

## NEET AMINES — PREPARATION OF AMINES — PYQS

Max. Marks: 72

Questions: 18

### Section A (MCQ) — 18 questions

**Q.1** Select the reagents that reduce nitriles to primary amines.

- A. (i)  $\text{LiAlH}_4$ ; (ii)  $\text{H}_2\text{O}$     B.  $\text{Sn} + \text{HCl}$   
 C.  $\text{H}_2/\text{Ni}$     D.  $\text{Na}(\text{Hg})/\text{C}_2\text{H}_5\text{OH}$   
 E.  $\text{Br}_2/\text{aq. NaOH}$

Choose the correct answer from the options given below.

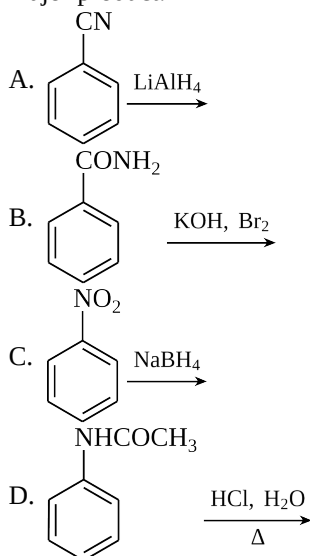
[NEET (UG) 2026]

- (1) A, B and C only    (2) A, D and E only  
 (3) A, C and D only    (4) B, D and E only

Scan or tap for the full solution



**Q.2** Identify the reactions which give aniline as the major product.



Choose the correct answer from the options given below.

[RE-NEET (UG) 2026]

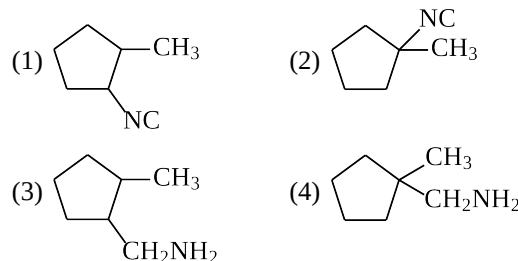
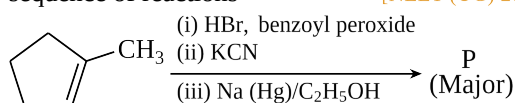
- (1) C and D only    (2) A and B only  
 (3) B and D only    (4) A and C only

Scan or tap for the full solution



**Q.3** Predict the major product 'P' in the following sequence of reactions-

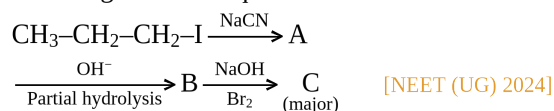
[NEET (UG) 2025]



Scan or tap for the full solution



**Q.4** Identify the major product C formed in the following reaction sequence :



- (1) propylamine    (2) butylamine  
 (3) butanamide    (4)  $\alpha$ -bromobutanoic acid

Scan or tap for the full solution



**Q.5** Which of the following reactions will NOT give primary amine as the product? [NEET (UG) 2023]

- (1)  $\text{CH}_3\text{CN} \xrightarrow[\text{(ii) H}_3\text{O}^+]{\text{(i) LiAlH}_4} \text{Product}$   
 (2)  $\text{CH}_3\text{NC} \xrightarrow[\text{(ii) H}_3\text{O}^+]{\text{(i) LiAlH}_4} \text{Product}$   
 (3)  $\text{CH}_3\text{CONH}_2 \xrightarrow[\text{(ii) H}_3\text{O}^+]{\text{(i) LiAlH}_4} \text{Product}$   
 (4)  $\text{CH}_3\text{CONH}_2 \xrightarrow{\text{Br}_2/\text{KOH}} \text{Product}$

Scan or tap for the full solution



**Q.6** Match List-I with List-II :

| List-I<br>(Reaction) |                      | List-II<br>(Product formed) |                |
|----------------------|----------------------|-----------------------------|----------------|
| a.                   | Gabriel synthesis    | i.                          | Benzaldehyde   |
| b.                   | Kolbe synthesis      | ii.                         | Ethers         |
| c.                   | Williamson synthesis | iii.                        | Primary amines |
| d.                   | Etard reaction       | iv.                         | Salicylic acid |

Choose the correct answer from the options given below :

[NEET (UG) 2022 (Phase 2)]

- (1) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)  
 (2) (a)-(iii), (b)-(i), (c)-(ii), (d)-(iv)  
 (3) (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)  
 (4) (a)-(iv), (b)-(iii), (c)-(i), (d)-(ii)

Scan or tap for the full solution



**Q.7** Which of the following reactions is appropriate for converting acetamide to methanamine?

[NEET 2017]

- (1) Hoffmann hypobromamide reaction  
 (2) Stephen's reaction  
 (3) Gabriel phthalimide synthesis  
 (4) Carbylamine reaction

Scan or tap for the full solution



**Q.8** Method by which aniline cannot be prepared is

[AIPMT 2015]

- (1) degradation of benzamide with bromine in alkaline solution  
 (2) reduction of nitrobenzene with  $H_2/Pd$  in ethanol  
 (3) potassium salt of phthalimide treated with chlorobenzene followed by hydrolysis with aqueous NaOH solution  
 (4) hydrolysis of phenylisocyanide with acidic solution.

