

Problem Set #6

Techniques and Methods

Question 1: What is the difference between a laminar flow hood and a biosafety cabinet?

Answer:

Question 2: How many biosafety levels are there and which one is the highest risk level?

Answer:

Question 3: What method can be used to sterilize both liquid medium as well as solid objects?

Answer:

Question 4: Why are antibiotics often added to microbial culture media?

Answer:

Question 5: What is the purpose of streak plating?

Answer:

Question 6: What is the most accurate method to determine the number of live bacteria in a liquid sample?

Answer:

Question 7: What is the main difference between a batch culture and a chemostat culture?

Answer:

Question 8: What are the 3 main functional components of a fluorescent filter cube and what do they do?

Answer:

Question 9: How does a confocal microscope achieve a higher resolution than standard fluorescence microscopy?

Answer:

Question 10: How does super resolution microscopy beat the diffraction limit?

Answer:

Question 11: What are the two main uses for FACS?

Answer: