

## Unit 12 - Lab: Introduction to Cleanroom and Cleanroom Equipments

### Course outline

How to access the portal

Introduction

Introduction to MEMS-based Sensors

Fundamentals of Fabrication Techniques

Fundamentals of Fabrication Techniques contd...

Fundamentals of Fabrication Techniques contd...

Application of Fabrication Technology

Fabrication of Sensors for Cancer Diagnosis

Fabrication of a Device to Determine Efficacy of Drugs

Fabrication of Microchip for Rapid Drug Screening

Fabrication of a Smart Catheter

Lab: Introduction to Cleanroom and Cleanroom Equipments

Clean Room: Equipments Required

GLP: Gowning Procedure for using Lab

Introduction to Equipments: Refridgerator

Gowning Procedure for using Biological Lab Setup

Introduction to Equipments: Desiccator

Introduction to Equipments: Impedance Analyzer

Introduction to Equipments: DAQ

Introduction to Equipments: DAQ contd...

Week 10 Assignment Solution

Quiz : Week 10 Assessment NEW

Lab: Introduction to Equipments in Cleanroom

Lab: Cleanroom Equipments and Demonstration

Text Transcripts

## Week 10 Assessment NEW

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

**Due on 2019-10-09, 23:59 IST.**

1) UV Light is necessary in a Class II biosafety cabinet

1 point

- True  
 False

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*True*

2) When working with infectious biological material, identify the best place to perform the work:

1 point

- In a Biological Safety Cabinet  
 On the laboratory bench  
 On a clean bench, wearing a dust mask  
 In a Fume Hood

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*In a Biological Safety Cabinet*

3) The required personal protective equipment for working in the clean room is:

1 point

- Lab coat  
 Hairnet  
 Facemask  
 All the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*All the above*

4) What are the incubation parameters most important for in vitro cell culture?

1 point

- Temperature: 37 oC, Relative Humidity: 95%, CO2 concentration: 5%  
 Temperature: 47 oC, Relative Humidity: 90%, CO2 concentration: 15%  
 Temperature: 34 oC, Relative Humidity: 92%, CO2 concentration: 50%  
 Temperature: 34 oC, Relative Humidity: 90%, CO2 concentration: 5%

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Temperature: 37 oC, Relative Humidity: 95%, CO2 concentration: 5%*

5) To prevent spread of disease, prior to disposal of biohazard waste, which step must be followed

1 point

- Autoclave  
 Closed Containment  
 Burning  
 Cleansing

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Autoclave*

6) Precise sectioning of tissue blocks to obtain thin slices can be performed using?

1 point

- Micromanipulator  
 Microtome  
 Microscope  
 Mastectomy

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Microtome*

7) Chemicals that enhance growth in in-vitro cultures are

1 point

- Dulbecco's modified Essential Medium  
 Iscove's Modified Dulbecco's Medium  
 Eagle's Basal media  
 All the above

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*All the above*

8) Container used for preserving moisture sensitive samples is

1 point

- Hot plate  
 Desiccator  
 Safety cabinet  
 Incubator

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Desiccator*

9) The Virtual Bench showed in the video lectures offers which of the following features

1 point

- Mixed-signal oscilloscope, Function generator, Digital multimeter  
 Programmable power source  
 Only a  
 Both a&b

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*Both a&b*

10) Data Acquisition system has an inbuilt signal conditioning unit. What is the role of a signal conditioning circuit?

1 point

- attenuating the voltage  
 maintaining a constant voltage  
 keeping the voltage zero  
 boosting the voltage

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
*boosting the voltage*