

**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 semester students of \_\_\_\_\_ section.

*Section : ...1CSE-5... ....*

S. No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24CS257	Applications of ordinary differential equations using MATLAB.	Differential Calculus and Ordinary Differential Equations [DCODE]	Dr. K. Sandhya Rani
2	B24CS258	Matrices in the MATLAB	DCODE	Dr. K. Sandhya Rani
3	B24CS259	Taylor's theorem and its applications.	DCODE	Dr. K. Sandhya Rani

4	B24CS260	Mathematical Reasoning and its Applications.	DCODE	Dr. K. Sandhya Rani
5	B24CS261	Sequences and Series using C Programming	DCODE	Dr. K. Sandhya Rani
6	B24CS262	Set Operations using Mat lab	DCODE	Dr. K. Sandhya Rani
7	B24CS263	Linear equations solving using mat lab and its applications	DCODE	Dr. K. Sandhya Rani
8	B24CS264	Probability and Statistics in real world data set	DCODE	Dr. K. Sandhya Rani
9	B24CS265	Number theory and its applications	DCODE	Dr. K. Sandhya Rani
10	B24CS266	Modelling with ordinary differential equations	DCODE	Dr. K. Sandhya Rani
11	B24CS267	Linear differential equations and its applications.	DCODE	Dr. K. Sandhya Rani
12	B24CS268	Investigate the properties of semiconductors and analyze their applications in electronic devices	Engineering Physics [EP]	Dr. K. Rajendra Prasad
13	B24CS269	Clap Switch	EP	Dr. K. Rajendra Prasad
14	B24CS270	Simulation of Projectile Motion with software tool	EP	Dr. K. Rajendra Prasad
15	B24CS271	Build a simple electric circuit and measure the voltage and current	EP	Dr. K. Rajendra Prasad
16	B24CS272	Fire Detection and Alarm System	EP	Dr. K. Rajendra Prasad
17	B24CS273	Investigate the physics of laser technology and study the properties and applications of different types of lasers	EP	Dr. K. Rajendra Prasad
18	B24CS274	Automatic Streetlight Control Using LDR and LED	EP	Dr. K. Rajendra Prasad
19	B24CS275	Temperature Sensor using Thermistor	EP	Dr. K. Rajendra Prasad
20	B24CS276	Basic Calculator using software tool	EP	Dr. K. Rajendra Prasad
21	B24CS277	Investigate the properties of permanent magnets and their applications	EP	Dr. K. Rajendra Prasad
22	B24CS278	Smart Dustbin with Ultrasonic Sensor	EP	Dr. K. Rajendra Prasad

23	B24CS279	Design a Binary Calculator that can perform addition, subtraction, multiplication, and division of binary numbers using a basic GUI	Computer Organization and Architecture [COA]	Dr. Slokashree Padhi
24	B24CS280	Use a digital logic simulator to design a traffic light system using basic logic gates (AND, OR, NOT) and flip-flops.	COA	Dr. Slokashree Padhi
25	B24CS281	Use a Karnaugh map to simplify a given Boolean expression and verify it by building a circuit using a digital simulator.	COA	Dr. Slokashree Padhi
26	B24CS282	Design a simulator for different types of flip-flops (SR, JK, D, T) and use them to create basic registers.	COA	Dr. Slokashree Padhi
27	B24CS283	Build a digital logic circuit simulator where users can design circuits using logic gates. The tool should generate truth tables for given logic circuits.	COA	Dr. Slokashree Padhi
28	B24CS284	Simulate Cache Memory with Different Mapping Techniques	COA	Dr. Slokashree Padhi
29	B24CS285	Build a Signed Binary Arithmetic Calculator that can add, subtract, multiply, and divide signed binary numbers. Include error handling for overflows and incorrect inputs.	COA	Dr. Slokashree Padhi
30	B24CS286	Build a simulator to demonstrate the memory hierarchy (Registers, Cache, Main Memory, Secondary Storage).	COA	Dr. Slokashree Padhi
31	B24CS287	Simulate Booth's Algorithm with Error Handling.	COA	Dr. Slokashree Padhi
32	B24CS288	Simulate Pipeline and Measure Performance.	COA	Dr. Slokashree Padhi
33	B24CS0289	Simulate Instruction Pipeline with Hazard Detection.	COA	Dr. Slokashree Padhi
34	B24CS290	<b>Students information system :</b> Develop a project on current semester academic information of your class students, which	Programming for Problem Solving With C	A. Venkatesh

