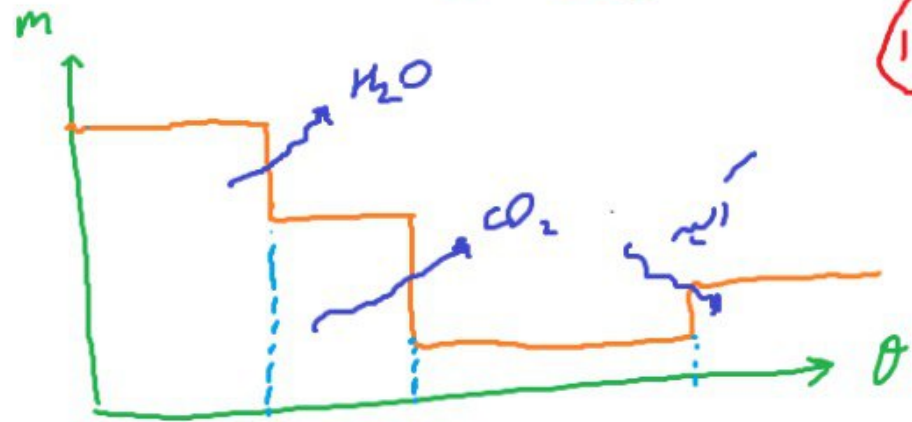
عمرازو دم  
عسیر

ب → 18



TGA

آنالیز گرما دین

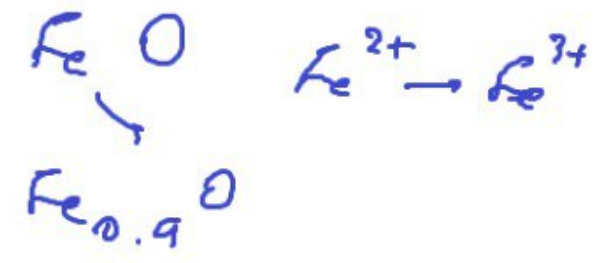


5.16 → 4.35 → 4.08 → 1.68

ب → 17



اين → 19



$\rho^{th} > \rho^{exp}$   
 $Fe_2O_3$

2

$$\frac{\rho_{exp}}{\rho_{th}} = \frac{M_{exp}}{M_{th}} = \frac{M_{Fe_2O}}{M_{Fe_2O}} = \frac{55.845x + 16.00}{55.845 + 16.00} = \frac{5.528}{5.706} \Rightarrow x = 0.96$$

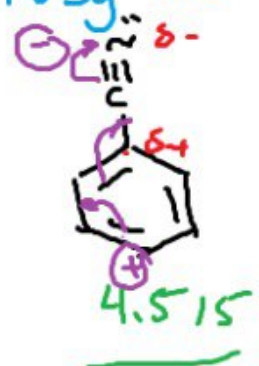
$Fe^{0}_{0.96}$    
 $\swarrow$   $y$  mol  $Fe^{3+}$    
 $\searrow$   $0.96 - y$  mol  $Fe^{2+}$

$$3y + 2(0.96 - y) = 2 \Rightarrow y = 0.08 \text{ mol } Fe^{3+}$$

$$\Rightarrow \% Fe^{3+} = \frac{0.08}{0.96} \times 100 = \underline{8.3\%}$$

الف - 20

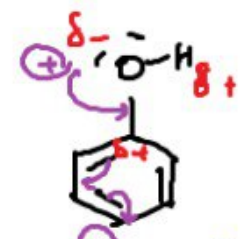
$\mu_{O}$



4.515



1.690



1.224

در دانش و الفا خلاصه

$\mu = q \cdot d$    
 فاصله مرکز بارها   
 مثبت و منفی

در حین هم هسته -  $\mu$  بسیار بیشتر

21 →  $\mu = qd \Rightarrow 1.82 \times 3.34 \times 10^{-30} = q \times 92 \times 10^{-12} \Rightarrow q = 6.6 \times 10^{20} e$

$\begin{matrix} +0.41e & -0.41e \\ H & - & F \\ & & \downarrow \div e \\ & & 0.41e \end{matrix}$

← پیوند 41% صحت یونی دارد.

