M.V.R. DEGREE COLLEGE
(UG And PG Courses)
(Affiliated to Andhra University)
An Institution of Priyadarshini Educational Academy
NAAC ACCREDITED COLLEGE

Dr.V.Rama Rao, M.A.,Ph.D.,
Secretary & Correspondent

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Principal

Department of Electronics
Bachelor Of Science(M.E.CS)
Revised CBCS Syllabus
W.e.f: 2020-2021

Course Outcomes' Of Electronics:

Code	Title of the paper	Out comes
Course1(TH)	Circuit Theory and electronic devices	CO 1:To learn about the concepts of RMS value of sine wave, basic concepts and laws of DC and AC electrical networks . CO 2:To solve Branch current method, Nodal Analysis, Superposition Theorem, Thevenin's Theorem, Norton's Theorem, Maximum Power, Milliman and Reciprocity theorems. CO 3: Frequency response of RC and RL circuits , filters. Passive differentiating and integrating circuits. Series resonance and parallel resonance circuits. CO 4: Togain the knowledge on BJT: characteristics of CE Configurations. FET: Construction, working and characteristics of JFET. UJT: Construction, working and characteristics of UJT. CO 5: To learn about the Rectifiers and Filters, I.C. regulators (78XX &79XX). Light Emitting Diode and Photodiode.
Course1(PR)	Circuit Theory and electronic devices lab	CO1:Thevenin's Theorem-verification CO2: Norton's Theorem-verification CO3: Maximum Power Transfer Theorem-verification CO4: LCR series resonance circuit. CO5: LCR parallel resonance circuit CO6: BJT input and output characteristics

		CO7: FET Output and transfer characteristics CO8: UJT VI characteristics CO9: IC regulated power supply(IC-7805)
Course2(TH)	Digital Electronics	CO 1:To know about Various number systems and conversions among them. Boolean Expressions and Conversions CO 2 : To learn about De-Morgan Theorems, Boolean identities, Karnaugh maps and applications of them to calculate Sum of Products and Product of Sum of Boolean expressions. CO 3: To know about the Half adder and Full adder, Parallel Adder. Also learn about various logic families. CO 4 :To learn about Multiplexers, de-multiplexers, half adder, full adder and various flip flops. CO 5 :To learn about Semi Conductor Memories.
Course2(PR)	Digital Electronics lab	CO1: Verification of IC-logic gates CO2: Realization of basic gates using discrete components (resistor, diodes &transistor) CO3: Realization of basic gates using Universal gates (NAND & NORgates) CO4:Verify Half adder and full adder usinggates CO5:Verify Half subtractor and full subtractor using gates. CO6: Verify the truth table Multiplexer and demultiplexer. CO7: Verify the truth table Encoder anddecoder. CO8: Verify the truth table of RS ,JK, T-F/F using NANDgates CO9: 4-bit binary parallel adder and subtractor using IC7483

Course3 (TH)	ANALOG CIRCUITS AND COMMUNICATION	CO 1:To Learn About the OPERATIONAL AMPLIFIERS: Basic op-amp Ideal Op-Amp, Block diagram of op-amp, inverting, noninverting, Virtual ground, Subtractors, Summing Amplifier, Voltage follower, op-amp parameters, integrator, differentiator, differential amplifier, Logarithmic amplifier. CO 2 :To Learn About OP-AMP CIRCUITS: Voltage Regulator, Comparator , Schmitt trigger. Sinewave generator, Square wave generator, ,Active filters , IC-555 . CO 3 :To Understand About for amplitude modulation- modulators. Detection of AM signals . CO 4:To learn about FM, , Generation of FM signals ,Detection of FM waves – Ratio detector.
COURSE3(PR)	ANALOG CIRCUITS AND COMMUNICATION lab	**CO1:** Op-Amp as inverting and non-inverting **CO2:**OpAmp Voltage follower. **CO3:** Op-Amp as integrator and differentiator **CO4:** Op-Amp as adder **CO5:** Op-Amp as voltage to currentconverter **CO6:** Op-Amp as square wave generator **CO7: Amplitude** modulation and demodulation. **CO8:**AM Transmitter and Receiver. **CO9:** FM Transmitter and Receiver.
Course4(TH)	Microprocessor systems	CO 1:To Learn about Introduction to Microprocessor, INTEL -8085. CO 2:To learn About Instructions, Machine Control instructions. CO 3:To learn about Assembly

		Language Programming using 8085. CO 4:To Learn about the Basic 8086 Configurations – Minimum mode and Maximum Mode, Interrupts, interfaces, DMA controller.
Course 5(TH)	8051 Microcontroller and interfacing	CO 1:To Learn about the Introduction, micro controller, Evolution of microcontrollers from 4-bit to 32 bit,. CO 2:To Learn about the 8051 Microcontroller, Interrupts and timers. CO 3:Addressing modes and accessing memory using various addressing modes, instruction set. CO 4:To learn about assembly language programmes on 8051. CO 5:To learn about the various Interfacings.

Attested

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