

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

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**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<sup>st</sup> semester students of B.Tech, 1ECE3 section.

***Section : 1ECE3***

S. No	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24EC129	Optimization of Resource Allocation using Maxima and Minima	U24MH101-DCODE	Dr.E. Ranjith Kumar
2	B24EC130	Forecasting Stock Prices using Time Series Analysis	U24MH101-DCODE	Dr.E. Ranjith Kumar
3	B24EC131	Taylor Series-Based Solution for Population Growth Modelling	U24MH101-DCODE	Dr.E. Ranjith Kumar
4	B24EC132	Signal Processing using Partial Derivatives for Noise Reduction	U24MH101-DCODE	Dr.E. Ranjith Kumar
5	B24EC133	The maximum or minimum of the signal using Lagrange's Mean Value Theorem	U24MH101-DCODE	Dr.E. Ranjith Kumar



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6	B24EC134	Temperature Control System for Food Storage using Newton's Law of Cooling	U24MH101-DCODE	Dr. E. Ranjith Kumar
7	B24EC135	Analysis of an Electrical Circuit using Cauchy's Mean Value Theorem	U24MH101-DCODE	Dr.E. Ranjith Kumar
8	B24EC136	Design and Implementation of an RL Series Circuit for Power Quality Improvement in Industrial Power Systems	U24MH101-DCODE	Dr.E. Ranjith Kumar
9	B24EC137	Design of a Navigation System using Jacobian Matrix and GPS	U24MH101-DCODE	Dr.E. Ranjith Kumar
10	B24EC138	The maximum height of a Projectile using Rolle's mean value theorem	U24MH101-DCODE	Dr.E. Ranjith Kumar
11	B24EC139	Application of Linear differential equations Electrical Circuits: -LCR Circuit	U24MH101-DCODE	Dr.E. Ranjith Kumar
12	B24EC140	Implementing low-cost sensors for precision agriculture solutions and smart farming	U24PY102E-EP	Dr. K. Srinivas
13	B24EC141	Investigation of IR LED applications as detectors and receivers	U24PY102E-EP	Dr. K. Srinivas
14	B24EC142	Transistor-Based LED Blinker Circuit using EasyEDA software	U24PY102E-EP	Dr. K. Srinivas
15	B24EC143	Investigation on challenges of harnessing solar energy for sustainable agriculture and solar-powered irrigation systems	U24PY102E-EP	Dr. K. Srinivas
16	B24EC144	Exploring the trends and applications of professional and open-source circuit design software used in the electronics industry	U24PY102E-EP	Dr. K. Srinivas
17	B24EC145	Enhance the reliability of electronic circuits by exploring the golden rules and best practices of circuit design	U24PY102E-EP	Dr. K. Srinivas
18	B24EC146	Implementation of a simple digital micro-Voltmeter using Arduino nano and LCD Display	U24PY102E-EP	Dr. K. Srinivas
19	B24EC147	Exploring signal analysis techniques using CRO: A hands-on approach	U24PY102E-EP	Dr. K. Srinivas
20	B24EC148	Harnessing energy: Exploring applications of low-cost piezoelectric discs in energy harvesting	U24PY102E-EP	Dr. K. Srinivas



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21	B24EC149	Exploring the simulating circuits of 0-30V Variable DC Power Supplies: using Easy-EDA software tool	U24PY102E-EP	Dr. K. Srinivas
22	B24EC150	Investigation on magnetoresistance measurements and its applications in memory devices	U24PY102E-EP	Dr. K. Srinivas
23	B24EC151	4-bit Binary Adder-Subtractor	U24EC103-STLD	Dr. S. P. Girija
24	B24EC152	4-bit Carry Look-Ahead Adder	U24EC103-STLD	Dr. S. P. Girija
25	B24EC153	N-Bit Parallel Adder	U24EC103-STLD	Dr. S. P. Girija
26	B24EC154	7-Segment Display Decoder (BCD to 7 Segment)	U24EC103-STLD	Dr. S. P. Girija
27	B24EC155	Priority Encoder (8-to-3)	U24EC103-STLD	Dr. S. P. Girija
28	B24EC156	4:1 Multiplexer Implementation of Boolean Function	U24EC103-STLD	Dr. S. P. Girija
29	B24EC157	Full Adder using Multiplexer	U24EC103-STLD	Dr. S. P. Girija
30	B24EC158	4-bit Synchronous Binary Counter	U24EC103-STLD	Dr. S. P. Girija
31	B24EC159	4-bit Asynchronous Binary Counter	U24EC103-STLD	Dr. S. P. Girija
32	B24EC160	Johnson Counter	U24EC103-STLD	Dr. S. P. Girija
33	B24EC161	SR Flip-Flop Implementation	U24EC103-STLD	Dr. S. P. Girija
34	B24EC162	Heritage and Nature-Based Tourism Management in South India	U24DS104-PPSC	Sri Syed Zaheeruddin
35	B24EC163	Design a simple voting system where users can cast votes and the system displays the results after voting ends.	U24DS104-PPSC	Sri Syed Zaheeruddin
36	B24EC164	Routing of vehicles to ensure efficient traffic management system.	U24DS104-PPSC	Sri Syed Zaheeruddin
37	B24EC165	Empowering Financial Literacy: A Comprehensive Approach to Personal Budget Management	U24DS104-PPSC	Sri Syed Zaheeruddin
38	B24EC166	Game Limit Pro: Automatic Playtime Shutdown System	U24DS104-PPSC	Sri Syed Zaheeruddin
39	B24EC167	Mini banking system with adaptive interest calculation.	U24DS104-PPSC	Sri Syed Zaheeruddin
40	B24EC168	Design of Intelligent Elevator Control Simulation using restricted usage.	U24DS104-PPSC	Sri Syed Zaheeruddin