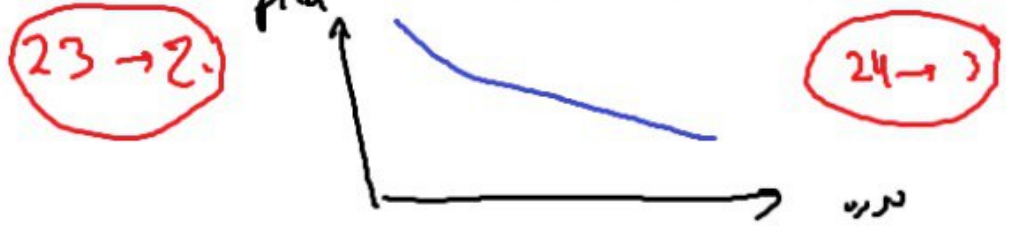
22 →  $\checkmark$  نکته: جدول ترکیب استاندارد از mp بالاتر

در آبی سمودر مولکولهای استاندارد از کمتری است.

در آب کمترین مولکولهای کمتری، mp بالاتر

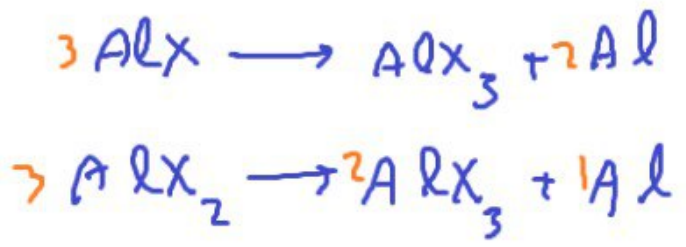
	XeF <sub>2</sub>	XeF <sub>4</sub>	XeF <sub>6</sub>
mp/K	413	390	322
d/pm	200	195	189

بسته به اتم نهایی با افزایش هم دور خود با کمتری در دسترس.



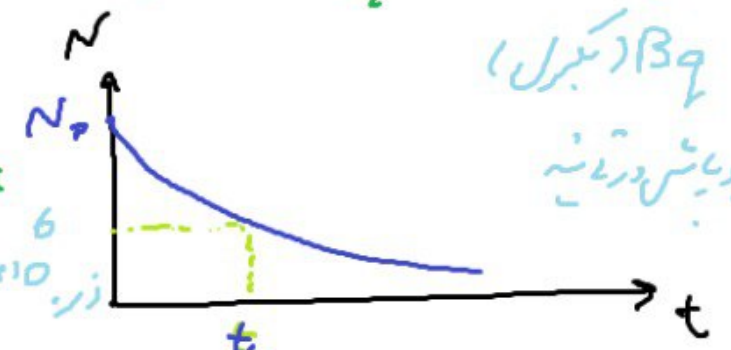


25 → ب



26 → انف

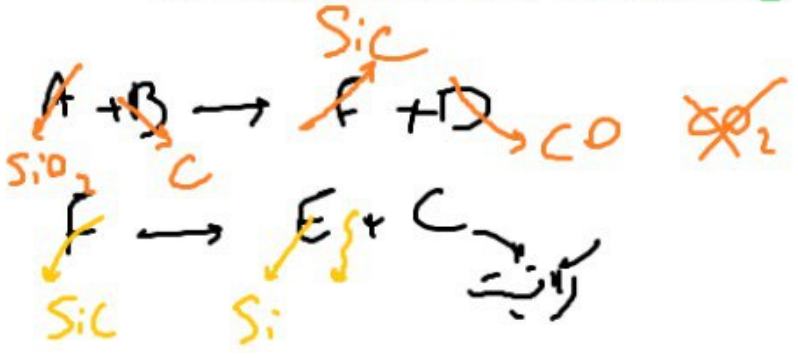
$$\ln \frac{N_0}{N} = \frac{\ln 2}{t_{1/2}} t$$



