

Problem 1

(a): 2.94

(b): 3.92

(c): 4.87

Q: Option 2

Problem 2

Problem 3

(a): $\text{pH} = 13$

(b): Alkaline

Problem 4

$$(a): -\log(0.03091) = 1.51$$

$$(b): 14 - 1.51 = 12.49$$

Problem 5

(a): 21

(b): 9

- (c):
- Electrically charged side chains
 - Uncharged but chiral side chains
 - Hydrophobic side chains
 - Special cases

Problem 6

(a) Micelle

(b) Bilayer

Problem 7

(a): Option 2

(b): Option 3