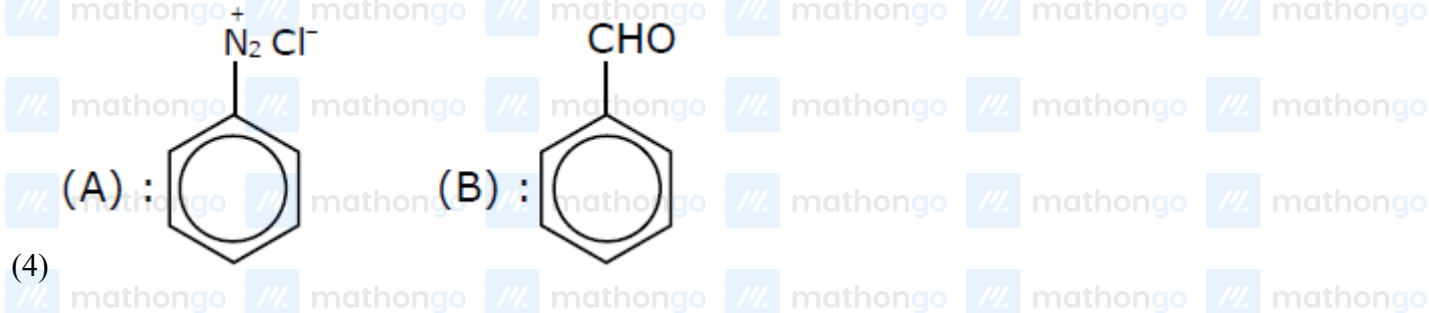
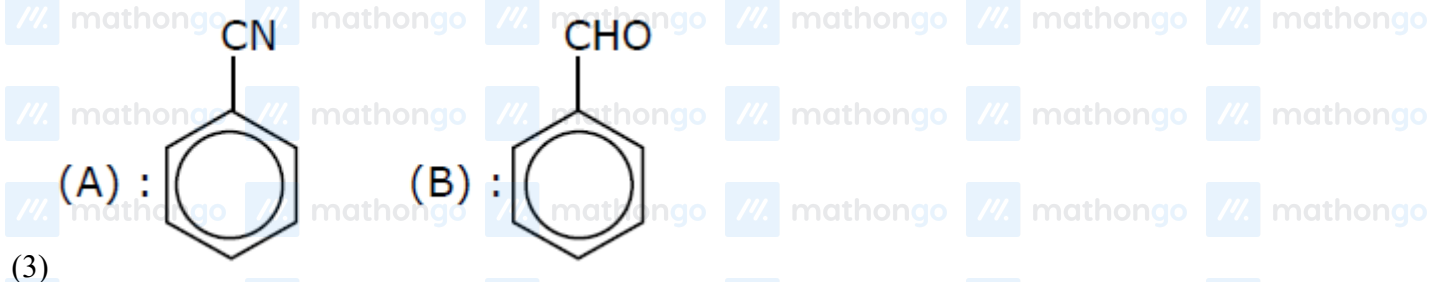
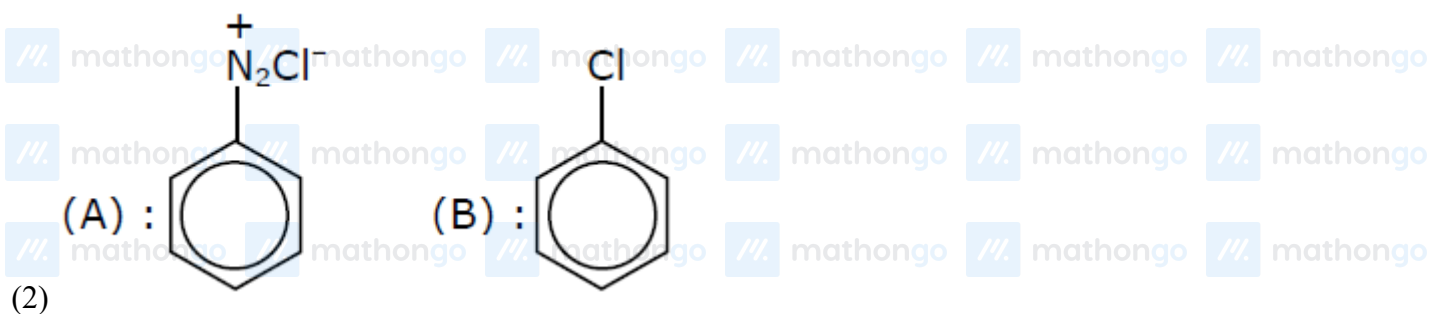
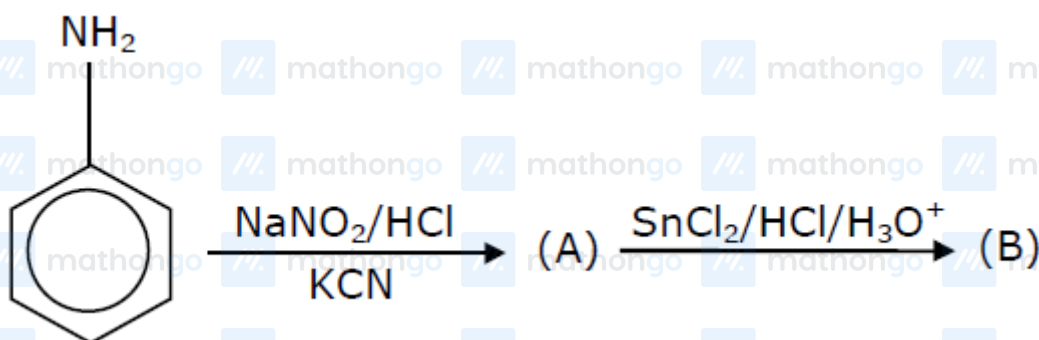