$N = \text{const.}$       $R = \bar{R} \Rightarrow kN = \frac{dN}{dt} \Rightarrow \Delta N = kN \Delta t$

$$\Delta N = \frac{\ln 2}{4.5 \times 10^9 \times 365.25 \times 24 \times 3600 \text{ s}} \times \frac{1000}{238} N_A \times 1 \text{ s} = 12.4 \times 10^6 \text{ زبر}$$

$R = 12.4 \text{ MBq}$



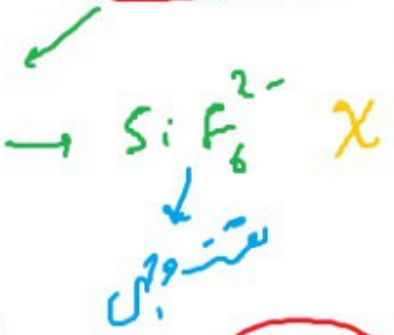
$D \rightarrow \text{سی}$   
 $B \rightarrow \text{گگ}$   
 $A \rightarrow SiO_2$   
 $F \rightarrow ?$

در ا CO تولید می شود نه O کم است.  
 CO<sub>2</sub> ← آسترادی بیشتر

5

27 → د

28 → ب

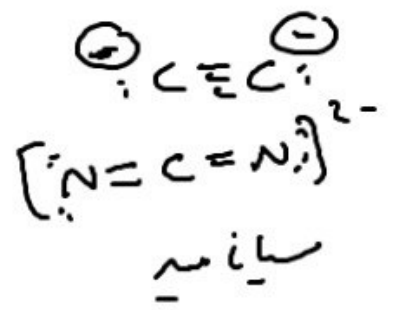
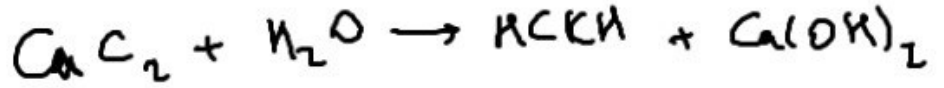


29 → الف

30 → ج

نکته: پیوند  $Si-F$  یکی از قویترین پیوندهای گردانی

$sp^3d^2$   
 $\Delta X = 2,2$  } سه لبه ششگانه



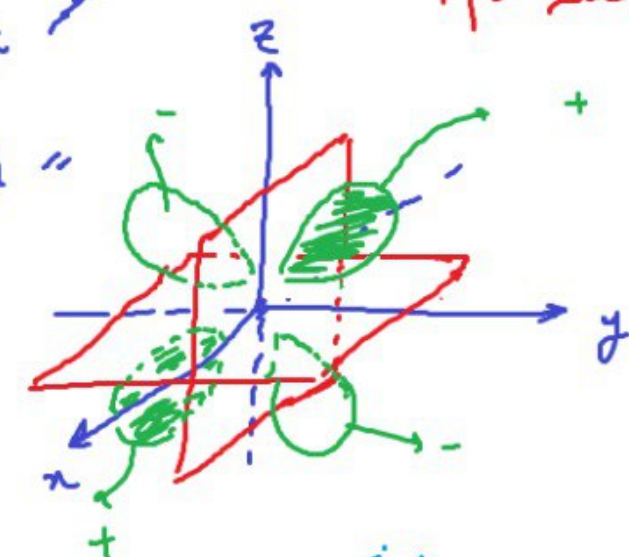
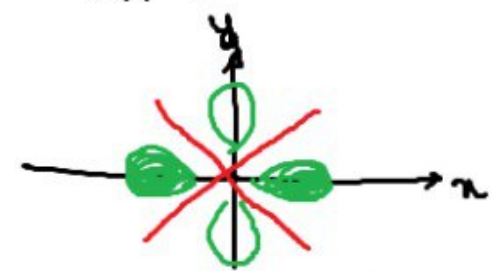
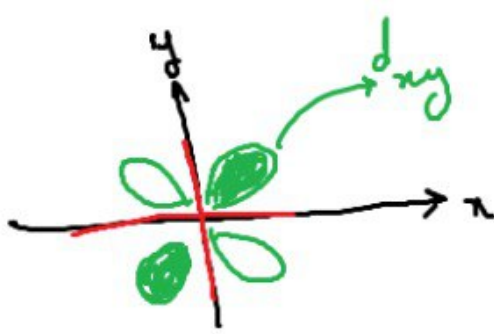
6

