

**SANT GADGE BABAB AMRAVATI UNIVERSITY, AMRAVAATI**

**Summer Examination 2020(Backlog)**

**HVPM'S College of Engineering and Technology, Amravati**

**Department of Mechanical Engineering**

**Subject: Measurement System (5ME03)**

**Semester: 5<sup>th</sup>**

**ASSIGNMENT**

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Solve any Two out of Four Questions

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|------|--|---|
| Q.1) | a) What are the various mode of measurement?                       | 2 |
|      | b) Define scale range and span.                                    | 1 |
|      | c) Explain in details atmospheric pressure.                        | 1 |
|      | d) What is hot wire anemometer?                                    | 2 |
|      | e) What is optical pyrometer?                                      | 2 |
|      | f) Explain magnetic pick up.                                       | 2 |
| Q.2) | a) Discuss any one application of measurement system.              | 1 |
|      | b) Define accuracy and sensitivity.                                | 2 |
|      | c) Explain in details absolute pressure.                           | 2 |
|      | d) Draw neat figure Electromagnetic flow meter.                    | 1 |
|      | e) What is RTD? Draw its working diagram.                          | 2 |
|      | f) Explain the piezoelectric accelerometer.                        | 2 |
| Q.3) | a) What are the applications of measurement system?                | 1 |
|      | b) Define threshold and resolution.                                | 2 |
|      | c) Explain in details gauge pressure.                              | 2 |
|      | d) What is four strain gauge?                                      | 1 |
|      | e) Describe calibration process of liquid in glass thermometer.    | 2 |
|      | f) Explain piezoelectric pick up.                                  | 2 |
| Q.4) | a) Explain Borden pressure gauge.                                  | 2 |
|      | b) Define drift and reproducibility.                               | 1 |
|      | c) Classify resistance strain gauge.                               | 2 |
|      | d) What is turbine flow meter?                                     | 1 |
|      | e) Describe the calibration process of thermocouple.               | 2 |
|      | f) Explain how L.V.D.T.is used to measure the linear displacement. | 2 |