



Enrolment No. _____

HASMUKH GOSWAMI COLLEGE OF ENGINEERING, VAHELAL

MID SEMESTER EXAMINATION, SEPTEMBER-2016

Subject Code: 2170913

Date: 27/9/2016

Subject Name: INDUSTRIAL INSTRUMENTATION

Sem: 7TH

Time: 10:00 TO 10:50

Total Marks: 20

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- QUE.1** (A) Define the following (i) Absolute Pressure (i) Gauge Pressure (iii) Differential Pressure 3
3
(B) Obtain expression for Gauge Factor with respect to resistance strain gauge in terms of poisson's ratio.
- QUE.2** (A) Describe with neat sketches the construction and working of L.V.D.T. 3
4
(B) Explain construction and working of semiconductor strain gauge. Also state its advantages and applications
- OR**
- (B) Explain difference between: 4
1) Active transducer-Passive transducer
2) Primary transducer- Secondary transducer
- QUE.3** (A) Explain control type synchro system 3
4
(B) Explain construction and working of Rotameter. State it's advantages and disadvantages.
- OR**
- (A) Write Short Notes on Macleod gauge 3
4
(B) What is Hall effect? Describe the working principle, construction and application of Hall effect transducer

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