

## Question Bank (G scheme)

**Name of subject: MEASUREMENT & CONTROL**

**Subject code: 17528**

**Semester: V**

**Unit Test :I**

**Course : ME**

### **1. SIGNIFICANCE OF MEASUREMENT**

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|--|---|
| 1) Define three static characteristics.                                | 3 |
| 2) Define three dynamic characteristics.                               | 3 |
| 3) Define measurement & measurand.                                     | 3 |
| 4) State the significance of measurement                               | 3 |
| 5) State the classification of instruments.                            | 4 |
| 6) State the classification of errors and explain Environmental error. |   |
| 7) What is Transducer explain any one transducer.                      | 4 |

### **2. DISPLACEMENT MEASUREMENT.**

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|---|---|
| 1) State specifications of LVDT.              | 3 |
| 2) Write advantages and disadvantages of LVDT | 3 |
| 3) Sketch and explain the RVDT.               | 4 |
| 4) Sketch and explain the potentiometer.      |   |
| 5) State application of LVDT.                 | 3 |
| 6) Sketch and explain LVDT.                   | 4 |
| 7) Specify range of RVDT.                     | 3 |

### **3. TEMPERATURE MEASUREMENT.**

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|---|---|
| 1) Sketch and explain the radiation pyrometer                                       | 4 |
| 2) Sketch and explain the thermocouple  | 3 |
| 3) Sketch and explain the liquid in glass thermometer                               | 4 |
| 4) Sketch and explain the laws of intermediate temp and laws of intermediate metal. | 4 |
| 5) Sketch and explain the optical pyrometer.  | 4 |

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|---|---|
| 6) Sketch and explain the RTD                               | 4 |
| 7) What is mean by thermistor and give its types.           | 3 |
| 8) State any four characteristics of thermocouple material. | 3 |
| 9) State advantages and disadvantage of thermocouple.       | 3 |
| 10) Sketch and explain the bimetallic thermometer.          | 4 |

#### **4) FLOW MEASUREMENT**

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|--|---|
| 1) Sketch and explain the Rota meter.          | 4 |
| 2) Sketch and explain the hot wire anemometer. | 4 |