

LESSON PLAN

Subject Code & Name: 13EC3047 & Electronic Measurements And Instrumentation

Branch: E.C.E-C

Class / Semester: III/I

Academic Year:2017-18

| Period | Date (Tentative) | Topic | Unit No. | Teaching Methodology | Remarks | Corrective action upon review |
|--------|---------------------|---|-------------|-------------------------|---------|-------------------------------------|
| | | Performance characteristics of instruments: | I | | | |
| 1 | 12.06.2017 | Static Characteristics, Accuracy, Resolution,. | | Chalk & Board | | |
| 2 | 13.06.2017 | Precision, Expected Value, Error And Sensitivity | | ” | | |
| 3 | 15.06.2017 | Errors In Measurement | | ” | | |
| 4 | 16.06.2017 | Dynamic Characteristics: Speed Of Response, | | ” | | |
| 5 | 19.06.2017 | Fidelity, Lag And Dynamic Error. | | ” | | |
| 6 | 20.06.2017 | Voltmeters: Multirange, Range Extension, | | ” | | |
| 7 | 22.06.2017 | Solid State | | ” | | |
| 8 | 23.06.2017 | Differential Voltmeters | | ” | | |
| 9 | 27.06.2017 | Ammeters: Shunt And Thermocouple Type Ammeter. | | ” | | |
| 10 | 29.06.2017 | Ohmmeters: Series Type, Shunt Type, | | ” | | |
| 11 | 30.06.2017 | Multimeter For Voltage, Current And Resistance Measurements. | | ” | | |
| 12 | 10.07.2017 | Digital Multimeters: Block Diagram And Specifications | | ” | | |
| | | Signal Generators | II | | | |
| 13 | 11.07.2017 | Fixed And Variable, | | Chalk & Board | | |
| 14 | 13.07.2017 | AF Oscillators | | ” | | |
| 15 | 14.07.2017 | Standard And AF Sine Wave Signal Generators | | ” | | |
| 16 | 17.07.2017 | Square Wave Signal Generators | | ” | | |
| 17 | 18.07.2017 | Function Generators, Square Pulse | | ” | | |
| 18 | 24.07.2017 | Random Noise And Sweep | | ” | | |
| 19 | 25.07.2017 | Wave Analyzers: Harmonic Distortion Analyzers | | ” | | |
| 20 | 27.07.2017 | Spectrum Analyzers | | ” | | |
| 21 | 28.07.2017 | Digital Fourier Analyzers | | ” | | |
| | | Cathode Ray Oscilloscopes: | III | | | |
| 22 | 31.07.2017 | CRT Features, Vertical Amplifiers, Horizontal Deflection System | | Chalk & Board | | |
| 23 | 01.08.2017 | Sweep, Trigger Pulse, Delay Line, Sync Selector Circuits | | ” | | |
| 24 | 03.08.2017 | Simple CRO, Triggered Sweep CRO, Dual Beam CRO | | ” | | |
| 25 | 04.08.2017 | Measurement Of Amplitude | | ” | | |

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|----|-------------------|---|-----------|---------------|--|--|
| | | And Frequency | | | | |
| 26 | 07.08.2017 | Dual Trace Oscilloscope, Sampling Oscilloscope | | ” | | |
| 27 | 08.08.2017 | Storage Oscilloscope, Digital Storage Oscilloscope | | ” | | |
| 28 | 10.08.2017 | Lissajous Method Of Frequency Measurement | | ” | | |
| 29 | 11.08.2017 | Standard Specifications Of CRO | | ” | | |
| 30 | 14.08.2017 | Probes For CRO (Active And Passive), Attenuator Type, | | ” | | |
| | | Ac Bridges: | IV | | | |
| 31 | 18.08.2017 | Measurement Of Inductance: Maxwell’s Bridge | | Chalk & Board | | |
| 32 | 21.08.2017 | Anderson Bridge | | ” | | |
| 33 | 24.08.2017 | Measurement Of Capacitance: Schering Bridge | | ” | | |
| 34 | 28.08.2017 | Kelvin’s Bridge | | ” | | |
| 35 | 04.09.2017 | Wheatstone Bridge | | ” | | |
| 36 | 05.09.2017 | Wien Bridge | | ” | | |
| 37 | 07.09.2017 | Errors And Precautions | | ” | | |
| 38 | 11.09.2017 | Related Problems on Bridges | | ” | | |
| 39 | 12.09.2017 | Related Problems. on Bridges. | | ” | | |
| 40 | 14.09.2017 | Q – Meter | | ” | | |
| | | Active And Passive Transducers: | V | | | |
| 41 | 15.09.2017 | Resistance, Capacitance, Inductance | | Chalk & Board | | |
| 42 | 18.09.2017 | Strain Gauges | | ” | | |
| 43 | 19.09.2017 | LVDT | | ” | | |
| 44 | 21.09.2017 | Piezo Electric Transducers | | ” | | |
| 45 | 22.09.2017 | Resistance Thermometers | | ” | | |
| 46 | 25.09.2017 | Thermocouples | | ” | | |
| 47 | 03.10.2017 | Thermistors | | ” | | |
| 48 | 05.10.2017 | Sensistors | | ” | | |
| 49 | 06.10.2017 | Basic Hall Effect Sensors. | | ” | | |
| 50 | 09.10.2017 | Calibration And Standards | | ” | | |
| 51 | 10.10.2017 | Data Acquisition Systems. | | ” | | |