


Branch- electrical engineering	SEMESTER- 6 TH SEM	NAME OF THE FACULTY:-Miss. <i>Sunil Badabya</i>
SUBJECT:- ELECTRICAL MEASUREMENT & INSTRUMENTATION	NO OF CLASS/WEEKS Allotted:5	SEMESTER FROM- 16.01.2024 to 26.04.2024 NO OF WEEKS:15
WEEKS – 15	CLASS/DAY	Topic
16.01.2024 To 21.01.2024	1st	MEASURING INSTRUMENTS
	2nd	Define Accuracy, precision, Errors, Resolutions Sensitivity and tolerance.
	3rd	Classification of measuring instruments.
	4th	Explain Deflecting, controlling and damping arrangements in indicating type of instruments.
22.01.2024 To 27.01.2024	1st	Calibration of instruments.
	2nd	NETAJI SUBHAS CHANDRA BOSE JAYANTI
	3rd	ANALOG AMMETERS AND VOLTMETERS
	4th	Describe Construction, principle of operation, errors, ranges merits and demerits .
	5th	REPUBLIC DAY
29.01.2024 To 03.02.2024	1st	Moving iron type instruments.
	2nd	Permanent Magnet Moving coil type instruments.
	3rd	Dynamometer type instruments
	4th	Rectifier type instruments
	5th	Induction type instruments
05.02.2024 To 10.02.2024	1st	Extend the range of instruments by use of shunts and Multipliers.
	2nd	Solve Numerical
	3rd	Solve Numerical
	4th	WATTMETERS AND MEASUREMENT OF POWER
	5th	Describe Construction, principle of working of Dynamometer type wattmeter. (LPF and UPF type)
12.02.2024 To 17.02.2024	1st	The Errors in Dynamometer type wattmeter and methods of their correction.
	2nd	The Errors in Dynamometer type wattmeter and methods of their correction.
	3rd	VASANT PANCHAMI
	4th	Discuss Induction type watt meters.
	5th	Discuss Induction type watt meters.
	1st	Discuss Induction type watt meters.

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19.02.2024 To 24.02.2024	2nd	ENERGYMETERS AND MEASUREMENT OF ENERGY
	3rd	Introduction
	4th	Single Phase Induction type Energy meters
	5th	Single Phase Induction type Energy meters construction, working principle.
26.02.2024 To 02.03.2024	1st	Single Phase Induction type Energy meters
	2nd	Their compensation & adjustments.
	3rd	Testing of Energy Meters.
	4th	Testing of Energy Meters.
	5th	MEASUREMENT OF SPEED, FREQUENCY AND POWER FACTOR
04.03.2024 To 09.03.2024	1st	Tachometers, types and working principles
	2nd	PANCHAYAT RAJ DIVAS
	3rd	Tachometers, types and working principles
	4th	Principle of operation and construction of Mechanical and Electrical resonance Type frequency meters.
	5th	MAHA SIVA RATRI
11.03.2024 To 16.03.2024	1st	Principle of operation and construction of Mechanical and Electrical resonance Type frequency meters.
	2nd	Principle of operation and working of Dynamometer type single phase and three phase power factor meters.
	3rd	Principle of operation and working of Dynamometer type single phase and three phase power factor meters.
	4th	MEASUREMENT OF RESISTANCE, INDUCTANCE & CAPACITANCE
	5th	Classification of resistance
18.03.2024 To 23.03.2024	1st	Measurement of low resistance by potentiometer method. .
	2nd	Measurement of medium resistance by wheat Stone bridge method.
	3rd	Measurement of high resistance by loss of charge method.
	4th	Construction, principle of operations of Megger & Earth tester for insulation resistance and earth resistance measurement respectively.
	5th	Construction and principles of Multimeter. (Analog and Digital)
	1st	DOLO PRUNIMA
	2nd	HOLI
		Measurement of inductance by Maxwell's


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25.03.2024 To 30.03.2024	3rd	Bridge method.
	4th	Measurement of capacitance by Schering Bridge method
	5th	GOOD FRIDAY
01.04.2024 To 06.04.2024	1st	UTAKAL DIVAS
	2nd	SENSORS AND TRANSDUCER
	3rd	Define Transducer, sensing element or detector element and transduction elements.
	4th	Classify transducer. Give examples of various class of transducer.
	5th	Resistive transducer
08.04.2024 To 13.04.2024	1st	Linear and angular motion potentiometer.
	2nd	Thermistor and Resistance thermometers.
	3rd	Wire Resistance Strain Gauges, Inductive Transducer1
	4th	ID-UL-FITRE
	5th	Principle of linear variable differential Transformer (LVDT) Uses of LVDT. Capacitive Transducer.
15.04.2024 To 20.04.2024	1st	General principle of capacitive transducer. Variable area capacitive transducer.
	2nd	Change in distance between plate capacitive transducer. Piezo electric Transducer and Hall Effect Transducer with their applications.
	3rd	RAM NAVAMI
	4th	OSCILLOSCOPE
	5th	Principle of operation of Cathode Ray Tube.
22.04.2024 To 27.04.2024	1st	Principle of operation of Oscilloscope (with help of block diagram).
	2nd	Measurement of DC Voltage & current.
	3rd	Measurement of AC Voltage, current, phase & frequency.
	4th	ATTEDANCE CLOSE
	5th	


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