## Gujarat Technological University, Ahmedabad Shantilal Shah Engineering College, Bhavnagar Sem. 4<sup>th</sup> Production Engineering

Subject: Metrology and Measurement(2142503): Individual Presentation in place of PAT Exam

A.Y.:- 2018-19

## **Presentation Schedule**

| Batch    | Date and Day of Presentation | Time of Presentation |
|----------|------------------------------|----------------------|
| Batch A1 | 26.02.2019 (Tuesday)         | 3:30 pm to 5:30 pm   |
| Batch A2 | 05.03.2019 (Tuesday)         | 3:30 pm to 5:30 pm   |
| Batch A3 | 12.03.2019 (Tuesday)         | 3:30 pm to 5:30 pm   |

Vanue: Main Building, Room No. 215

## **Important Instructions:-**

- (1) All students of Sem.4<sup>th</sup>Production Engineering MUST be present during the above mentioned date and time.
- (2) Each Presentation topic is compulsory for each student.
- (3) Maximum time of presentation is 10 minute (main contain) + 5 minute (practical video) & question answers minutes.
- (4) Presentation must contain with the list of questions asked in GTU examination, their related answers included in the slides.
- (5) It is required to show the video of your topic at the end of presentation, if possible.
- (6) Once any student fail to presentation/ absent have to give the valid reason with proof otherwise considered him/ her as absent.
- (7) After successfully completion of presentation student must submit CD to faculty.

| Metrology and Measurement(2142503) :- List of Individual Presentation |               |                              |  |  |
|---|---------------|------------------------------|--|--|
| ROLL<br>NO.   | ENROLMENT NO. | NAME OF STUDENTS             | TOPIC OF PRESENTATION  |  |
| 5001  | 150430125087  | PATEL VIKESHKUMAR GANPATBHAI | Generalized Measurement system   |  |
| 5002  | 170430125001  | BELADIYA KRUNAL              | Static & dynamic characteristics of instruments  |  |
| 5003  | 170430125002  | BERA KASHYAP                 | Types of measurement system classification with examples                                     |  |
| 5004  | 170430125003  | BHALALA SIDDHARTHKUMAR       | Types of Error in Measurement with examples  |  |
| 5005  | 170430125004  | CHAUHAN MAHENDRA             | Measurement of Force: load cells, cantilever beams, proving rings, differential transformers |  |
| 5006  | 170430125005  | DABHI SANJAYKUMAR            | Measurement of Torque: Torsion bar dynamometer,  |  |

|      |              |                           | servo controlled dynamometer, absorption dynamometers   |
|------|--------------|---------------------------|---|
| 5007 | 170430125006 | DHAKECHA YASHKUMAR        | Measurement of strain: Mechanical strain gauges, electrical strain gauges, strain gauge: materials, gauge factors, theory of strain gauges and method of measurement, bridge arrangement, temperature compensation. |
| 5008 | 170430125007 | GOHIL PRAVINSINH          | Linear variable differential transducers, Electro<br>Magnetic Transducers   |
| 5009 | 170430125009 | GONDALIYA RENISH          | Mechanical, Electrical and Photoelectric Tachometers, Piezoelectric Accelerometer, Seismic Accelerometer,   |
| 5010 | 170430125010 | GONDALIYA VISHAL          | Temperature Measuring Devices: Thermocouples, Resistance Temperature Detectors, Thermistor, Liquid in glass Thermometers, Pressure Thermometers, Pyrometer  |
| 5011 | 170430125011 | GORASIYA RAHUL            | Bimetallic strip. Calibration of temperature measuring devices, Numerical Examples on Flow Measurement.   |
| 5012 | 170430125012 | GUNA VARUN BHARATBHAI     | Need for Inspection, Objective of Inspection,<br>Accuracy and Precision   |
| 5013 | 170430125013 | JADAV JAYESHBHAI          | Calipers: Vernier Calipers, Vernier Height Gauge, Vernier Depth Gauge   |
| 5014 | 170430125015 | JETANI MITUL DINESHBHAI   | Micrometer: Simple Micrometer, Screw Thread Micrometer, Depth Micrometer  |
| 5015 | 170430125018 | KANANI DHAVAL             | Bore Gauge, Telescopic Gauge, Slip Gauge  |
| 5016 | 170430125020 | KATHESHIYA DARSHANKUMAR   | Dial Indicator, Construction, Working Principle and It's Application  |
| 5017 | 170430125021 | KAVA VISHALBHAI           | Angular Measuring Instrument: Bewel Protractor  |
| 5018 | 170430125025 | MANDANKA MITUL            | Angular Measuring Instrument: Sine Bar  |
| 5019 | 170430125027 | MORADIYA HARDIKKUMAR      | Types of Gear & It's Elements with their application video  |
| 5020 | 170430125028 | NAKRANI HARMISHABEN       | Tool Maker's Microscope   |
| 5021 | 170430125029 | NAVADIYA VIVEKKUMAR       | Alignment of gears  |
| 5022 | 170430125030 | PADAYA KALPESH VINODBHAI  | Measurement of tooth thickness: Gear tooth Vernier  |
| 5023 | 170430125031 | PADHIYAR PRATIK NAVINBHAI | Types of Screw Threads & It's Elements  |
| 5024 | 170430125032 | PARMAR JAYKUMAR           | Thread caliper gauges.  |