ب → 1

$\psi_{d_{yz}} = ? \rightarrow \psi = \text{O}$

$xyxz \xrightarrow{\text{مركز}} \psi = 0$   
 $|\psi|^2 = 0$

هفتمه سوم



$\psi_{d_{x^2-y^2}} \rightarrow \psi = \text{O} (x^2 - y^2) = 0 \rightarrow \begin{cases} y = x \\ y = -x \end{cases}$

$d_{z^2 - x^2 - y^2} \xrightarrow{\text{اصفا}} d_{z^2}$

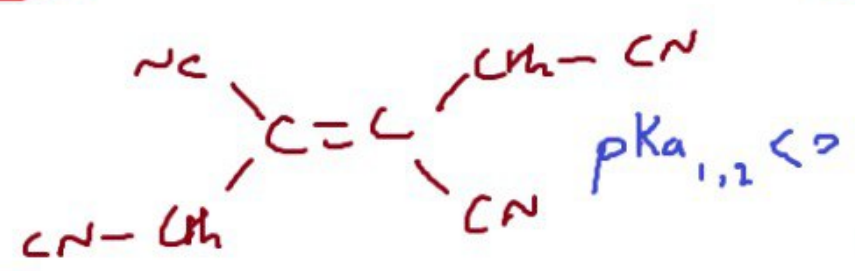
7

2 → ج



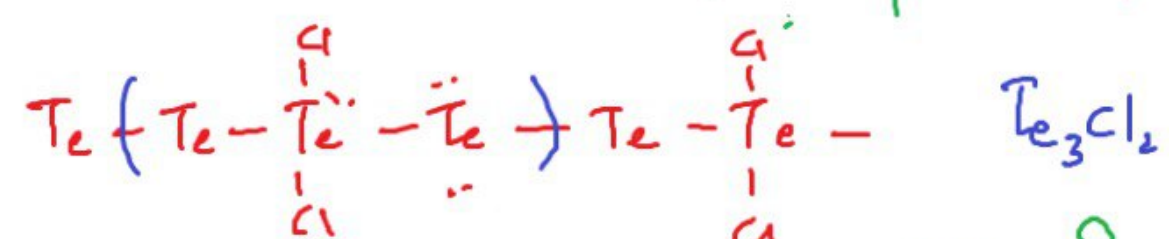
3 → 2

$C_6H_6$	$C_{60}$	$SO_2$	$C_2(CN)_4$
EA ( $kJ mol^{-1}$ )	-68	259	107
			306



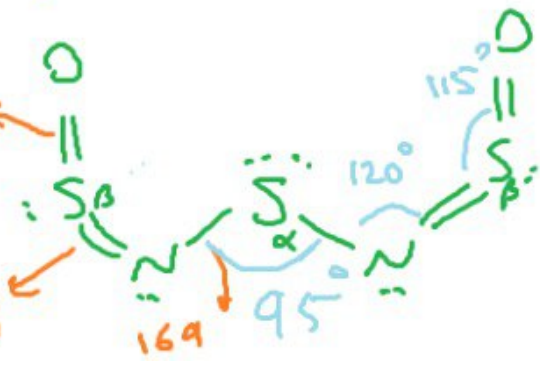
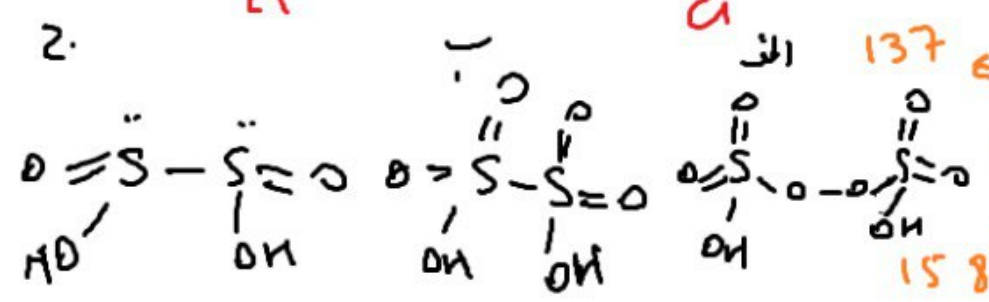
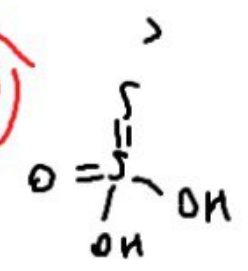
م از صفت الکتا بارش را پیش گفته دم از صفت ریزش

