



CHEMISTRY ONLINE
— **TUITION** —

Phone: +442081445350

www.chemistryonlinetuition.com

Email: asherrana@chemistryonlinetuition.com

CHEMISTRY

ORGANIC CHEMISTRY II

Level & Board	AQA (A-LEVEL)
TOPIC:	CHROMATOGRAPHY
PAPER TYPE:	QUESTION PAPER - 4
TOTAL QUESTIONS	10
TOTAL MARKS	/15

ChemistryOnlineTuition Ltd reserves the right to take legal action against any individual/ company/organization involved in copyright abuse.

Chromatography - 4

1. What is the mobile phase in column chromatography?

What is it also known as?

(3)

2. In high-performance liquid chromatography (HPLC), what is the mobile phase typically composed of?

- A. Gas
- B. Liquid
- C. Solid
- D. Gel

(1)

3. What does R_f value stand for?

CHEMISTRY ONLINE
— TUITION —

(1)

4. What is the purpose of a detector in chromatography?

- A. To measure the flow rate of the mobile phase
- B. To measure the temperature of the column
- C. To detect and quantify the separated components
- D. To maintain the pressure in the system

I am Sorry !!!!!

(1)

5. How can you observe colourless spots?

(2)

6. In gas chromatography, separation is based on

- A. Differences in Stability
- B. Differences in vapor pressure
- C. Differences in polarity
- D. Differences in solubility

(1)

7. What are the advantages of TLC over paper chromatography?

(2)

8. The data from a chromatographic run is shown below:

t_R for Drug X is 5.8 minutes

t_R for Drug Y is 9.4 minutes

The solvent front comes out at 2.8 min.

Which of the following statements is true?

- A. Selectivity factor of 2.2 and capacity factor of 1.29
- B. Selectivity factor of 1.2 and capacity factor of 2.36
- C. Selectivity factor of 2.2 and capacity factor of 1.07 and 2.36
- D. Selectivity factor of 2.36 and capacity factor of 1.07 and 2.2

(1)

9. Explain the concept of retention time in chromatography.

(2)

10. What is the purpose of a guard column in chromatography?

- A. To protect the analytical column from contamination
- B. To increase the resolution of the chromatogram
- C. To reduce the pressure in the chromatographic system
- D. To control the temperature of the column

(1)

I am Sorry !!!!!



DR. ASHAR RANA



- Founder & CEO of Chemistry Online Tuition Ltd.
- Tutoring students in UK and worldwide since 2008
- Chemistry, Physics, and Math's Tutor

CONTACT INFORMATION FOR CHEMISTRY ONLINE TUITION

- UK Contact: 02081445350
- International Phone/WhatsApp: 00442081445350
- Website: www.chemistryonlinetuition.com
- Email: asherrana@chemistryonlinetuition.com
- Address: 210-Old Brompton Road, London SW5 OBS, UK