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41	B24EC169	Electronics Hub(Providing Details of the electronic gadgets)	U24DS104-PPSC	Sri Syed Zaheeruddin
42	B24EC170	Enhancing User Experience through Modern Library Management Systems	U24DS104-PPSC	Sri Syed Zaheeruddin
43	B24EC171	Optimizing Urban Traffic Flow: A Study on Traffic Lights Control Systems	U24DS104-PPSC	Sri Syed Zaheeruddin
44	B24EC172	Design of Health Monitoring system. (Supply of medicine and other facilities at the doorstep).	U24DS104-PPSC	Sri Syed Zaheeruddin
45	B24EC173	Calculation of voltage, current and power for a given DC circuit by applying Mesh and Nodal Analysis using MATLAB/PSPICE.	U24EE105B-BEE	Sri M. Srinivas
46	B24EC174	Calculation of Resonance frequency for a given single phase series R-L-C circuit Using MATLAB/PSPICE.	U24EE105B-BEE	Sri M. Srinivas
47	B24EC175	Verification of Maximum Power Transfer theorem for a given DC circuit using MATLAB/PSPICE.	U24EE105B-BEE	Sri M. Srinivas
48	B24EC176	Interfacing sensors with Arduino using TINKERCAD.	U24EE105B-BEE	Sri M. Srinivas
49	B24EC177	Generation of pulses for controlling LED brightness using Arduino UNO board.	U24EE105B-BEE	Sri M. Srinivas
50	B24EC178	Determination of voltage and current relationships between line & phase quantities for balanced 3-phase star connections.	U24EE105B-BEE	Sri M. Srinivas
51	B24EC179	Efficiency calculation of single phase Induction Motor	U24EE105B-BEE	Sri M. Srinivas
52	B24EC180	Calculation of core losses in a single phase Transformer using O.C. (open circuit) test.	U24EE105B-BEE	Sri M. Srinivas
53	B24EC181	Determination of voltage and current relationships between line & phase quantities for balanced 3-phase delta connections.	U24EE105B-BEE	Sri M. Srinivas
54	B24EC182	Calculation of copper losses in a single phase Transformer using Short Circuit test.	U24EE105B-BEE	Sri M. Srinivas
55	B24EC183	Exploration of Food Chain of Pond Eco System	U24CY106-ES	Dr. D. Praveena



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56	B24EC184	Aesthetic value of Bio diversity Eco Tourism	U24CY106-ES	Dr. D. Praveena
57	B24EC185	Investigation of Sustainable Agriculture Practices: Green Poly House	U24CY106-ES	Dr. D. Praveena
58	B24EC186	Exploration of composting and vermin composting	U24CY106-ES	Dr. D. Praveena
59	B24EC187	Awareness on Implementation of Rain water harvesting pits	U24CY106-ES	Dr. D. Praveena
60	B24EC188	Comparative Study of Diesel and Bio Diesel and it's applications	U24CY106-ES	Dr. D. Praveena
61	B24EC189	Investigation of Solid waste management- Landfilling	U24CY106-ES	Dr. D. Praveena
62	B24EC190	Investigation of BOD/COD in Fresh water Ecosystems	U24CY106-ES	Dr. D. Praveena
63	B24EC191	Evaluation of Air pollutants by Air Pollution sensors	U24CY106-ES	Dr. D. Praveena
64	B24EC192	Exploration of Terrace gardening-organic farming	U24CY106-ES	Dr. D. Praveena

*Sd/-*  
*(Signature of class teacher)*  
*Dr. K. Srinivas (PS)*