

Unit 9 - Week 7 Extraction and membranes

Course outline

How to access the portal?

Prerequisites Assignment

Week 1: Introduction

Week 2

Week 3: Cell breakage and Solid-Liquid Separation

Week 4 Solid liquid separation

Week 5 Adsorption

Week 6 Liquid-Liquid Extraction

Week 7 Extraction and membranes

Liquid liquid extraction

Reversed micellar and aqueous two phase extraction

Membranes

Week 7 - Lecture Material

Quiz : Assignment 7

Weekly Feedback 7: Principles Of Downstream Techniques In Bioprocess

Week 8 Membranes

Precipitation and chromatography

week 10 chromatography

week 11 chromatography and crystallization

Week 12 Drying and distillation

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Assignment 7

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-09-18, 23:59 IST.

1) In aqueous two-phase extraction

1 point

- both the fluids are aqueous
- one is water and the other is organic
- both are organic
- both are mixture of water and organic

No, the answer is incorrect.
Score: 0

Accepted Answers:
both the fluids are aqueous

2) Increasing molecular weight of polymer in aqueous two-phase extraction

1 point

- decreases partition
- increases partition
- partition remains same
- partition stops

No, the answer is incorrect.
Score: 0

Accepted Answers:
increases partition

3) Which is not a surface active agent

1 point

- SDS
- Tween 80
- PEG
- dodecane

No, the answer is incorrect.
Score: 0

Accepted Answers:
dodecane

4) To inhibit partitioning in reverse micelle

1 point

- increase salt concentration
- increase surfactant amount
- increase ionic strength
- increase temperature

No, the answer is incorrect.
Score: 0

Accepted Answers:
increase surfactant amount

5) Which is not a nonbonded interaction

1 point

- hydrophobic
- electrostatic
- hydrogen
- covalent

No, the answer is incorrect.
Score: 0

Accepted Answers:
covalent

6) Increasing molecular weight of polymer in one phase decreases the concentration of the protein in that phase as $[conc] = a - b \log [M \text{Wt}]$. If the $[conc]$ of the protein is 0.2 and 0.1 when the molecular weights of polymer added are 10,000 and 40,000 respectively what is the concentration of the protein if I have polymer of 30000 molecular weight added?

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Range) 0.12,0.121

3 points

7) Which membrane does not have pores

1 point

- Microfiltration
- Ultrafiltration
- Pervaporation
- Dialysis

No, the answer is incorrect.
Score: 0

Accepted Answers:
Pervaporation

8) Desalination of sea water is achieved by

1 point

- Microfiltration
- Ultrafiltration
- Reverse osmosis
- electro dialysis

No, the answer is incorrect.
Score: 0

Accepted Answers:
Reverse osmosis