

X

NPTEL

reviewer3@nptel.iitm.ac.in ▼

Courses » Design Practice - II

Announcements

Course

Ask a Question

Progress

Mentor

FAQ

Unit 5 - WEEK 04 Design Practice II

Course outline

How to access
the portal

WEEK 01 Design
practice II

WEEK 02 Design
Practice II

WEEK 03 Design
Practice II

WEEK 04 Design
Practice II

- ☐ Introduction to Silicon as a MEMS material
- ☐ Etching processes
- ☐ Types of Photolithography
- ☐ Introduction to actuators
- ☐ Designing of the Micro-Valve
- ☐ Quiz : Assignment 04_Design Practice 2
- ☐ Solutions_Week 04_Assignment 04

Assignment 04_Design Practice 2

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment. **Due on 2018-09-26, 23:59 IST.**

1) is considered as the most expensive micromechanical process:

1 point

- ☐ Etching
- ☐ Lift-off technique
- ☐ Lithography
- ☐ Masking

No, the answer is incorrect.

Score: 0

Accepted Answers:

Lithography

2) Lithography is used for:

1 point

- ☐ Forming resist layers on the substrate
- ☐ Cutting tool
- ☐ Forming electric bonds
- ☐ None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

Forming resist layers on the substrate

3) Types of lithography:

1 point

- ☐ Photolithography
- ☐ X-ray lithography

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -



A project of



NPTEL

National Programme on
Technology Enhanced Learning

In association with

NASSCOM®

Funded by

WEEK 06 Design Practice II**WEEK 07 Design Practice II****WEEK 08 Design Practice II**

ce De

4) Types of photoresist:

1 point

- ☐ Positive
- ☐ Negative
- ☐ Positive and Negative
- ☐ None of them

No, the answer is incorrect.**Score: 0****Accepted Answers:***Positive and Negative*

5) State which of the following statements is/are true

1 point

- ☐ Positive photoresist softens on exposure to UV light
- ☐ Positive photoresist hardens on exposure to UV light
- ☐ Negative photoresist softens on exposure to UV light
- ☐ Negative photoresist hardens on exposure to UV light

No, the answer is incorrect.**Score: 0****Accepted Answers:***Positive photoresist softens on exposure to UV light**Negative photoresist hardens on exposure to UV light*

6) In X-ray lithography, the X-ray absorber is usually:

1 point

- ☐ Silver
- ☐ Gold
- ☐ Aluminum
- ☐ None of them

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

7) is projecting electron beam directing on photoresist of the wafer:

1 point

- ☐ E-beam lithography
- ☐ Light emitting
- ☐ Electron beam gun
- ☐ Radar beam

No, the answer is incorrect.**Score: 0****Accepted Answers:***E-beam lithography*

8) The electron gun is used in lithography because it is.....:

1 point

- ☐ Inexpensive
- ☐ Accurate
- ☐ Doesn't require high voltage
- ☐ None of them

No, the answer is incorrect.

Score: 0

Accepted Answers:

Accurate

9) used for removing desired areas of the photo resist from the substrate: **1 point**

- ☐ LIGA
- ☐ Lithography
- ☐ Etching
- ☐ None of them

No, the answer is incorrect.

Score: 0

Accepted Answers:

Etching

10) Types of etching are.....: **1 point**

- ☐ Wet isotropic
- ☐ Wet anisotropic
- ☐ Dry
- ☐ All of them

No, the answer is incorrect.

Score: 0

Accepted Answers:

All of them

11) is an Etch stop technique. **1 point**

- ☐ Wet isotropic etching
- ☐ Wet anisotropic etching
- ☐ Electrochemical etching
- ☐ Physical sputter etching

No, the answer is incorrect.

Score: 0

Accepted Answers:

Electrochemical etching

12) is the etching through chemical or physical interaction between ions: **1 point**

- ☐ Wet isotropic etching
- ☐ Wet anisotropic etching
- ☐ Dry etching
- ☐ None of these

No, the answer is incorrect.

Score: 0

Accepted Answers:

Dry etching

13) is used for metals that are hard to etch: **1 point**

- ☐ Lift-off technique

- ☐ Combined physical/chemical etching
- ☐ Physical sputter etching
- ☐ Chemical plasma etching

No, the answer is incorrect.

Score: 0

Accepted Answers:

Lift-off technique

Previous Page

End