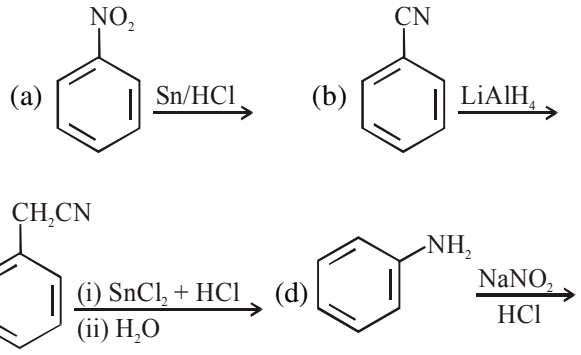
AMINES

1. The Kjeldahl method of Nitrogen estimation fails for which of the following reaction products ?



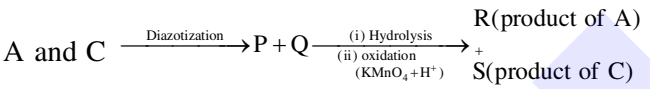
(1) a and d

(2) c and d

(3) a, c and d

(4) b and c

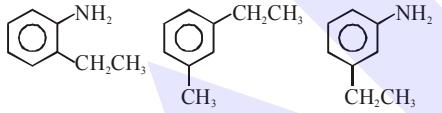
2. Three isomers A, B and C (mol. formula $C_8H_{11}N$) give the following results :



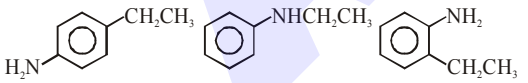
R has lower boiling point than S

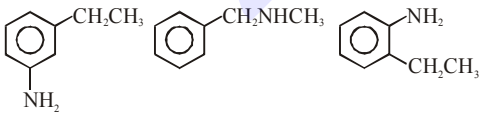
B $\xrightarrow{C_6H_5SO_2Cl}$ alkali-insoluble product

A, B and C, respectively are :

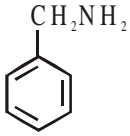
(1) 

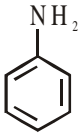
(2)

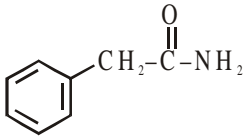
(3) 

(4) 

3. Which of the following compounds can be prepared in good yield by Gabriel phthalimide synthesis?

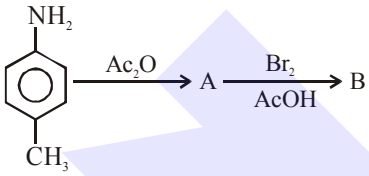
(1) 

(2) 

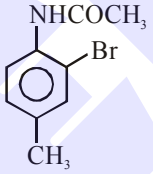
(3) 

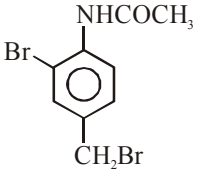
(4) $CH_3–CH_2–NHCH_3$

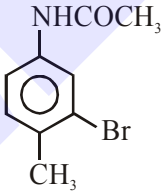
4. In the following reaction sequence

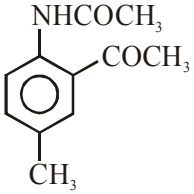


the major products B is -

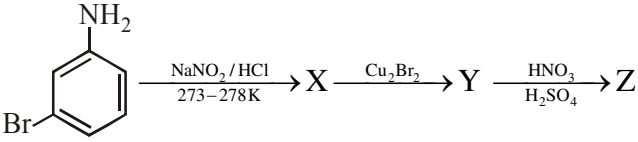
(1) 

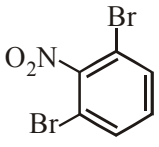
(2) 

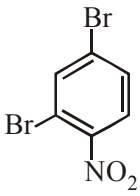
(3) 

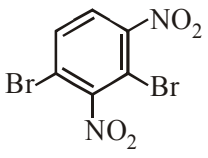
(4) 

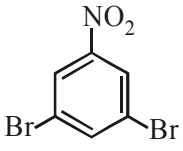
5. The major product Z obtained in the following reaction scheme is :



(1) 

(2) 

(3) 

(4) 