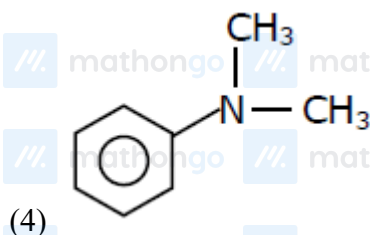
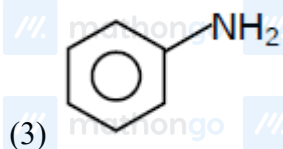
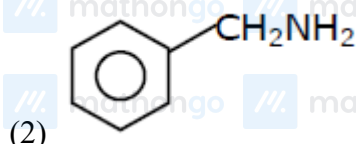
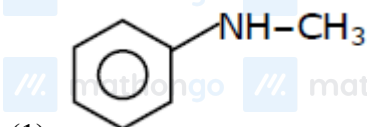
Q1: 24 Feb (Shift 1) - Single Correct

'A' and 'B' in the following reactions are :



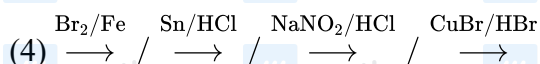
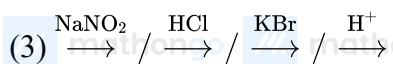
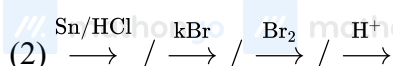
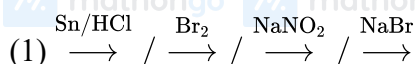
Q2: 24 Feb (Shift 2) - Single Correct

The diazonium salt of which of the following compounds will form a coloured dye on reaction with β -Naphthol in NaOH ?



Q3: 24 Feb (Shift 2) - Single Correct

What is the correct sequence of reagents used for converting nitrobenzene into *m*-dibromobenzene?

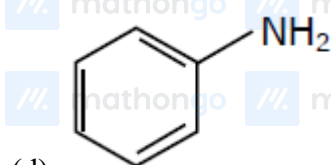
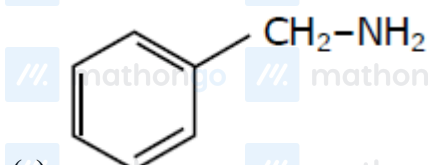
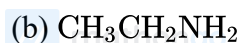
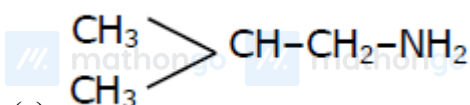


