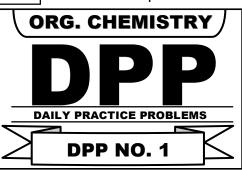
**TARGET: NEET (UG) 2024** 

Course: SARANSH (Youtube Live CRASH COURSE)



## **CHEMISTRY: HALOALKANES AND HALOARENES**

**DPP No.: 1** 

1. Which one of the following has maximum nucleophilicity:

(1) 
$$^{\circ}_{CH_3}$$

2. Which of the following reaction is a substitution reaction?

(1) 
$$CH_2 = CH_2 \xrightarrow{Ni/H_2} CH_3 - CH_3$$

(2) 
$$\begin{matrix} CH_2 - CH_2 \\ I & I \\ Br & Br \end{matrix} \xrightarrow{Zn} CH_2 = CH_2 + ZnBr_2$$

(3) 
$$CH_3 - I + \overset{\Theta}{OH} \longrightarrow CH_3OH + I \overset{\Theta}{}$$

(4) 
$$CH_3 - CHO \xrightarrow{KCN} CH_3 - CH_3 -$$

3. Correct order of rate of solvolysis of the following alkyl chlorides in 50% aqueous ethanol at 44.6°C is:

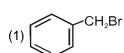
(1) 
$$III > II > I$$

(2) 
$$III > I > II$$

(3) 
$$I > III > II$$

(4) 
$$I > II > III$$

Which of the following will not give precipitate with aq. AgNO<sub>3</sub>? 4.



5. Neopentyl bromide is allowed to react with aquous acetone. The major product formed in the reaction is:

(3) 
$$\frac{CH_3}{CH_3}$$
 C=CHCH<sub>3</sub>

**6.** What will be the major product of the following reaction?

$$\begin{array}{c} \text{Br} \\ | \\ \text{Ph-CH}_2\text{-CH-CH}_3 & \xrightarrow{\text{EtOH}} & \text{Product} \end{array}$$

**7.** What is the final product of the given reaction?

$$\begin{array}{c}
OH \\
& \\
& \\
& \\
\end{array}
+ CH_3I \xrightarrow{KOH} Product$$





**8.** The reaction given is an example of :

$$\begin{array}{c} C_{5}H_{11} \\ H_{11} \\ CH_{3} \end{array} \longrightarrow \begin{array}{c} OH^{-} \\ -CI^{-} \end{array} \longrightarrow \begin{array}{c} C_{5}H_{1} \\ CH_{3} \end{array}$$

- 9. Reaction of methyl bromide with an alcoholic solution of silver cyanide predominantly gives :
  - (1) Acetonitrile
- (2) Methyl isocyanide
- (3) Methyl isocyanate
- (4) Methyl isothiocyanate
- 10. Which amongst the following reactions of alkyl halides produces isonitrile as a major product?

(1) 
$$R - X + HCN \rightarrow$$

(2) 
$$R - X + AgCN \rightarrow$$

(3) 
$$R - X + KCN \rightarrow$$

(4) R - X + NaCN 
$$\xrightarrow{H_2O}$$
  $\xrightarrow{C_2H_5OH}$ 

## **Answer Key**

- 1.
- (1) 2
- (3)
- 3.
- (1)
- (4)

(2)

- 6.
- )
- (3)

- **8.** (2)
- 9.
- (2)
- 10.
- (3)