

**Total No. of Pages : 01**

**Total No. of Questions : 08**

**M.Tech. (VLSI D) EL-IV (2016 & Onwards) (Sem.-3)**

## SENSOR TECHNOLOGY AND MEMS

**Subject Code : MTVL-308**

**Paper ID : [74817]**

**Time : 3 Hrs.**

**Max. Marks : 100**

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

Q1) Describe the Acoustic and Radiation Sensors.

Q2) Differentiate between Wet Etching and Dry Etching.

Q3) Illustrate the functionalities of MEMS and NEMS devices.

Q4) Describe in detail :

a) Lithography

### b) Sacrificial Layer Technology

Q5) What are Smart Sensors? Discuss its purpose and functions.

Q6) Briefly describe the electrostatic-elastic systems.

Q7) Discuss the Adhesion Problems in Surface Micromachining.

Q8) Discuss the evolution of Micro Sensors.