

Roll No.

Total No. of Questions : 08]

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M.Tech.

VLSI TECHNOLOGY

SUBJECT CODE : VL - 514

Paper ID : [E0724]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours

Maximum Marks : 50

Instruction to Candidates:

- 1) Attempt any **Five** questions.
- 2) All questions carry equal marks.

Q1) What is etching? Explain wet chemical etching techniques.

Q2) What is solid state diffusion? Explain.

Q3) Explain high k and low K dielectrics used for ULSI?

Q4) What is photolithography? Explain any two photolithography techniques.

Q5) Explain chemical vapour depositions techniques used for deposition of polysilicon.

Q6) What is the failure rate in metal interconnects? How it can be reduced.

Q7) Describe the masking sequence and process flow for BIPOLAR devices.

Q8) List topological design rules.

