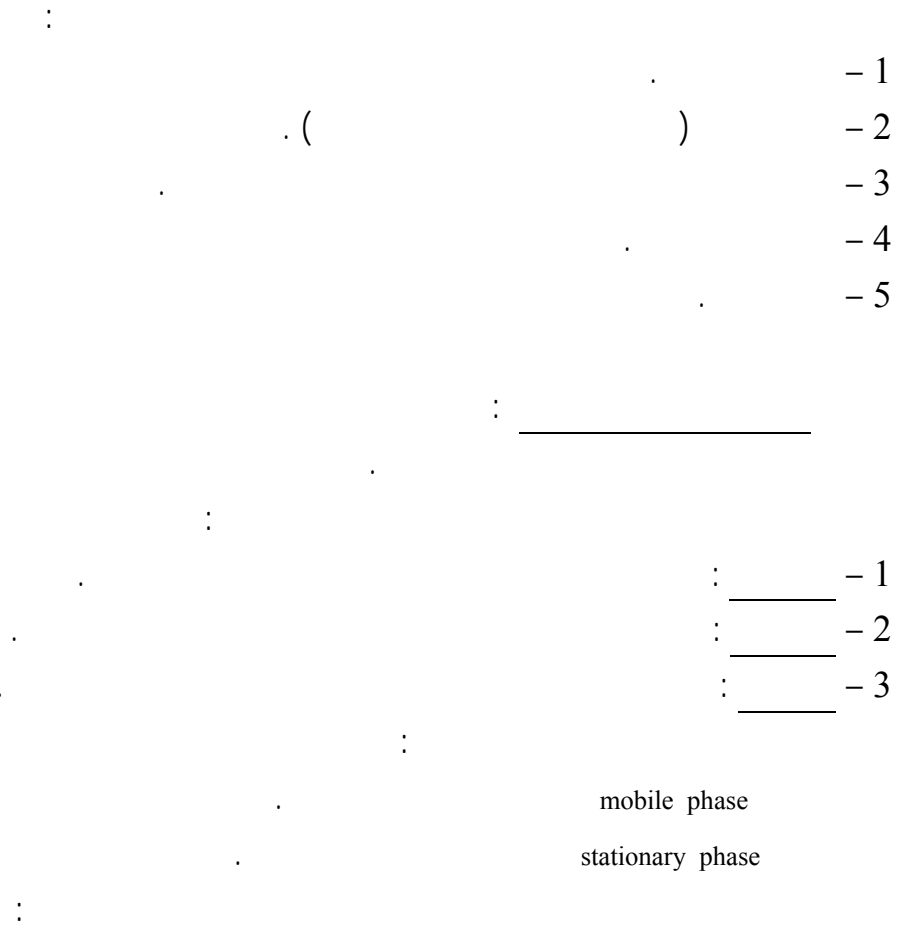


Thin Layer Chromatography



Stationary phase	Mobile phase	Chromatography Name
Solid	Liquid	Liquid – Solid Chromatography
Liquid	Liquid	Liquid – Liquid Chromatography
Solid	Gas	Gas – Solid Chromatography
Liquid	Gas	Gas – Liquid Chromatography

$$R_f = \frac{\text{Distance traveled by component}}{\text{Distance traveled by solvent front}}$$

= (Distribution Coefficient "K")

K

	:	<u>TLC</u>	
()			- 1
			- 2
			- 3
	:	<u>TLC</u>	
		(Silica gel " silicic acid ")	- 1
		(Al ₂ O ₃)	- 2
partition chromatography			- 3
		distomaceous earth	- 4

. partition chromatography

	:	<u>TLC</u>	
()		()	: Activation
			: Adsorption chromatography
			: Ascending chromatography
		" " " " " " "	: Descending chromatography
:			: () Detction
		- 3	- 2
		()	: Developing solvent
			: Development
			: () Elution

()

Kd = () = (partion coefficient)

() : Origin

() : Solvent front

: R_f value

R_f

R_f

1 - heptane – ethylacetate (1 : 3)

2 – ethylacetate – hexane (1 : 1)

3 – Toluene

R_f

detection

– 2

– 1

:

– 3

(3 ml of 10 % platinum chloride + 97 ml H₂O + 100 ml 6 % potassium iodide)

