

## Пример письменного коллоквиума

1	Написать механизм реакции галогенирования на примере хлорирования метана	Инициирование цепи Рост цепи Обрыв цепи
2	$\text{CH}_3\text{CH}_2\text{CH}_3 + \text{SO}_2 \longrightarrow$	
3	$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{C} - \text{H} \\   \\ \text{CH}_3 \end{array} \xrightarrow{\text{HNO}_3}$	
4	$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{CH} - \text{CH}_2\text{Br} \end{array} \xrightarrow{\text{Na}}$	
5	$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{C} - \text{CH}_3 \\   \\ \text{Br} \end{array} \xrightarrow{\text{Mg/эфир}}$	
6	$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{C} - \text{CH}_2 - \text{CH}_3 \\   \\ \text{Cl} \end{array} \xrightarrow{\text{KOH/C}_2\text{H}_5\text{OH}}$	
7	$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{C} = \text{CH} - \text{CH}_3 \end{array} \xrightarrow{\text{HBr/H}_2\text{O}_2}$	
8	$\begin{array}{c} \text{CH}_3 \quad \text{CH}_3 \\   \quad   \\ \text{CH}_3 - \text{CH} - \text{CH} = \text{C} - \text{CH}_3 \end{array} \xrightarrow{\text{KMnO}_4 (\text{p-p})}$	
9	$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{C} = \text{C} - \text{CH}_3 \\   \\ \text{CH}_3 \end{array} \xrightarrow{\text{H}_2\text{SO}_4 (\text{конц.})}$	
10	$\text{CH}_2 = \text{C}(\text{CH}_3)_2 \xrightarrow{\text{O}_2/\text{Ag}}$	
11	$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_3 - \text{C} = \text{CH}_2 \end{array} \xrightarrow{\text{HBr}}$	
12	$\text{CH}_3\text{CH} = \text{CH}_2 \xrightarrow{\text{O}_3}$	
13	$\text{CH}_2 = \text{CH} - \text{CH} = \text{CH} - \text{CH}_3 \xrightarrow{\text{HBr}}$	
14	$\text{CH}_3\text{CH}_2\text{C} = \text{CH} \xrightarrow{\text{HCl}} \xrightarrow{\text{HBr}}$	
15	$\text{CH}_3\text{CH}_2\text{C} = \text{CH} \xrightarrow{[\text{Ag}(\text{NO}_3)_2]\text{OH}}$	
16	$\text{HC} \equiv \text{CH} + \text{CH}_3\overset{\text{O}}{\underset{  }{\text{C}}} \text{H}_2\text{CH}_3 \longrightarrow$	
17	$2 \text{HC} \equiv \text{CH} \xrightarrow{\text{CuCl/NH}_4\text{Cl}}$	