

Chromatography and Qualitative Analysis (MCQ)

1. Which statement(s) is/are correct for gas chromatography?
- 1 The components in a mixture can be identified from their retention time.
 - 2 The relative peak areas give the proportions of components in a mixture.
 - 3 Calibration curves are used to confirm the concentrations of components in a mixture.

- A** 1, 2 and 3
B Only 1 and 2
C Only 2 and 3
D Only 1

Your answer

[1]

2. Which one of the following reacts with ethanoic acid **and** with phenol?

- A** Aqueous potassium hydroxide
B Bromine
C Calcium carbonate
D Methanol and an acid catalyst

Your answer

[1]

3. Which reagents could be used to prepare $\text{CH}_3\text{CH}_2\text{CONHCH}_3$?

- A** $\text{CH}_3\text{CH}_2\text{COCl} + \text{CH}_3\text{NH}_2$
B $\text{CH}_3\text{CH}_2\text{CONH}_2 + \text{CH}_3\text{Br}$
C $\text{CH}_3\text{CH}_2\text{COONa} + \text{CH}_3\text{NH}_2$
D $\text{CH}_3\text{CH}_2\text{COCH}_3 + \text{NH}_3$

Your answer

[1]

END OF QUESTION PAPER

Mark scheme – Chromatography and Qualitative Analysis (MCQ)

Question			Answer/Indicative content	Marks	Guidance
1			A	1 (AO1.1)	
			Total	1	
2			A	1 (AO1.1)	
			Total	1	
3			A	1	<p>Examiner Comments</p> <p>Many Candidates scored well on this question having clearly learned that an acyl chloride will react with an amine to produce an amide. Where candidates failed to score this mark answers provided showed no pattern, with all distractors being seen equally.</p>
			Total	1	