Questions with Answer Keys

MathonGo

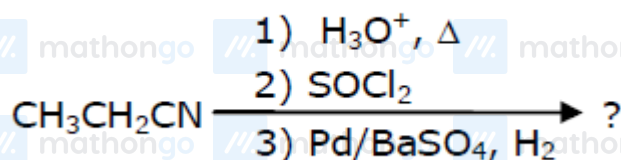
Q4: 24 Feb (Shift 2) - Numerical

The total number of amines among the following which can be synthesized by Gabriel synthesis is



Q5: 25 Feb (Shift 1) - Single Correct

The major product of the following chemical reaction is:

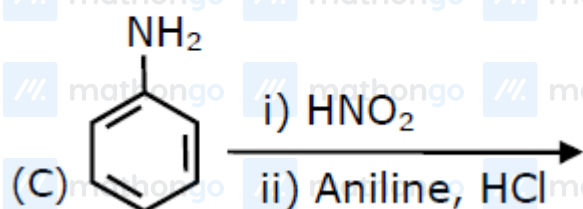
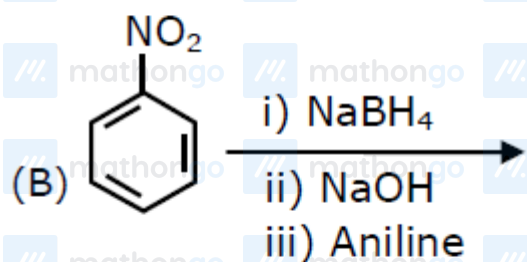
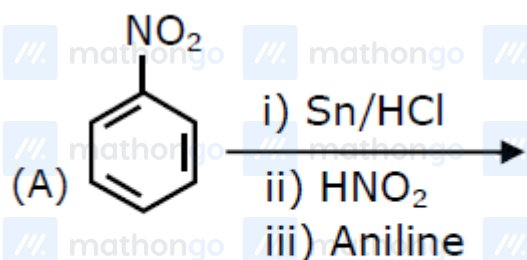


Q6: 25 Feb (Shift 1) - Single Correct

Questions with Answer Keys

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Which of the following reaction/s will not give p-aminoazobenzene?



(1) B only

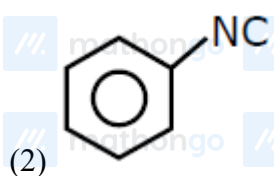
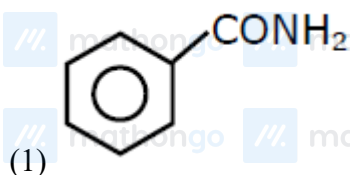
(2) A and B

(3) C only

(4) A only

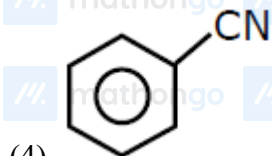
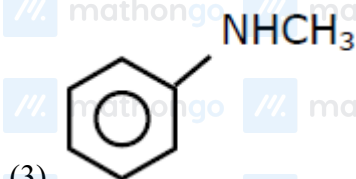
Q7: 25 Feb (Shift 2) - Single Correct

Carbylamine test is used to detect the presence of primary amino group in an organic compound. Which of the following compound is formed when this test is performed with aniline ?

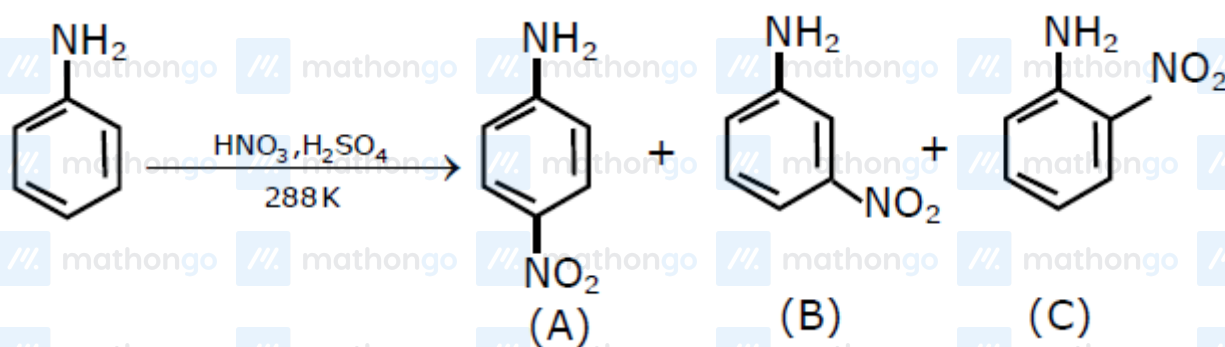


Questions with Answer Keys

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Q8: 25 Feb (Shift 2) - Single Correct



