

## KHENTAWAS, FARRUKHNAGAR, GURGAON, HR

Department: ELECTRICAL & ELECTRONICS ENGINEERING

Academic Session: 2017-18 (Jan-June 2018)

Lesson Plan for the Semester started w.e.f 08.01.2018

Subject with code: MEASUREMENTS AND INSTRUMENTATION (ME-310-F)

Semester VI

Name of Faculty with designation : Mr. Vipin Kumar Singh (Asst. Proff.)

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Test / assignment
January	08.01.2018 Monday	VI ME-1	А	Introduction of Instrument Systems	Assignment of two ques.
January	9.01.2018 Tuesday	VI ME-1	А	Functional Elements of a Measurement System	Assignment of two ques.
January	11.01.2018 Thursday	VI ME-1	А	Typical Applications of Instrument Systems	Assignment of two ques.
January	15.01.2018 Monday	VI ME-1	А	Classification of Instruments	Assignment of two ques.
January	16.01.2018 Tuesday	VI ME-1	A	Standards and Calibration	Assignment of two ques.
January	18.01.2018 Thursday	VI ME-1	А	Static characteristics of Instruments :Introduction, Accuracy, Precision, Resolution, Threshold,	Assignment of two ques.
January	23.01.2018 (Tuesday)	VI ME-1	А	Sensitivity, Linearity, Hysteresis, Dead Band, Backlash, Drift, Error	Assignment of two ques.
January	25.01.2018 (Thursday)	VI ME-1	А	Formulation of Differential Equations for Dynamic Performance- Zero Order, First Order and Second order systems,	Assignment of two ques.

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January	29.01.2018 Monday	VI ME-1	А	Response of First and Second Order Systems to Step, Ramp, Impulse and Harmonic Functions.	Assignment of two ques.
January	30.01.2018 Tuesday	VI ME-1	В	Analog and Digital Transducers, Electromechanical; Potentiometric	Assignment of two ques.
February	01.02.2018 Thursday	VI ME-1	В	Inductive Self Generating and Non-Self Generating Types, Electromagnetic, Electrodynamic, Eddy Current, Magnetostrictive	Assignment of two ques.
February	05.02.2018 Monday	VI ME-1	В	Variable Inductance, Linearly Variable Differential Transformer, Variable Capacitance,	Assignment of two ques.
February	06.02.2018 Tuesday	VI ME-1	В	PiezoElectric Transducer and Associated Circuits	Assignment of two ques.
February	08.02.2018 Thursday	VI ME-1	В	Single Double and Four Active Arm Bridge Arrangements, Temperature Compensation	Assignment of two ques.
February	19.02.2018 Monday	VI ME-1	В	Balancing and Calibration, Ionisation Transducers, Mechano Electronic Transducers, Opto-Electrical Transducers	Assignment of two ques.
February	20.02.2018 Tuesday	VI ME-1	В	Photo Conductive Transducers, Photo Volatic Transducers, Digital Transducers, Frequency Domain Transducer, Vibrating String Transducer, Binary codes, Digital Encoders.	Assignment of two ques.
February	22.02.2018 Thursday	VI ME-1	С	Relative motion Measuring Devices, Electromechanical, Optical, Photo Electric, Moire-Fringe, Pneumatic, Absolute Motion Devices, Seismic Devices,	Assignment of two ques.

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February	26.02.2018 Monday	VI ME-1	С	Spring Mass & Force Balance Type, Calibration, Hydraulic Load Cell, Pneumatic Load Cell, Elastic Force Devices,	Assignment of two ques.
February	27.02.2018 Tuesday	VI ME-1	С	Separation ofForce Components, Electro Mechanical Methods,	Assignment of two ques.
March	01.03.2018 Thursday	VI ME-1	С	Intermediate, Indicating and Recording Elements : Introduction Amplifiers, Mechanical, Hydraulic,	Assignment of two ques.
March	05.03.2018 Monday	VI ME-1	С	Pneumatic, Optical, Electrical Amplifying elements, Compensators, Differentiating and Integrating Elements,	Assignment of two ques.
March	06.03.2018 Tuesday	VI ME-1	D	Pressure & Flow Measurement,	Assignment of two ques.
March	08.03.2018 Thursday	VI ME-1	D	Moderate Pressure Measurement, Monometers, Elastic Transducer, Dynamic Effects of Connecting Tubing,	Assignment of two ques.
March	12.03.2018 Monday	VI ME-1	D	High Pressure Transducer, Low Pressure Measurement, Calibration and Testing, Quantity Meters,	Assignment of two ques.
March	13.03.2018 Tuesday	VI ME-1	D	Positive Displacement Meters, Flow Rate Meters, Variable Head Meters, Variable Area Meters	Assignment of two ques.

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March	15.03.2018 Thursday	VI ME-1	D	Rotameters, Pitot-Static Tube Meter, Drag Force Flow Meter,	Assignment of two ques.
March	26.03.2018 Monday	VI ME-1	D	Turbine Flow Meter, Electronic Flow Meter, Electro Magnetic Flow meter. Hot-Wire Anemometer	Assignment of two ques.
March	27.03.2018 Tuesday	VI ME-1	D	Temperature Measurement : Introduction, Measurement of Temperature,	Assignment of two ques.
April	02.04.2018 Monday	VI ME-1	D	Non Electrical Methods – Solid Rod, Liquid-in-Glass thermometer,	Assignment of two ques.
April	03.04.2018 Tuesday	VI ME-1	D	Pressure Thermometer, Electrical Methods  – Electrical Resistance Thermometers, Semiconductor Resistance Sensors (Thermistors),	Assignment of two ques.
April	05.04.2018 Thursday	VI ME-1	D	Thermo–Electric\Sensors, Thermocouple Materials, Radiation Methods (Pyrometry),	Assignment of two ques.
April	09.04.2018 Monday	VI ME-1	D	Total Radiation Pyrometer, Selective Radiation Pyrometer	Assignment of two ques.
April	10.04.2018 Tuesday	VI ME-1	С	Strain Gage, Torque Transducer, Toque Meter.	Assignment of two ques.
April	12.04.2018 Monday	VI ME-1	С	Unbonded and Bonded Resistance Strain Gages. Strain Gage Bridge circuits,	Assignment of two ques.
April	24.04.2018 Monday	VI ME-1	D	Thermometer, Bimetallic Thermometer	Assignment of two ques.
April	26.04.2018 Tuesday	VI ME-1		Revision	Assignment of two ques.