4 → ب



5 → 2

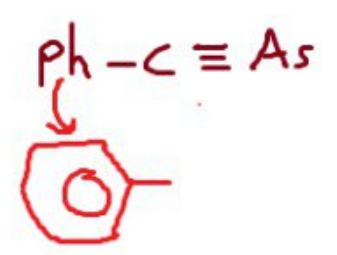
6 → 1



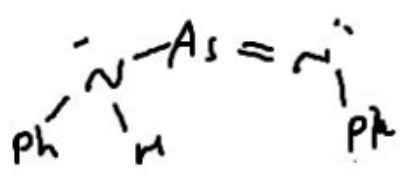
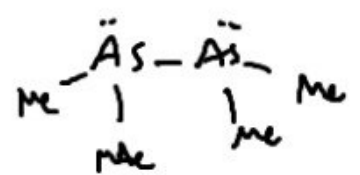
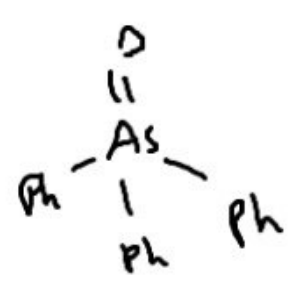
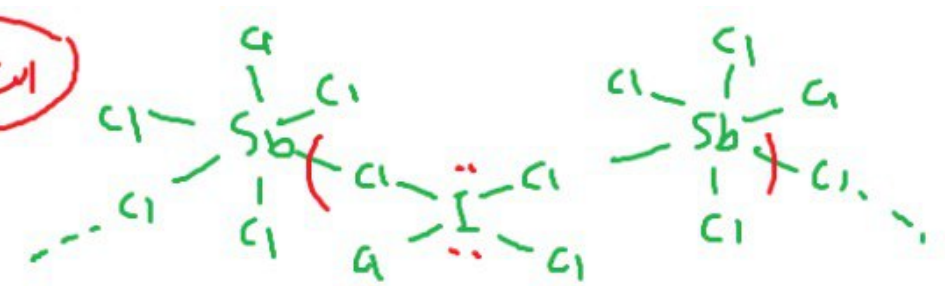
8