| 5025 | 170430125033 | PARMAR VISHAL NANABHAI           | Measurement of Effective Diameter by One Wire Method   |
|------|--------------|----------------------------------|--|
| 5026 | 170430125035 | PUROHIT ROHIT                    | Measurement of Effective Diameter by Two Wire Method   |
| 5027 | 170430125037 | RATHOD RUPESH                    | Measurement of Effective Diameter by Three Wire Method   |
| 5028 | 170430125038 | RAYAJADA KRIPALSINH              | Surface Metrology Concepts and terminology,<br>Analysis of surface traces, Specification of surface<br>Texture characteristics |
| 5029 | 170430125040 | SAKARIYA JASMIN                  | Profilometer   |
| 5030 | 170430125042 | SARVAIYA AAKASH                  | Taylor Hobson Talysurf   |
| 5031 | 170430125044 | SAVANI FENIL DHANJIBHAI          | Tomlinson Surface Recorder   |
| 5032 | 170430125046 | SHIROYA ASHISH                   | Temperature Measuring Device: Pyrometer  |
| 5033 | 170430125047 | SHUKLA MAHARSHI                  | Mechanical Comparators   |
| 5034 | 170430125048 | SOLANKI JIGAR I                  | Electrical Comparators   |
| 5035 | 170430125049 | SOLANKI SIDDHARTH                | Pneumatic Comparators  |
| 5036 | 170430125050 | SONDAGAR BHARGAVKUMAR            | Coordinate measuring machines: Structure, Modes of Operation, Probe, Operation and applications                                |
| 5037 | 170430125051 | SURANI PARESHBHAI                | Profile Projector  |
| 5038 | 170430125052 | TILAVA BRIJESHKUMAR              | Optical Square   |
| 5039 | 170430125053 | TRIPATHI ABHILASH                | Basics of Optical Interference and Interferometry  |
| 5040 | 170430125054 | VAGHASIYA JAYDIP                 | Generalized Measurement system   |
| 5041 | 180433125002 | CHUDASAMA RAJVEERSINH BHARATSINH | Static & dynamic characteristics of instruments  |
| 5042 | 180433125003 | JANI SANKETKUMAR GOPALBHAI       | Mechanical Comparators   |
| 5043 | 180433125004 | KAVA BHARGAV HIMMATBHAI          | Electrical Comparators   |
| 5044 | 180433125006 | RAJYAGURU MILAN GAJENDRABHAI     | Pneumatic Comparators  |
| 5045 | 180433125007 | RATHOD BHAVINKUMAR DILIPKUMAR    | Coordinate measuring machines: Structure, Modes of Operation, Probe, Operation and applications                                |

Faculties Head of Department

Prof. N P Nirmal Prof. Dr. A. V. Gohil

Prof. P H Solanki