



**RR-0851**

**Third Year B. Sc. Examination**

**March/April – 2010**

**IDS IC Technology**

*(CAN Course For Electronics)*

Time : Hours]

[Total Marks : 70

**Instructions :**

(1)

नीचे दर्शाविए निशानीवाणी विगतो उत्तरवही पर अवश्य लखवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
T. Y. B. Sc.

Name of the Subject :  
IDS IC Technology (CAN Course)

Subject Code No. : 0 8 5 1 Section No. (1, 2,.....): Nil

Seat No. :

Student's Signature

(2) Figures to extreme right indicate full marks.

(3) Q. 1 is compulsory.

(4) All short forms have usual meaning.

1 Write very short answers :

14

(1) What is an ingot?

(2) What is stripping in photo lithography?

(3) Draw the package of IC 741.

(4) What are flats?

(5) What is the importance of post baking?

(6) Why is CZ apparatus subjected to inert gas environment?

(7) Describe the function of a seed crystal.

2 What are monolithic integrated circuits ? Discuss the classification of integrated circuits. Discuss the method used for purifying silicon to MGS.

14

**OR**

- 2 Discuss the lead bonding used in IC technology. 14  
What are IC packages?
- 3 Discuss the CZ technique of making silicon ingot. 14  
What are the disadvantages of CZ method?
- OR**
- 3 Discuss steps involved in fabricating DIODE and PMOS 14  
device on an IC technology.
- 4 What is photolithography ? Discuss the steps involved 14  
in photolithography. What are the disadvantages of  
photolithography?
- OR**
- 4 What is fine line lithography ? Discuss the electron 14  
beam lithography and its advantages.
- 5 Write short notes : (any two) 14
- (1) Silicon wafer preparation
  - (2) FZ method
  - (3) IC packages
  - (4) Chemical vapor deposition
  - (5) Types of photo resist.
-