



Because of Today Tomorrow Will Be better

# RK Academy

One step Ahead to Your Success...





## WEEKLY TEST

CLASS: XII  
SUBJECT: CHEMISTRY  
**(1 MARK)**

FM: 26  
TIME: 45 MIN

1. Which of the following is vinylic halide?

- (a)  $\text{CH}_3\text{CH}=\text{CHCH}_2\text{Br}$  (b)  (c)  (d)  $\text{CH}_3\text{CH}(\text{Br})\text{CH}=\text{CH}_2$

2. The position of Br in the compound in  $\text{CH}_3\text{CH}=\text{CHC}(\text{Br})(\text{CH}_3)_2$  can be classified as \_\_\_\_\_.

[NCERT Exemplar]

- (a) Allyl (b) Aryl (c) Vinyl (d) Secondary

3. Which of the following is an example of vic-dihalide?

[NCERT Exemplar]

- (a) Dichloromethane (b) 1,2-dichloroethane  
(c) Ethylidene chloride (d) Allyl chloride

4. Ethylidene chloride is a/an \_\_\_\_\_.

[NCERT Exemplar]

- (a) vic-dihalide (b) gem-dihalide  
(c) allylic halide (d) vinylic halide

5. Haloalkanes contain halogen atom(s) attached to the  $sp^3$  hybridised carbon atom of an alkyl group. Identify haloalkane from the following compounds.

[NCERT Exemplar]

- (a) 2-Bromopentane (b) Vinyl chloride (chloroethene)  
(c) 2-Chloroacetophenone (d) Trichloromethane

6. Which is the correct IUPAC name for  $\text{CH}_3-\text{CH}-\text{CH}_2-\text{Br}$ ?

[NCERT Exemplar]

- (a) 1-Bromo-2-ethylpropane (b) 1-Bromo-2-ethyl-2-methylethane  
(c) 1-Bromo-2-methylbutane (d) 2-Methyl-1-bromobutane

7. The IUPAC name of the compound  is:

- (a) 4-fluoro-1-methyl-3-nitrobenzene (b) 1-fluoro-4-methyl-2-nitrobenzene  
(c) 2-fluoro-5-methyl-1-nitrobenzene (d) 4-methyl-1-fluoro-2-nitrobenzene

8. Which of the following is most preferred to prepare alkylchloride from alcohol?

- (a) Concentrated HCl (b)  $\text{SOCl}_2$  (c)  $\text{PCl}_5$  (d)  $\text{PCl}_3$



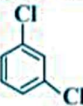
9. Ethylene chloride and ethylidene chloride are isomers. Identify the correct statements.

[NCERT Exemplar]

- (a) Both the compounds form same product on treatment with alcoholic KOH.  
(b) Both the compounds form same product on treatment with aq. NaOH.  
(c) Both the compounds form same product on reduction.  
(d) Both the compounds are optically active.

10. Arrange the following compounds in the increasing order of their densities.

[NCERT Exemplar]

- (i)  (ii)  (iii)  (iv) 

- (a) (i) < (ii) < (iii) < (iv)  
(b) (i) < (iii) < (iv) < (ii)  
(c) (iv) < (iii) < (ii) < (i)  
(d) (ii) < (iv) < (iii) < (i)

11. How do you convert the following?

(i) Prop-1-ene to 1-fluoropropane

(ii) Chlorobenzene to 2-chlorotoluene (2 MARKS)

12. Give reason for

(i) Butyl bromide has higher boiling point than t-butyl bromide.

Or

(i) Racemic mixture is optically inactive.

(ii) The presence of nitro group ( $-\text{NO}_2$ ) at o/p positions increases the reactivity of haloarenes towards nucleophilic substitution reactions. (2 MARKS)

13. Write Hoffman bromamide reaction. Write Friedel craft reaction (2 MARKS)

14. (5 MARKS)

Predict, giving reasons, the order of basicity of the following compounds in

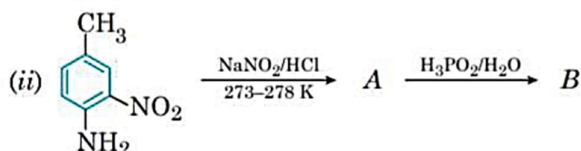
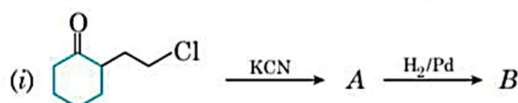
(i) gaseous phase and

(ii) in aqueous solutions ( $\text{CH}_3)_3\text{N}$ ,  $(\text{CH}_3)_2\text{NH}$ ,  $\text{CH}_3\text{NH}_2$ ,  $\text{NH}_3$ .

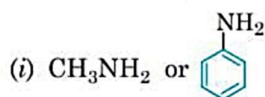
Explain the observed  $K_b$  order:

$\text{Et}_2\text{NH} > \text{Et}_3\text{N} > \text{EtNH}_2$  in aqueous solution

Identify A and B in the following reaction.



In the following pairs which one is more basic and why?



15. .

Q. 7. Predict the reagents or the products in the following reaction sequence:

