

## NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	The most reactive compound for electrophilic nitration will be	A. Benzyl chloride B. Benzoic acid C. Nitrobenzene D. Chlorobenzene
2	What happens when $\text{CCl}_4$ is treated with $\text{AgNO}_3$ solution?	A. $\text{NO}_2$ will be evolved B. A white ppt. of $\text{AgCl}$ will form C. $\text{CCl}_4$ will dissolve in $\text{AgNO}_3$ solution D. Nothing will happen
3	Reaction of ethylamine with chloroform in alcoholic KOH produces	A. $\text{CH}_3\text{CH}_2\text{OH}$ B. $\text{CH}_3\text{CH}_2\text{NC}$ C. $\text{C}_2\text{H}_5\text{NC}$ D. $\text{C}_2\text{H}_5\text{CN}$
4	Ethyl chloride on treatment with aqueous alkali gives	A. Ethane B. Ethene C. Ethanal D. Ethanol
5	DDT is formed from	A. Benzene and Chlorobenzene B. Chloral and Chlorobenzene C. Chloral and benzene D. Chlorobenzene and chlorine
6	Which of the following with aqueous KOH will give acetaldehyde?	A. 1, 2-Dichloroethane B. 1, 1-Dichloroethane C. Chloroacetic acid D. Ethyl chloride
7	Aryl halides are less reactive towards nucleophilic substitution reactions as compared to alkyl halides due to	A. The formation of less stable carbonium ion B. Resonance stabilization C. Larger carbon-halogen bond D. The inductive effect
8	Carbon atom holding halogen in aryl halides is	A. $\text{sp}^2$ -hybridised B. $\text{sp}^3$ -hybridised C. $\text{sp}$ -hybridised D. $\text{sp}^3\text{d}$ -hybridised
9	Which of the following reagent cannot be used for preparing alkyl chloride from alcohol?	A. $\text{HCl} + \text{anhyd. ZnCl}_2$ B. $\text{NaCl}$ C. $\text{PCl}_5$ D. $\text{SOCl}_2$
10	Octane number can be changed by	A. Isomerisation B. alkylation C. Cyclisation D. All of these
11	The treatment of benzene with isobutene in the presence of sulphuric acid give	A. isobutyl benzene B. tert-Butyl benzene C. n- Butyl benzene D. no reaction
12	Which of the following possesses the highest melting point?	A. Chlorobenzene B. o- Dichlorobenzene C. m-Dichlorobenzene D. p-Dichlorobenzene
13	Which of the following species participate in sulphonation of benzene ring?	A. $\text{H}_2\text{SO}_4$ B. $\text{HSO}_3^-$ C. $\text{SO}_3$ D. $\text{SO}_2$
14	Heating a mixture of sodium benzoate and soda lime gives	A. Benzene B. Methane C. Sodium benzoate D. Calcium benzoate
15	Benzene is obtained by fractional distillation of	A. Heavy oil B. Anthracene oil C. Middle oil D. None of these