Correct statement about the given chemical reaction is :

- (1) Reaction is possible and compound (A) will be major product.
- (2) The reaction will form sulphonated product instead of nitration.
- (3) $-\text{NH}_2$ group is ortho and para directive, so product (B) is not possible.
- (4) Reaction is possible and compound (B) will be the major product.

Q9: 26 Feb (Shift 1) - Single Correct

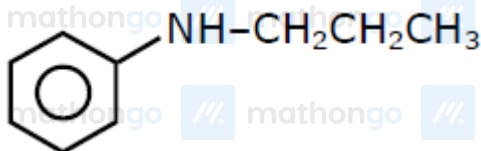
An amine on reaction with benzenesulphonyl chloride produces a compound insoluble in alkaline solution.

This amine can be prepared by ammonolysis of ethyl chloride. The correct structure of amine is :

- (1) $\text{CH}_3\text{CH}_2\text{CH}_2\overset{\text{H}}{\text{N}}-\text{CH}_2\text{CH}_3$
- (2) $\text{CH}_3\text{CH}_2\text{CH}_2\text{NHCH}_3$

Questions with Answer Keys

MathonGo



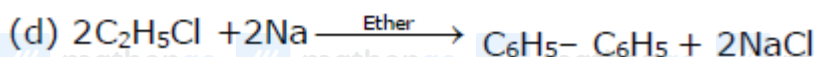
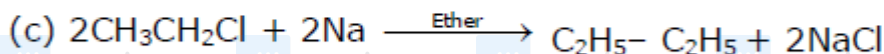
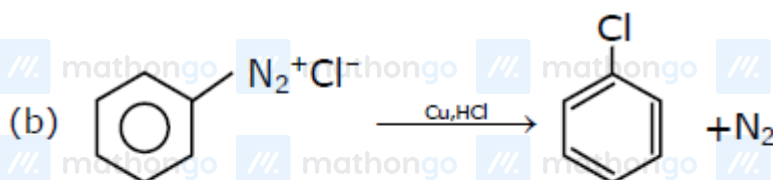
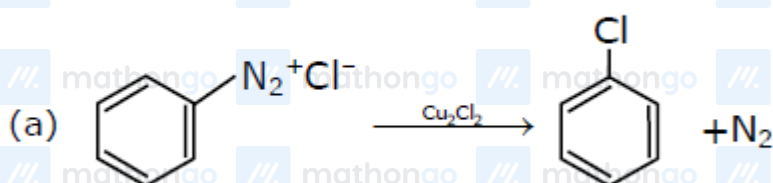
(3)



Q10: 26 Feb (Shift 2) - Single Correct

Match List-I with List-II

List-I



List-II

(i) Wurtz reaction

(ii) Sandmeyer reaction

(iii) Fitting reaction

(iv) Gatterman reaction

Choose the correct answer from the option given below:

(1) (a) – (ii), (b) – (i), (c) – (iv), (d) – (iii)

(2) (a) – (iii), (b) – (iv), (c) – (i), (d) – (ii)

(3) (a) – (ii), (b) – (iv), (c) – (i), (d) – (iii)

(4) (a) – (iii), (b) – (i), (c) – (iv), (d) – (ii)

Q11: 26 Feb (Shift 2) - Single Correct

A. Phenyl methanamine

B. N, N-Dimethylaniline

Questions with Answer Keys

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C. N-Methyl aniline

D. Benzenamine

Choose the correct order of basic nature of the above amines.

(1) $D > C > B > A$

(2) $D > B > C > A$

(3) $A > C > B > D$

(4) $A > B > C > D$