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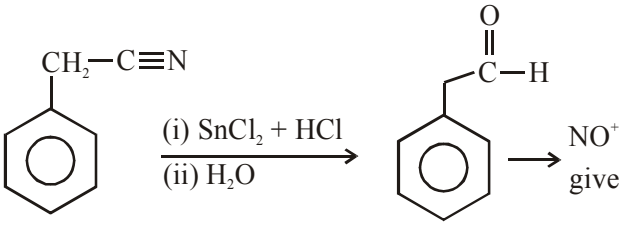
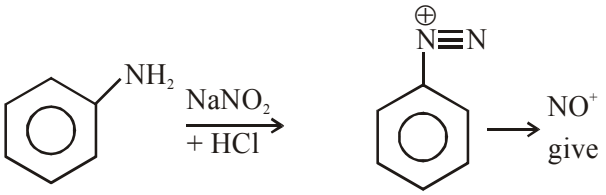
SOLUTION

1. Official Ans. by NTA (2)

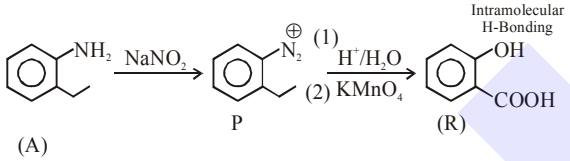
Sol. Kjeldahl method is used for N estimation But not given by 'Diazo' compounds

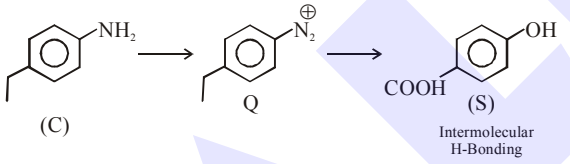


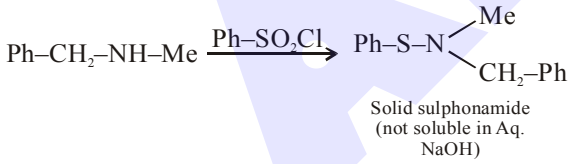


2. Official Ans. by NTA (2)

Sol.

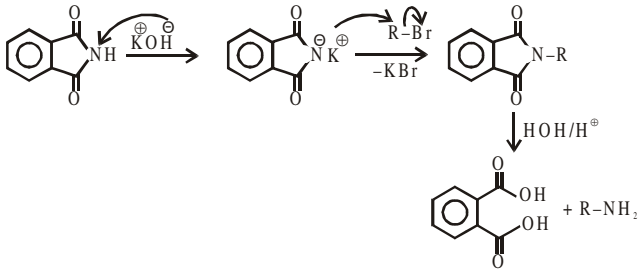




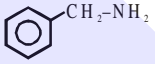


3. Official Ans. by NTA (1)

Sol. Gabriel phthalimide synthesis is used for preparation of 1° Aliphatic amine

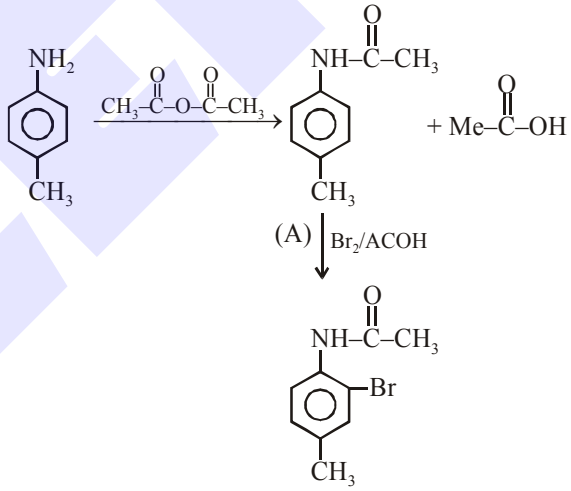


Here R–Br =

R–NH_2 = 

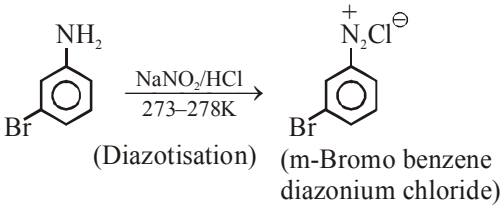
4. NTA Ans. (1)

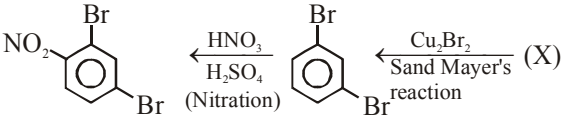
Sol.



5. NTA Ans. (2)

Sol.





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