Scan or tap for the full solution



**Q.9** The electrolytic reduction of nitrobenzene in strongly acidic medium produces

[AIPMT 2015 (Cancelled)]

- (1) azobenzene (2) aniline  
 (3) p-aminophenol (4) azoxybenzene.

Scan or tap for the full solution



**Q.10** An organic compound A on treatment with  $NH_3$  gives B, which on heating gives C. C when treated with  $Br_2$  in the presence of KOH produces ethyl amine. Compound A is

[AIPMT 2011 (Mains)]

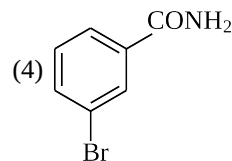
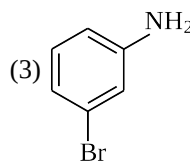
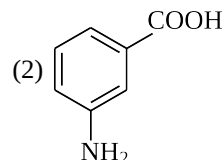
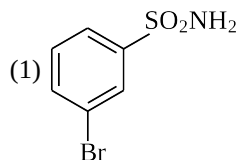
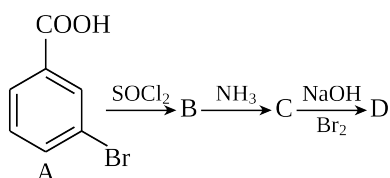
- (1)  $CH_3COOH$  (2)  $CH_3CH_2CH_2COOH$   
 (3)  $CH_3-CHCOOH$  (4)  $CH_3CH_2COOH$   
                   |  
                    $CH_3$

Scan or tap for the full solution



**Q.11** In a set of reactions m-bromobenzoic acid gave a product D. Identify the product D.

[AIPMT 2011 (Prelims)]

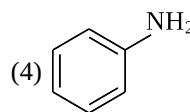
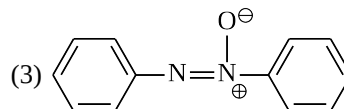
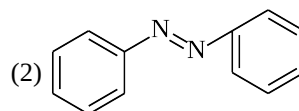
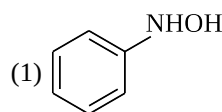
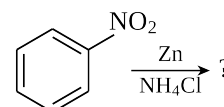


Scan or tap for the full solution



**Q.12** What is the product obtained in the following reaction?

[AIPMT 2011 (Prelims)]



Scan or tap for the full solution



**Q.13** Acetamide is treated with the following reagents separately. Which one of these would yield methyl amine?

[AIPMT 2010 (Prelims)]

- (1) NaOH/ $Br_2$  (2) Sodalime  
 (3) Hot conc.  $H_2SO_4$  (4)  $PCl_5$

Scan or tap for the full solution



**Q.14** Which one of the following on reduction with lithium aluminium hydride yields a secondary amine?

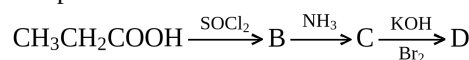
[AIPMT 2007]

- (1) Methyl isocyanide (2) Acetamide  
 (3) Methyl cyanide (4) Nitroethane

Scan or tap for the full solution



**Q.15** In a set of reactions propionic acid yielded a compound D.



The structure of D would be

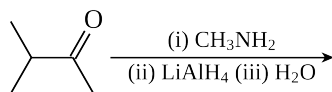
[AIPMT 2006]

- (1)  $\text{CH}_3\text{CH}_2\text{NH}_2$  (2)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{NH}_2$   
 (3)  $\text{CH}_3\text{CH}_2\text{CONH}_2$  (4)  $\text{CH}_3\text{CH}_2\text{NHCH}_3$

Scan or tap for the  
full solution



**Q.16** The major organic product formed from the following reaction :



is

[AIPMT 2005]

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

Scan or tap for the  
full solution



**Q.17** Electrolytic reduction of nitrobenzene in weakly acidic medium gives

[AIPMT 2005]

- (1) N-phenylhydroxylamine  
 (2) nitrosobenzene  
 (3) aniline  
 (4) p-hydroxyaniline

Scan or tap for the  
full solution



**Q.18** Intermediates formed during reaction of with  $\text{Br}_2$  and  $\text{KOH}$  are

[AIPMT 2001]



- (1)  $\text{RCONHBr}$  and  $\text{RNCO}$   
 (2)  $\text{RNHCOBr}$  and  $\text{RNCO}$   
 (3)  $\text{RNH}-\text{Br}$  and  $\text{RCONHBr}$   
 (4)  $\text{RCONBr}_2$

Scan or tap for the  
full solution



## ANSWER KEY

| Ques. | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8 | 9 | 10 | 11 |
|-------|----|----|----|----|----|----|----|---|---|----|----|
| Ans.  | 3  | 3  | 3  | 1  | 2  | 1  | 1  | 3 | 3 | 4  | 3  |
| Ques. | 12 | 13 | 14 | 15 | 16 | 17 | 18 |   |   |    |    |
| Ans.  | 1  | 1  | 1  | 1  | 2  | 3  | 1  |   |   |    |    |