



Name _____ Class: _____

Start Time _____ End Time _____ Time Taken _____

Time allowed: 34 minutes**INSTRUCTIONS TO CANDIDATES**

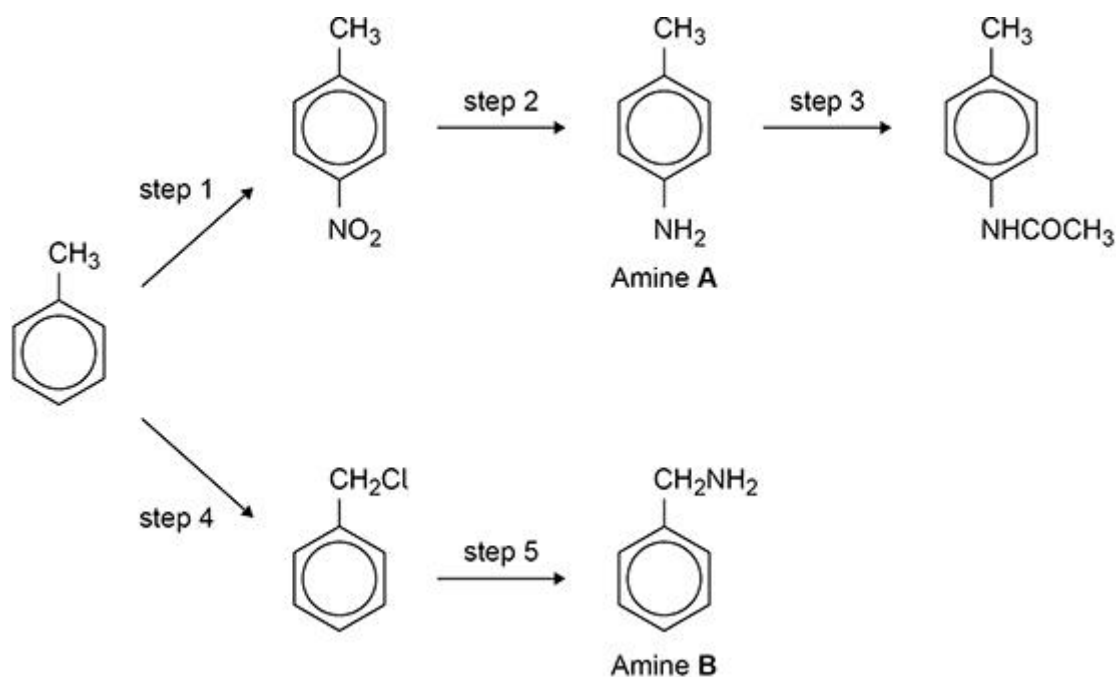
- This document is designed to be used as a practice test.
- Complete the test under exam conditions in one sitting.
- Optional: Before marking it, go through the paper with a set of notes and improve your answers.
- Mark the test using the mark scheme make corrections on the paper.
- Complete the table on the front page.
- Improve your notes so that they better reflect your weaknesses.
- Make a note of your strengths and weaknesses for future revision.

Success Criteria	Questions in Paper	Mark	Out of	%	Rank Order
General and nomenclature	3b		1		
Forming Aliphatic Amines	1d, 2a,		2, 6		
Forming Aromatic Amines	1a, 1b, 2b		3, 1, 5		
Basic Properties of Amines	1e		2		
Nucleophilic Properties of Amines	3c		5		
Organic Synthesis pathways	1c, 3a		2, 5		
			32		



Q1.

This question is about the reaction scheme shown.



- (a) State the reagents needed for step 1 and the reagents needed for step 2.

step 1 _____

step 2 _____

(3)

- (b) Give the name of the mechanism for the reaction in step 3.

(1)

- (c) Name the reagent for step 4.

State a necessary condition for step 4.

Reagent _____

Condition _____

(2)

