457,KLS SHRI [redacted]SANTRAO POTDAR POLYTECHNIC,B[redacted]LAGAVI.
DEPT OF ELECTRONICS & COMMUNICATION ENGINEERING
2024-25(ODD SEMESTER) PORTION FOR INTERNAL TEST SEMESTER: III SEM

I INTERNAL TEST

SL. NO.	DATE OF IA	NAME OF THE CC	THE COURSE	PORTION	CO	% OF PORTION	SIGN OF CC
1	02.08. 2024	Mrs. Amruta S Devangavi	20EC31P/ ANALOG ELECTRONICS	**Week1**: Power Supplies,Need, Types – Unregulated, Regulated Linear, Switched, Battery, Selection Criteria of different power supplies,RPS & UPS – Online & Offline ,SMPS **Week2**: RC Integrator & RCDifferentiator,Clippers,clampers **Week3**:Tunnel Diode, Varactor Diode,Gunn diode,PIN diode, Solar cell,Schottky diode & UJT:: **Week4**:Transistor Amplifiers.DC load line, Operating point, Need for biasing, Stabilization, stability factor,BJT,Amplifiers	1,2, 3,4	38	
2	02.08. 2024	Mrs. K.S.Bharati	20EC32P/ LOGIC DESIGN USING VERILOG	**week1:** Introduction to VSLI & HDL Introduction to verilog and types of Modelling Basic concepts of verilog **week2:** Data types and operators **Week 3:** verlog module and gate level modelling. **week4 :**Data flow modelling with programs **week7:** Sequentialcircuits RS Flipflop, JK flip flop,MS JK flipflop D flipflop,T flipflop	1,3	38	
3	03.08. 2024	Mrs.Sucheta Kulkarni	20EC33P/ COMMUNICATION SYSTEMS	**week1:**Network theorems: Superposition theorem, Maximum Power Transfer theorem,Thevenin's theorem and Norton'stheorem-statements and explanation **week2:** Resonance: Series resonance - circuit diagram,phasor diagram, resonance plot and characteristics,Parallel resonance-resonance plot and characteristics, Condition for resonance,expression for frequency of resonance . **Week3:**Filters: Classification of filters, cut-off frequency,passband and stopband,Ideal characteristics curve of passive LPF,HPF, BPFand BRF, Circuit diagram & formula for cut-off frequency of T and Π configurations of LPF and HPF. **Week4:** Attenuators:Classification and applications of attenuators. Definition of Bel, Decibel and Neper, Symmetrical T type attenuator- Circuit diagram,expression for attenuation, Symmetrical Π type attenuator- Circuit diagram,expression for attenuation **Week5:** TransmissionMedia: 1.Need, different types of transmission media (guided, unguided), Transmission lines-Electrical model,Primary constants - R, L, G and C ,Secondary constants - Characteristic Impedance and Propagation Constant, Optical fiber -principle ofoperation,Numerical aperture, Angle of acceptance, Classification,fiber losses. Basic components of Fiber opticsystem,splices,connecters,couplers and switches.	1,2, 3	38	
4	03.08. 2024	Mrs. Amruta S Devangavi	20EC34P/ ELECTRONICMEASUREMENTS & TESTING TECHNIQUES	**Week 1:**Necessity of measurement,direct and indirect method,static and dynamic chracteristics,block diagram of measurement,Error etc. **Week 2:**statistical analysis,prblems on statistical analysis,calibration,error check and data shhet reading. **Week 3**:Standars in measurement,AC DC bridges,Wheatstone's meter bridge. **Week 4:**Electrical transuder,types application,Strain guage,guage factor,types,load cell,capacitive transducer etc.Week 5:Hall effect transducer,thermistors and thermocouple.	1,2, 3,4	38	
	02.08. 2024	Ms. Sayali Sawant	20KA31T/ KANNADA-II/SAHITYA SINCHANA-II, BALAKE KANNADA-II	BK-II: Lesson 1 , Lesson 2, Lesson 3, Lesson 4		30	
5		Mrs. Priyanka N		ಹೊಸಗನ್ನಡ ಸಾಹಿತ್ಯ ಹೊಸಗನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆಯ ಪ್ರಭಾವಗಳು ಮತ್ತು ಪ್ರೇರಣೆಗಳುಹೊಸಗನ್ನಡ ಕಾವ್ಯದ ಪ್ರಕಾರಗಳು		35	