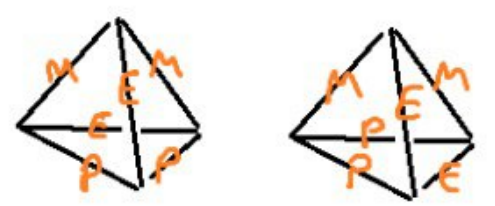
7 → ب



8 → انت



9 → ب

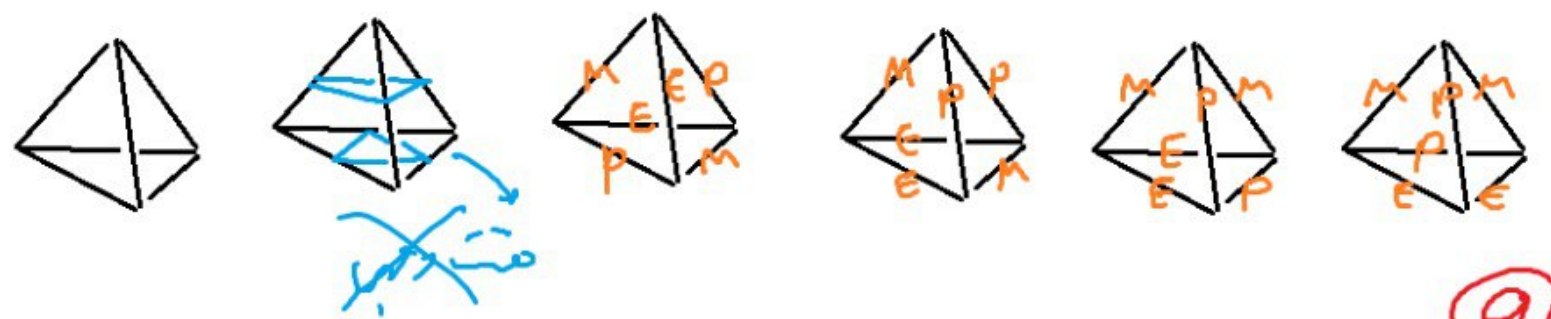


P<sub>4</sub> → P<sub>4</sub>O<sub>6</sub>

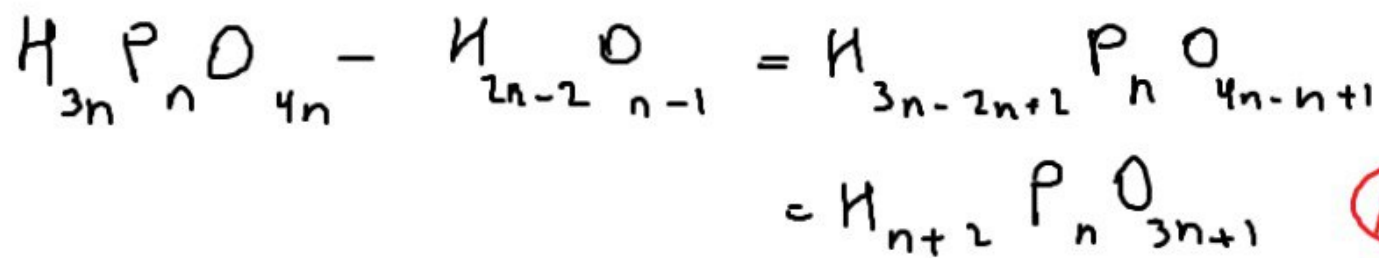
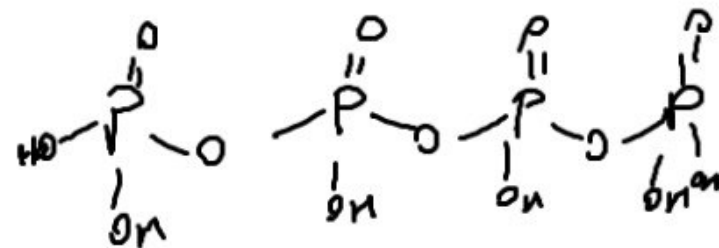
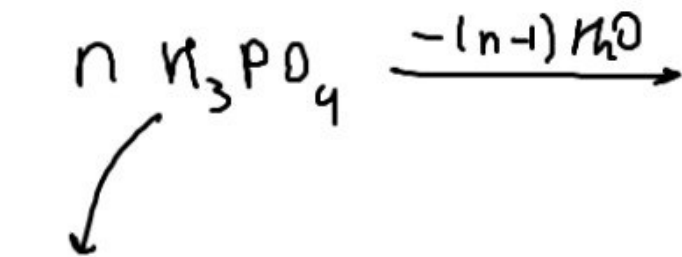
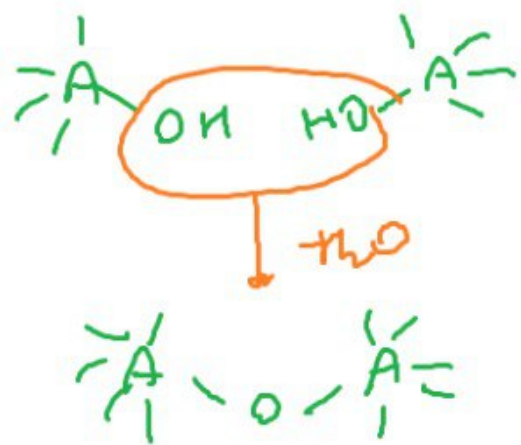
•O• ↔ •N•R

NMe → M NEt → E

NPr → P



9



(10)