NPTEL » Biomicrofluidics

Announcements

About the Course

Ask a Question

Progress

Mentor

1 point

Unit 5 - Week 3

Course outline

How to access the

Week 0 Assignment 0

portal

Week 1

Week 2

Week 3

Continue Lecture 11 :

Lecture 12 :

culture

Microfluidic cell

Microfluidic cell

Lecture 13 : On-chip

O Lecture 14 : On-chip

d.

b.

d.

Score: 0

(a.

b.

○ c.

d.

○ c.

Score: 0

○ c.

d.

Score: 0

a.

8)

b.

No, the answer is incorrect.

quantification based on?

Accepted Answers:

d.

Accepted Answers:

No, the answer is incorrect.

Accepted Answers:

culture-part II

cellular assay

cellular assay techniques-II

Microfluidics for

understanding

Quiz : Assignment 3

Feedback for Week 3

Download Videos

Text Transcripts

O Lecture 15:

biology

Week 4

Solution

techniques

Assignment 3 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.

What are the precautions for microfluidic cell culture? a. Bubbles

b. Evaporation

c. Contaminations

d. All of these a.

b.

○ c. d.

No, the answer is incorrect. Score: 0 Accepted Answers:

2) One of the major demerits of perfusion system is

a. Media exchange

b. Generates shear force

c. Hinders cell-cell communication through growth factors d. Causes cell polarity

a.

No, the answer is incorrect.

Accepted Answers:

Which material cannot be used for microfluidic channel preparation?

a. PDMS b. Polystyrene

c. Polycarbonate d. None of these

○ c. d. No, the answer is incorrect.

a. HEPES

b. Acetate

c. Citrate

4) Which buffer can be used to maintain pH?

d. None of these

a. b.

Score: 0 Accepted Answers: a.

a. Lifetime b. Intensity

In order to understand cellular behavior, which property of fluorescent molecules are generally

a.

d. All of these

measured using microscopes

b.

d. No, the answer is incorrect.

Diffusion time

6) FRET stands for a. Fluorescence Recovery Electron Transfer

c. Fluorescence Recovery Energy Transfer

b. Fluorescence Resonance Energy Transfer

a. b.

d. None of these

7) Fluorescent imaging can be quantified in terms of differences in relative intensity. What is this

c. The colour of the fluorescent dye d. The relative intensity detected by the digital colour camera

b. The absolute intensity of the particular fluorophore

a. Relative intensity detected by the grey-scale detector(s)

d.

No, the answer is incorrect. Score: 0 Accepted Answers:

a. 0.2 microns b. 0.3 microns

Resolution is the ability of a lens to distinguish between small objects close together. What

approximate resolution can be obtained with a lower power (10X, N.A. 0.25) objective lens?

c. 0.9 microns

d. 0.25

a.

b.

○ c.

d.

a.

b.

○ c.

d.

a.

b.

Score: 0

Accepted Answers:

Accepted Answers:

No, the answer is incorrect.

d. None of these

b. DMEM low glucose

a. RPMI

c. MEM

9) The media that cannot be used to grow mammalian cells is

No, the answer is incorrect. Score: 0 Accepted Answers: 10) Immortalized cell lines are

c. Cells freshly isolated from explants d. Both b and c

a. Cancerous

b. Cancerous or non-cancerous

○ c. d. No, the answer is incorrect.