

## Unit 13 - Lab: Introduction to Equipments in Cleanroom

### 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

Lab: Introduction to Equipments in Cleanroom

Introduction to Equipments: Stereo Microscope

Introduction to Equipments: Metallurgical Microscope

Introduction to Equipments: Inverted Microscope

Introduction to Equipments: Fire Alarm

Introduction to Equipments: Bio-safety Hood

Week 11 Assignment Solutions

Quiz : week 11 Assessment

Lab: Cleanroom Equipments and Demonstration

Text Transcripts

## week 11 Assessment

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

**Due on 2019-10-16, 23:59 IST.**

1) Which among these is not an optical microscopy technique

1 point

- Scanning electron microscopy  
 Inverted microscopy  
 Metallurgical microscopy  
 Stereo Microscopy

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Scanning electron microscopy

2) Total magnification offered by an optical microscope can be obtained by

1 point

- Multiplying magnifying power of the eyepiece by x2  
 Multiplying magnifying power of the objective lens by x2  
 Multiplying magnifying power of the eyepiece and objective lens  
 Multiplying magnifying power of the condenser lens and objective lens power

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Multiplying magnifying power of the eyepiece and objective lens

3) How can resolving power of a microscope be determined?

1 point

- Wavelength of light  
 Numerical aperture of the lens  
 Wavelength and numerical aperture of the lens  
 Either A or B

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Wavelength and numerical aperture of the lens

4) If you are given cell culture petri dishes, which among the below is an optimal choice for studying cell culture dishes?

1 point

- Inverted Microscope  
 Compound Microscope  
 Stereo Microscope  
 Confocal Microscope

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Inverted Microscope

5) Identify the number of biosafety levels defined (each level with distinct precautionary measures for each level) to isolate bacterium, virus etc. in an enclosed laboratory

1 point

- 3  
 4  
 2  
 5

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
4

6) Why electron microscopy can provide greater resolving power than optical microscopy?

1 point

- Wavelength of electron is much smaller than visible light  
 Wavelength of electron is much greater than visible light  
 More electrical power is involved in electron microscope  
 Diffraction of light affects resolving power

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Wavelength of electron is much smaller than visible light

7) Specimens imaged under a scanning electron microscope should contain no water

1 point

- True  
 False

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
True

8) Live cell imaging is to be performed by you. Which microscopy technique do you think is optimal?

1 point

- Electron Microscopy  
 Optical Microscopy

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Optical Microscopy

9) Ability to resolve two neighbouring points in a field as distinct entities is called

1 point

- Resolution  
 Magnification

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Resolution

10) Part of the microscope responsible for gathering diffuse rays from microscope light source and illuminating specimen with a small cone of bright light?

1 point

- Objective lens  
 Condenser lens  
 Ocular lens  
 Focusing lens

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
Condenser lens