Self Assessment

1. McCabe – Thiele method calculates _____ & _____ of each component at every plate.
2. For a j^{th} plate, the liquid an vapor leaving from top are denoted by ____ and ____ respectively.
3. The vapor and liquid on any plate are assumed to be in _____ equilibrium.
4. In McCabe – Thiele method, liquid and vapor enthalpies are assumed to be _____.
5. The slope of operating line for stripping section is given by _____.
6. The y – intercept of operating line for enriching section is given by _____.
7. Mixture that is to be separated is called as ____.

Self Assessment

8. q=0 when the feed is totally _____.
9. _____ and _____ are the slope and the y – intercept of q line respectively.
10. Fill the following table.

Condition	q	Slp
Sat. Vap. (h_F=H)	q=0	
Sat. Liq. (h_F=h)		∞
2 ph. (H<h_F<h)	0<q<1	-ve
Sub. Liq. (h_F<h)		+ve
	q<0	+ve

Answers

1. Vapor fraction, liquid fraction
2. L_j and V_j
3. Thermal
4. Constant
5. L_{n+1}/V_n
6. $(-(B/V_m)x_B)$
7. Feed
8. Vapor
9. $q/(q-1)$ and $x_F/(1-q)$

Condition	q	Slp
Sat. Vap. ($h_F=H$)	$q=0$	0
Sat. Liq. ($h_F=h$)	$q=1$	∞
2 ph. ($H<h_F<h$)	$0<q<1$	-ve
Sub. Liq. ($h_F<h$)	$q>1$	+ve
Sup. Vap. ($h_F>h$)	$q<0$	+ve