II INTERNAL TEST

SL. NO.	DATE OF IA	NAME OF THE CC	THE COURSE	PORTION	CO	% OF PORTION	SIGN OF CC
1	28.08. 2024	Mrs. Amruta S Devangavi	20EC31P/ ANALOG ELECTRONICS	**Week 5**:Common Emitter Transistor,RC Coupled transistor amplifier,power amplifiers **Week6**:Working of Class A,Class B,Class AB and Class C **Week7**:Op-amp,Modes of operation-Single ended, Common mode & Differential mode, Ideal and practical characteristics,Op-amp parameters **Week8**:Open-loop,Closed-loop configuration,Voltage follower, summing & difference amplifiers **Week9**:Op-amp as Differentiator, Integrator.Schmitt trigger and precision rectifier, Gain of Multistage Op-Amp Circuits.Sinusoidal Oscillators, Types of Oscillations, LC Tank circuit	1,2, 3,4	70	
2	28.08. 2024	Mrs. K.S.Bharati	20EC32P/LOGIC DESIGN USING VERILOG	**week8**Verilog description of SR flip flops &JK flip flop using data flow&behavioral modeling resply..Registers-Classification of registers.SISO using flip-flops. **week 9:**SIPO, PISO and PIPO using flip flops.universal shiftregister. Ring counter and Johnson's counter. Verilog description of any one shift register using any modeling **week 10** Counters - definition, classification, modulus. Working and realization of asynchronous counters using flip-flops, comparison, partial mod counters **week 11**:Higher mod counters using lower mod counters &verilog description of counters	1,2 ,3	70	
3	29.08. 2024	Mrs.Sucheta Kulkarni	20EC33P/ COMMUNICATION SYSTEMS	**Week6:** Antennas: Concept of electric and magnetic fieldsin a dipole, antenna terminology-polarization, radiation pattern, antennagain, directive gain, directivity, powergain,antenna resistance.Antenna efficiency, beam width,bandwidth,isotropic radiators.Effects of ground on antennas, effect of antenna height, Antenna types, examples and applications, Working of Dish Antenna, Feedmechanisms-CassegrainandHornfeed, **Week7:** Wave Propagation: Wave Propagation: Fundamentals of Electromagnetic Waves, electromagnetic spectrum, Modes of wave propagation-groundwave propagation and sky wavepropagation and space wavepropagation,comparison, Analog modulation Block diagram of communicationsystem,Need for modulation and types of analog modulation techniques. **Week8:** AM Transmitter and Receiver -blockdiagram & waveforms, Expressions for modulating signal,Carrier signal, modulated signal,modulation index and power, Frequency Transmitter and Receiver-block diagram, waveform,Expressions for frequency deviation,modulation index. **Week9:** Digitalcommunication: Block diagram of digital communication system. Definition ofinformation capacity, entropy, bit-rate,baud rate and bandwidth of digital data,Sampling- Sampling theorem for lowpass and band pass signals, Nyquist criterion and aliasing effect,Explain Analog pulse modulation techniques-PAM, PPM, PWM using waveforms.	1,2, 3	70	
4	29.08. 2024	Mrs. Amruta S Devangavi	20EC34P/ELEC. MEASTS. & TESTING TECH.	**Week 5:**Proximity sensors, digital optical encoders & PIR sensors, **week 6:**PMMC working principle,DC ammeter & voltmeter, electrodynamometer-principle, **Week 7:**Electronic voltmeter,ac voltmeter,ohmmeter. **week 8:**Digital instruments,. Automatization in digital meters,Electronic counters. **week 9:**Digital frequency meter.	1,2 ,3, 4	70	
5	28.08. 2024	Ms. Sayali Sawant	20KA31T/ KANNADA-II/SAHITYA SINCHANA-II, BALAKE KANNADA-II	BK-II : Lesson 5,Lesson 6. Lesson 7, Lesson 8		60	
		Mrs. Priyanka N		ವೈಚಾರಿಕತೆ ಕುರಿತಾದ ಲೇಖನ ಕಥೆ ನೇಮಿಚಂದ್ರಪ್ರವಾಸ ಕಥನ ಹಿ ಚಿ ಬೋರಲಿಂಗಯ್ಯಪರಿಸರ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಕುರಿತಾದ ಲೇಖನಗಳು ಪ್ರಬಂಧ ಗೋರೂರು ರಾಮಸ್ವಾಮಿ ಅಯ್ಯಂಗಾರ್		70	

