

Started on	Tuesday, 3 September 2024, 10:35 PM
State	Finished
Completed on	Tuesday, 3 September 2024, 10:36 PM
Time taken	27 secs
Marks	4.00/4.00
Grade	10.00 out of 10.00 (100%)

Question 1

Correct

Mark 1.00 out of 1.00

Which of the following statements are correct about the configuration of the electrodes in a sputtering system used for the deposition of metals on semiconductor wafers?

- ☐ a. For sputtering of the metal, the metal target is biased as the anode.
- ☐ b. For sputter cleaning of the wafer, the wafer is biased as the anode.
- ☒ c. For sputter cleaning of the wafer, the wafer is biased as the cathode. ✓
- ☒ d. For sputtering of the metal, the metal target is biased as the cathode. ✓

Your answer is correct.

The correct answers are: For sputtering of the metal, the metal target is biased as the cathode. , For sputter cleaning of the wafer, the wafer is biased as the cathode.

Question 2

Correct

Mark 1.00 out of 1.00

Typical VLSI plasma processes are conducted in which of the plasma regimes?

- ☐ a. Breakdown
- ☒ b. Abnormal glow ✓
- ☐ c. Arc
- ☐ d. Normal glow

Your answer is correct.

The correct answer is: Abnormal glow

**Question 3**

Correct

Mark 1.00 out of 1.00

Which of the following statements are correct about the voltage drop in different regions in the plasma in a parallel plate plasma system?

- ☐ a. The highest voltage drop in the system is in the anode sheath or dark space.
- ☒ b. The highest voltage drop in the system is in the cathode sheath or dark space. ✓
- ☒ c. The potential drop in the plasma is nearly zero. ✓

Your answer is correct.

The correct answers are: The highest voltage drop in the system is in the cathode sheath or dark space., The potential drop in the plasma is nearly zero.

**Question 4**

Correct

Mark 1.00 out of 1.00

Magnetron sputtering is widely used for deposition of metals in IC manufacturing. Which of the following statements about magnetron sputtering are correct?

- ☒ a. Magnetron sputtering has higher deposition rate compared to non magnetron sputtering. ✓
- ☐ b. Magnetron sputtering has lower deposition rate compared to non magnetron sputtering.

Your answer is correct.

The correct answer is: Magnetron sputtering has higher deposition rate compared to non magnetron sputtering.

[< Previous Activity](#)[Jump to...](#)[Next Activity >](#)