

PYQSide

NEET AMINES — PREPARATION OF AMINES — PYQS

Max. Marks: 72

Questions: 18

Section A (MCQ)

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

- A. (i) LiAlH_4 ; (ii) H_2O B. $\text{Sn} + \text{HCl}$
 C. H_2/Ni D. $\text{Na(Hg)}/\text{C}_2\text{H}_5\text{OH}$
 E. $\text{Br}_2/\text{aq. NaOH}$

Choose the correct answer from the options given below.

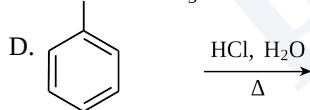
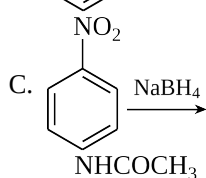
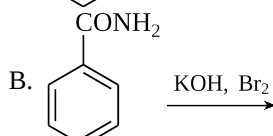
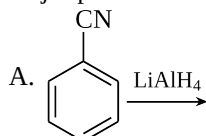
[NEET (UG) 2026]

- (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]

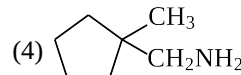
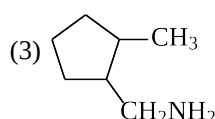
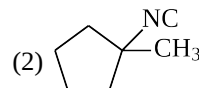
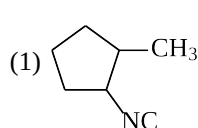
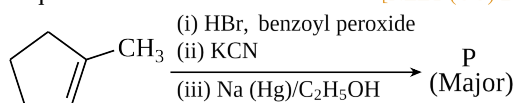
- (1) C and D only (2) A and B only
 (3) B and D only (4) A and C only

Scan or tap for the full solution



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

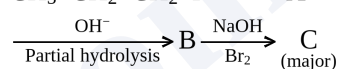
[NEET (UG) 2025]



Scan or tap for the full solution



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



[NEET (UG) 2024]

- (1) propylamine (2) butylamine
 (3) butanamide (4) α -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 (Reaction)		List-II (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)]

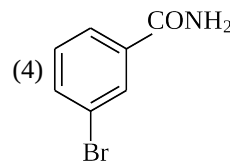
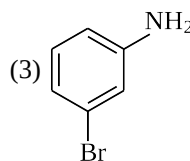
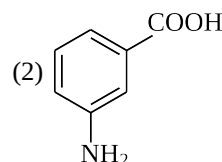
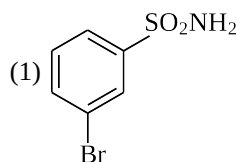
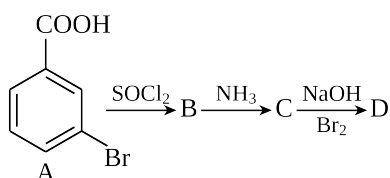
- (1) CH_3COOH (2) $CH_3CH_2CH_2COOH$
 (3) $CH_3-CHCOOH$ (4) CH_3CH_2COOH
 $|$
 CH_3

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)]

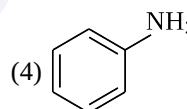
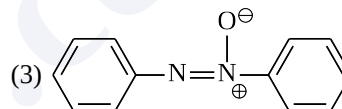
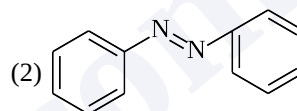
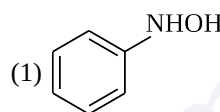
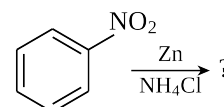


Scan or tap for the full solution



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?

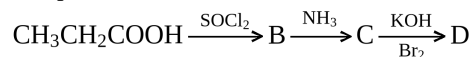
[AIPMT 2007]

- (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

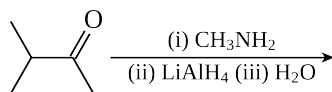
[AIPMT 2006]

- (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

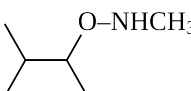
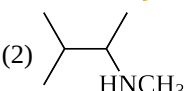
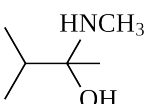
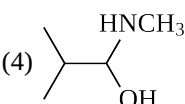


Q.16 The major organic product formed from the following reaction :



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 Br_2 and KOH are

[AIPMT 2001]



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