III INTERNAL TEST

SL. NO.	DATE OF IA	NAME OF THE CC	THE COURSE	PORTION	CO	% OF PORTION	SIGN OF CC
1	24.09.2024	Mrs. Amruta S Devangavi	20EC31P/ ANALOG ELECTRONICS	**Week10**:Concept of feedback, Barkhausen criteria,Types of Oscillators, Working of Hartley oscillator using BJT/Op-amp,Working of Colpitts and crystal oscillator using BJT/Op-amp **Week 11**: Working of RC phase-shift and Wein-bridge oscillators using Op-amp Filters: Classification, Applications & Advantages of Active over PassiveFilters ,Terminology, frequency response of 1st order Butterworth LPF, HPF **Week 12**:Frequency response of 1st order Butterworth BPF and Band Elimination Filter, BEF,Instrumentation amplifier-Need for instrumentation amplifier, Working of instrumentation amplifier circuit,Phase Locked Loop voltage to frequency converter, PLL operation with its applications **Week 13**:IC 555 Timer: Internal diagram, Pin Configuration. Interpret Datasheets.,IC 555 timer as Astable multivibrator.,IC 555 timer as monostable multivibrator.	1,3 ,4	100%	
2	24.09.2024	Mrs. K.S.Bharati	20EC32P/LOGIC DESIGN USING VERILOG	**week 5:**System tasks.Compiler directives- Behavioral modeling- Always and Initial statements. Procedural Assignments- Blocking and non-blocking assignments. Timing Control-Delay, Event Conditional statements **week6**: Behavioral Verilog description for BCD to seven segment decoder for common anode display using if- else, Case. Traffic light controller using Behavioral description.Test bench- Need, Importance, testbench for halfadder. **week 11**.DAC & ADC specifications ,**week12** :types of ADC & DAC memory devices **week13**:PLDs PLA & PAL	2,3 ,4	100%	
3	25.09.2024	Mrs.Sucheta Kulkarni	20EC33P/ COMMUNICATION SYSTEMS	**Week10:** Digital Coding: Quantization -process, classification.Quantization noise and companding process,PCM and DPCM system,Delta modulation and adaptive deltamodulation system. **Week11:** Baseband transmission-significance of inter symbol interference (ISI) & eyepattern,Digital modulation techniques-types, Generation & detection of Binary ASK & Binary FSK,Generation & detection of Binary PSK & QPSK. **Week12:** Multiplexing: FDM & TDM-concept,applications, PAM/TDM system -Block diagram,transmission bandwidth,synchronization, crosstalk & guard time, Digital multiplexers-Principle,classification & performance factors. **Week13:** Error detection & correction, Errors-types, redundancy, error control schemes, Error control codes: types Paritycheck bit coding, error detection methods-LRC, VRC,CRC,Checksum with examples	1,3	100%	
4	25.09.2024	Mrs. Amruta S Devangavi	20EC34P/ ELECTRONIC MEASUREMENTS & TESTING TECHNIQUES	**week 9:** Digital LCR meter, digital multimeter.3. Microprocessor based instruments, IEEE 488 GPIB instruments. **week 10:**CRO,DSO **week 11:**function generator,Standard RF signal generator, sweep frequency generator. **week 12:**Electrical grounding and shielding,**week 13:**Precautions to prevent instrument damage, ,Testing and troubleshooting,Testing Techniques, electronic repair ,n Basic steps of electronic equipment service and maintenance tools	1,3 ,4	100%	
5	24.09.2024	Ms. Sayali Sawant	20KA31T/ KANNADA-II/SAHITYA SINCHANA-II, BALAKE KANNADA-II	BK-II: Lesson 9 , Lesson 10 , Lesson 11,Lesson 12		100%	
		Mrs. Priyanka N		ಪ್ರಚಲಿತ ವಿದ್ಯಮಾನಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಲೇಖನ ಪೇರು ಮಾರ್ಕೆಟ್ ಮತ್ತು ಹಣಕಾಸು ನಿರ್ವಹಣೆ ಕುರಿತಂತೆ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಚಳುವಳಿ ಪ್ರೊ ಜಿ ವೆಂಕಟಸುಬ್ಬಯ್ಯ ಕನ್ನಡ ಸಿನಿಮಾ ರಂಗ ಬೆಳೆದು ಬಂದ ದಾರಿ ಮತ್ತು ನಾಡು ನುಡಿ ಹಾಗೂ ನಾಡಿನ ಸಂಸ್ಕೃತಿಯ ಮೇಲೆ ಬೀರಿದ ಪ್ರಭಾವಗಳು ಕನ್ನಡದ ಸಾಮಾಜಿಕ ಉಪಭಾಷೆಗಳು ಆಧುನಿಕ ಕನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆಯ ಒಂದು ಅವಲೋಕನ		100%	

PC

Head of Department
Dept. of Electronics & Communication
KLS' Shri V. P. Polytechnic
Tilakwadi, Belagavi-590006

IQAC
Coordinator,
IQAC,
KLS VPP Belagavi

PRINCIPAL
PRINCIPAL
K.L.S's Shri Vasantrao Potdar Polytechnic
Tilakwadi, Belgaum - 590 006