

VITHALBHAI PATEL & RAJRATNA P.T. PATEL SCIENCE COLLEGE  
VALLABH VIDHYA NAGAR

F.Y. B.Sc. SEM: II

INTERNAL TEST

DATE: 12<sup>th</sup> March 2014

SUB: INSTRUMENTATION (VOC.)

TIME: 11:00 pm to 12:00 pm

SUB CODE: US02CINV02

TOTAL MARKS: 30

**Q.1 Answer the following in short.(Attempt Three, each two marks) [06]**

- (1) What is transducer? list different type of transducer.
- (2) Just list and draw schematic of different type of filters.
- (3) List the different principle of displacement types.
- (4) List the force summing members.
- (5) Draw the block diagram of power supply.
- (6) What is piezo electric effect? Draw the symbol of piezo electric transducer.

**Q.2 Explain block diagram of power supply in detail. [08]**

OR

**Q.2 (A) Explain bridge rectifier in detail. [05]**

**(B) Draw the figure of any two filters, and explain any one in detail. [03]**

**Q.3 (A) Explain and derived an equation of strain gauge in detail. [08]**

OR

**Q.3 (A) Explain inductive transducer in detail. [04]**

**(B) Explain oscillation transducer. [04]**

**Q.4 (A) Explain potentiometric transducer in detail. [04]**

**(B) Explain capacitive transducer in detail. [04]**

OR

**Q. 4 Draw any four displacement transducer and explain In detail. [08]**



- : All the best: -