



Govt. Women Engineering College, Ajmer  
Department of Electronics and Communication Engineering

B. Tech (ECE) 8<sup>th</sup> Semester 1<sup>st</sup> Mid Term Examination –February 2018

Subject: **IC Technology**

Subject Code: **8EC1A**

Time: 1 Hr.

Batch: **A**

Max. Marks: **20**

Student RTU Roll No.: .....

Date of Examination: 15/02/2018

**Note: The paper consists of four questions and carries equal marks. Assume any missing data.**

- Q. 1. What are the basic features of float zone growth? Give its advantages and disadvantages. Explain the top seed and bottom seed.
- Q. 2. A boron-doped crystal is measured at its seed end with a four-point probe of spacing 1 mm. The (V/I) reading is 10 ohm. What is the seed end doping and the expected reading at 0.95 fraction solidified?
- Q. 3. What is electronic grade silicon? Draw and explain the schematic of a CVD reactor used for electronic-grade silicon (EGS) production.
- Q. 4. Discuss the chemical cleaning process used for wafer preparation.

**OR**

Discuss the different kinds of crystal defects with diagram.

-----**ALL THE BEST**-----



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