

CIRCULAR*Sub: I Semester -Allotment of Practicum topics- Reg.*

INSTRUCTIONS**Students:**

1. The students should meet immediately the allotted course faculty for practicum and start working on the practicum with the guidance of course faculty.
2. To complete the Practicum, the student shall work in laboratories under supervision of allotted course faculty, in the allotted hours in the classwork timetable and also outside the class work hours during weekdays.

Practicum/Course Faculty:

1. The course faculty are advised to guide the allotted students for practicum during the semester course work.
2. In case of any clash in respect of practicum slot and practicum-faculty classwork, the practicum faculty should allot 4.00 p.m. to 6.00 p.m. slot to their practicum students on any full day. The same shall be informed to the class teacher, for record

Following are the practicum topics allotted to the I semester students of 1ECE1 section.

Section : 1ECE1

S.NO.	ROLL NUMBER OF THE STUDENT	PRACTICUM TOPIC ALLOTTED	Practicum Under the Course	Course Faculty
1	B24EC001	Analyzing Sound Wave Decay Using Geometric Series in Audio Processing.	Differential Calculus and Ordinary Differential Equations (DCODE)	Smt. K. Nirmala
2	B24EC002	Optimizing Population Growth Models Using Geometric Series.	DCODE	Smt. K. Nirmala
3	B24EC003	Harmonic Series in Traffic Flow: Simulating the Impact of Increasing Vehicles on Highway Speeds.	DCODE	Smt. K. Nirmala

4	B24EC004	Implementing Rolle's theorem for Error Detection in Sensor Networks.	DCODE	Smt. K. Nirmala
5	B24EC005	Taylor's Series Approximation for Real Time Signal Processing in Telecommunication.	DCODE	Smt. K. Nirmala
6	B24EC006	Minimizing Energy Consumption in Smart Homes Using Maxima and Minima.	DCODE	Smt. K. Nirmala
7	B24EC007	Modelling Population Growth with Logistic Differential Equations.	DCODE	Smt. K. Nirmala
8	B24EC008	Vehicle Speed and Acceleration Analysis Using Lagrange's Mean Value Theorem: A Simulation Study.	DCODE	Smt. K. Nirmala
9	B24EC009	Orthogonal Trajectories in Electrostatic Fields: A Simulation and Analysis Using Python.	DCODE	Smt. K. Nirmala
10	B24EC010	Linear Differential Equations in Climate Modelling: Simulation Temperature Changes Over Time.	DCODE	Smt. K. Nirmala
11	B24EC011	Electrical Circuit Analysis: Simulating RLC Circuit Behaviour Using Linear Differential Equations.	DCODE	Smt. K. Nirmala
12	B24EC012	Humidity Indicator and Controller	Engineering Physics (EP)	Dr. N. Maramu
13	B24EC013	Automatic Water Dispenser	EP	Dr. N. Maramu
14	B24EC014	Automatic Darkness Sensor Circuit	EP	Dr. N. Maramu
15	B24EC015	Simple Clap Switch Circuit	EP	Dr. N. Maramu
16	B24EC016	LPG Gas Sensor Circuit	EP	Dr. N. Maramu
17	B24EC017	Police light Flasher Circuit	EP	Dr. N. Maramu
18	B24EC018	Real time water level indicator and alert system	EP	Dr. N. Maramu
19	B24EC019	Touchless Doorbell For The Post-Covid World	EP	Dr. N. Maramu
20	B24EC020	Simple 5W Stereo Amplifier For Noise-Free Music	EP	Dr. N. Maramu
21	B24EC021	Hybrid Solar Charger	EP	Dr. N. Maramu
22	B24EC022	ULTRASONIC DISTANCE SENSOR - ARDUINO	EP	Dr. N. Maramu
23	B24EC023	4-bit Binary Adder-Subtractor	Switching Theory and Logic Design (STLD)	Prof. G. Raghotham Reddy
24	B24EC024	4-bit Carry Look-Ahead Adder	STLD	Prof. G. Raghotham Reddy
25	B24EC025	N-Bit Parallel Adder	STLD	Prof. G. Raghotham Reddy
26	B24EC026	7-Segment Display Decoder (BCD to 7 Segment)	STLD	Prof. G. Raghotham Reddy

