

NAT II Physical Science Chemistry

Sr	Questions	Answers Choice
1	Which species represents the electrophile in aromatic nitration?	A. NO_2 B. NO_2^+ C. NO_2^- D. NO_3^+
2	Which reaction sequence would be best to prepare 3-chloro-aniline from benzene?	A. Chlorination, nitration, reduction B. Nitration, Chlorination, reduction C. Nitration, reduction, chlorination D. Nitration, reduction, acylation, chlorination, hydrolysis
3	Most common reactions of benzene and its derivatives are	A. Electrophilic addition reactions B. Electrophilic substitution reactions C. Nucleophilic addition reactions D. Nucleophilic substitution reactions
4	The reaction/method that does not give an alkane is	A. Catalytic hydrogenation of alkanes B. Wurtz reaction C. Hydrolysis of alkyl magnesium bromide D. Dehydrohalogenation of an alkyl halide.
5	Which of the following method is most appropriate for the manufacture of methane?	A. By reduction of CH_2SL_2 B. Wurtz reaction C. Liquification of natural gas D. None of these
6	The addition of HBr is easiest with	A. $\text{CH}_2 = \text{CHCl}$ B. $\text{ClCH} = \text{CHCl}$ C. $\text{CH}_3 - \text{CH} = \text{CH}_2$ D. $(\text{CH}_3)_2\text{C} = \text{CH}_2$
7	In Friedel-Craft's alkylation besides AlCl_3 the other reactants are	A. $\text{C}_6\text{H}_6 + \text{NH}_3$ B. $\text{C}_6\text{H}_6 + \text{CH}_4$ C. $\text{C}_6\text{H}_6 + \text{CH}_3\text{Cl}$ D. $\text{C}_6\text{H}_6 + \text{CH}_3\text{COCl}$
8	For preparing an alkane, a concentrated aqueous solution of sodium or potassium salt of saturated carboxylic acid is subjected to	A. Hydrolysis B. Oxidation C. Hydrogenation D. Electrolysis
9	Octane number is zero for	A. n-Heptane B. Isooctane C. n-Hexane D. Isoheptane
10	The IUPAC name of the compound having the formula $(\text{CH}_3)_3\text{C} - \text{CH} = \text{CH}_2$ is	A. 1, 1-Dimethyl-3-butene B. 1, 1, 1-Trimethyl-3-propene C. 3, 3,-Dimethyl-1-butene D. 3, 3, 3-Trimethyl-1-propene
11	Which of the following substances is used as an antiknock compound?	A. Tetraethyl lead B. Lead tetrachloride C. Lead acetate D. Ethyl acetate
12	The order of reactivity of halogens in aliphatic substitution reactions is	A. $\text{Br}_2 > \text{Cl}_2 > \text{F}_2$ B. $\text{Cl}_2 > \text{Br}_2 > \text{F}_2$ C. $\text{Cl}_2 > \text{F}_2 > \text{Br}_2$ D. $\text{F}_2 > \text{Br}_2 > \text{Cl}_2$
13	Acetylene gives	A. White ppt. with ammonical AgNO_3 and red ppt. with ammonical $\text{Cu}(\text{NO}_3)_2$ B. White ppt. with ammonical AgNO_3 and red ppt. with ammonical $\text{Cu}(\text{NO}_3)_2$ C. White ppt. with both D. Red ppt. with both
14	The essential component of organic compound is	A. O B. C C. P D. N

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Wholet prepared urea from

- A. Ammonia
- B. NH_4CNO
- C. NH_3
- D. Uric acid