(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 Dr.A.Balakrishna,M.Sc.,Ph.D., 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 3 To know about the H 1 eff addet, Puellel Add to A acout varieus locic families CO 4 To featt about Millin milliplexets, half addet ftil	CO 2:To solve Branch current method, Nodal Analysis, Superposition Theorem, Thevenin's Theorem, Norton's Theorem, Maximum Power, Milliman and Reciprocity theorems.
	various flip flops. CO 5 110 feam, about Semi Miemotics CO1, Venification of IC-log CO2, Realization of basic y	CO 3: Frequency response of RC and RL circuits, filters. Passive differentiating and integrating circuits. Series resonance and parallel resonance circuits.
	discrite compatients (telliste &blassmer) CO3 Realization of bencija Universitigates (NANE & F CO9 Worthy Ligif adder and bungeates	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.
and fail Multiplexen	<ol> <li>OCNERS: Half subvector subractor using gates</li> <li>COC Verify the truth traff.</li> <li>and claunifipiexer</li> </ol>	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

1

### (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.,	Dr.A.Balakrishna,M.Sc.,Ph.D.,
Secretary & Correspondent	Principal
(Electronics	CO7: FET Output and transfer
lence(M.E.CS)	characteristics
.5 Syllabox	CO8: UJT VI characteristics
20-2021	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 1: Fo feam about the concepts of PMS value of state volve, braticy endedts and tax's of DC and AC electrical networks	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 2:To solve Branch Arment mothod.	CO 3: To know about the Half adder and
Nodal Analysis, Superposition, The wetter	Full adder, Parallel Adder. Also learn
Flowenin & Theorem, Nation's Theorem.	about various logic families.
Missimum Power, Milliman and	CO 4 : To learn about Multiplexers, de-
Reciprocity filements	multiplexers, half adder, full adder and
- CO 'B Frequency response of RC and	various flip flops.
RL curcuity filters, 1/25/5/ c-	CO 5 :To learn about Semi Conductor
differentiating and actempting circuits	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

(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		Dr.A.Balakrishna,M.Sc.,Ph.D., Principal	
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.	
assembly s off \$051 the various		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	<ul> <li>CO1: Op-Amp as inverting and non-inverting</li> <li>CO2:OpAmp Voltage follower.</li> <li>CO3: Op-Amp as integrator and differentiator</li> <li>CO4: Op-Amp as adder</li> <li>CO5: Op-Amp as voltage to currentconverter</li> <li>CO6: Op-Amp as square wave generator</li> <li>CO7: Amplitude modulation and demodulation.</li> <li>CO8:AM Transmitter and Receiver.</li> <li>CO9: FM Transmitter and Receiver.</li> </ul>	
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	

Visakha-26 Gr

3

#### (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	Dr.A.Balakrishna,M.Sc.,Ph.D., Principal
CO U Lo Leant About the OPUR ATIONAL AMIL UPTERS: Basic op-and Ideal Qp-Amp Block diagram of op-ampt inverting, roman-etting, Variesi ground, Stitutaciors, Summong Amplifies, Voltage follower, eo-amp	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 OP-AMP - CIRCUTTS: Voltage Regulator.	CO 2:To Learn about the 8051 Microcontroller, Interrupts and timers.
<ul> <li>ourgarator, Schmidt regger onerwave generator, Square wave generator, Autive filters, IC-555</li> </ul>	CO 3:Addressing modes and accessing memory using various addressing modes, instruction set.
COSTO Understand - Coolin of anglitude modulation - modulators Depetion of AM sumply	CO 4:To learn about assembly language programmes on 8051.
CO (To learn about M., Generation of	CO 5:To learn about the various Interfacings.

Atteffel

PRINCIPAL A.V.R. DEGREE COLLEGE Silwamika Nagar, Gajuwaka, VISAKHAPATNAM - 530 026

COS: AM Transmitter and Receiver COS: FM Transmitter and Receiver

CO 1 To Learn about impoduction to Murraprocessor, DVTEL - 8083 CO 2 To Jearn About Instructions, Machine Control instructions. CO 3: To iearn about Assembly



vitoroprocesso

4