27	B24EC027	Priority Encoder (8-to-3)	STLD	Prof. G. Raghotham Reddy
28	B24EC028	4:1 Multiplexer Implementation of Boolean Function	STLD	Prof. G. Raghotham Reddy
29	B24EC029	Full Adder using Multiplexer	STLD	Prof. G. Raghotham Reddy
30	B24EC030	4-bit Synchronous Binary Counter	STLD	Prof. G. Raghotham Reddy
31	B24EC031	4-bit Asynchronous Binary Counter	STLD	Prof. G. Raghotham Reddy
32	B24EC032	Johnson Counter	STLD	Prof. G. Raghotham Reddy
33	B24EC033	SR Flip-Flop Implementation	STLD	Prof. G. Raghotham Reddy
34	B24EC034	Student Record Management System	Programmi ng for Problem Solving with C (PPSC)	Sri S. Pradeep Kumar
35	B24EC035	Hospital Management System	PPSC	Sri S. Pradeep Kumar
36	B24EC036	Digital Clock	PPSC	Sri S. Pradeep Kumar
37	B24EC037	Traffic Light Simulation	PPSC	Sri S. Pradeep Kumar
38	B24EC038	Movie Ticket Booking System	PPSC	Sri S. Pradeep Kumar
39	B24EC039	Payroll Management System	PPSC	Sri S. Pradeep Kumar
40	B24EC040	Library Management System	PPSC	Sri S. Pradeep Kumar
41	B24EC041	Hotel Reservation System	PPSC	Sri S. Pradeep Kumar
42	B24EC042	Attendance Management System	PPSC	Sri S. Pradeep Kumar
43	B24EC043	Personal Finance Management Tool	PPSC	Sri S. Pradeep Kumar
44	B24EC044	Bank Account Management System	PPSC	Sri S. Pradeep Kumar
45	B24EC045	Calculation of Resonance frequency for a given single phase series R-L-C circuit using MATLAB/PSPICE.	Basic Electrical Engineering (BBEE)	Dr. D. Rakesh Chandra
46	B24EC046	To measure single-phase power by using three ammeter method.	BBEE	Dr. D. Rakesh Chandra
47	B24EC047	To measure three-phase power by using two wattmeter method.	BBEE	Dr. D. Rakesh Chandra

48	B24EC048	To measure the single-phase power by using three voltmeter method.	BBEE	Dr. D. Rakesh Chandra
49	B24EC049	Interfacing sensors with Arduino using TINKERCAD.	BBEE	Dr. D. Rakesh Chandra
50	B24EC050	Voltage and current relationships between line & phase quantities for balanced 3-phase star connections.	BBEE	Dr. D. Rakesh Chandra
51	B24EC051	Efficiency calculation of a single phase Induction Motor	BBEE	Dr. D. Rakesh Chandra
52	B24EC052	Calculation of core losses in a single phase Transformer using O.C. (open circuit) test.	BBEE	Dr. D. Rakesh Chandra
53	B24EC053	Voltage and current relationships between line & phase quantities for balanced 3-phase delta connections.	BBEE	Dr. D. Rakesh Chandra
54	B24EC054	Calculation of copper losses in a single phase Transformer using Short Circuit test.	BBEE	Dr. D. Rakesh Chandra
55	B24EC055	Investigating the electronic waste disposal and recycling practices- E waste management	Environmental Studies(ES)	Dr. V. Sunil Kumar
56	B24EC056	Investigation on biogas energy and its applications.	ES	Dr. V. Sunil Kumar
57	B24EC057	Investigation on suitable methods for air quality monitoring in residential areas	ES	Dr. V. Sunil Kumar
58	B24EC058	Exploring on soil contamination in Industrial areas and its preventive methods.	ES	Dr. V. Sunil Kumar
59	B24EC059	Investigation on Sustainable Agriculture Practices: Green Poly House	ES	Dr. V. Sunil Kumar
60	B24EC060	Investigating the effective water conservation techniques in urban areas.	ES	Dr. V. Sunil Kumar
61	B24EC061	Exploring renewable energy sources and its applications	ES	Dr. V. Sunil Kumar
62	B24EC062	Investigating on organic farming methods as green initiative for global practice.	ES	Dr. V. Sunil Kumar
63	B24EC063	Investigating on heavy metal contamination in soil and its adverse effects and preventive methods.	ES	Dr. V. Sunil Kumar
64	B24EC064	Investigating the waste disposal practices and suggesting improvements.	ES	Dr. V. Sunil Kumar

V. Sunil Kumar
(Signature of class teacher)