		displays information like student details, attendance, performance of students in exams, and any other academic related data.	[PPSC]	
35	B24CS291	<b>Student canteen management system :</b> Develop a simple canteen management system for students in your college, which displays the status of all the orders from students	PPSC	A. Venkatesh
36	B24CS292	<b>Calendar :</b> Develop a calendar for the given year	PPSC	A. Venkatesh
37	B24CS293	<b>Hospital management system</b> Develop a small project on hospital management functionalities	PPSC	A. Venkatesh
38	B24CS294	<b>Election voting system :</b> Develop a project on voting system, which performs basic functionalities like displaying the contestants, votes polled, majority of a candidate, vote share	PPSC	A. Venkatesh
39	B24CS295	<b>Calculator :</b> Develop a simple calculator, which performs basic arithmetic operations	PPSC	A. Venkatesh
40	B24CS296	<b>Room Rental system :</b> Develop a project on rental system, which displays the necessary information of rooms in a hotel	PPSC	A. Venkatesh
41	B24CS297	<b>Bank transactions management system :</b> Develop a project on banking system, which perform all the basic functionalities by a user in bank. Functionalities includes account creation, credit information, debit information, balance checking, and etc.	PPSC	A. Venkatesh
42	B24CS298	<b>Movie ticket booking system :</b> Develop a system, which performs ticket booking and display the status of seats available	PPSC	A. Venkatesh
43	B24CS299	<b>Store management :</b> Develop a project on a store transactions, which displays all the information about products available in store	PPSC	A. Venkatesh
44	B24CS300	<b>Crickets score dashboard :</b> Develop a system to display	PPSC	A. Venkatesh

		cricket score information.		
45	B24CS301	Simulation of a given electrical circuit to determine the current, voltage and power at a given resistance using mesh analysis. Verify the same with nodal analysis.	Basic Electrical Engineering [BEE]	Mr. C. Pavan Kumar
46	B24CS302	Simulation by applying superposition theorem for a given electrical network to determine the current, voltage and power.	BEE	Mr. C. Pavan Kumar
47	B24CS303	By using simulation verify the Thevenin's theorem and determine the voltage and current across the load.	BEE	Mr. C. Pavan Kumar
48	B24CS304	Verify whether maximum power is transferred to the load in a given circuit.	BEE	Mr. C. Pavan Kumar
49	B24CS305	Measurement of 3-phase power for a star or delta connected load.	BEE	Mr. C. Pavan Kumar
50	B24CS306	To conduct load test on the given single phase induction motor and to plot its performance characteristics.	BEE	Mr. C. Pavan Kumar
51	B24CS307	LED blink test using Arduino	BEE	Mr. C. Pavan Kumar
52	B24CS308	Control of DC servo motor using Arduino	BEE	Mr. C. Pavan Kumar
53	B24CS309	Arduino based traffic signal control	BEE	Mr. C. Pavan Kumar
54	B24CS310	Light based street light controller using Arduino	BEE	Mr. C. Pavan Kumar
55	B24CS311	Light intensity controller for an auditorium	BEE	Mr. C. Pavan Kumar

56	B24CS312	Exploration of composting and vermin composting	Environmental Studies [ES]	Dr. D. Praveena
57	B24CS313	Awareness on Implementation of Rain water harvesting pits	ES	Dr. D. Praveena
58	B24CS314	Comparative Study of Diesel and Bio Diesel and it's applications	ES	Dr. D. Praveena
59	B24CS315	Investigation of Solid waste management- Landfilling	ES	Dr. D. Praveena
60	B24CS316	Investigation of BOD/COD in Fresh water Ecosystems	ES	Dr. D. Praveena
61	B24CS317	Evaluation of Air pollutants by Air Pollution sensors	ES	Dr. D. Praveena
62	B24CS318	Exploration of Terrace gardening- organic farming	ES	Dr. D. Praveena
63	B24CS319	Assessment of Climate Change Impacts and loss of Bio diversity in Sanctuaries	ES	Dr. D. Praveena
64	B24CS320	Implementing Practices for Waste water Treatment	ES	Dr. D. Praveena
65	B24CS321	Exploration of Sustainable Agriculture Practices: Green Poly House	ES	Dr. D. Praveena

*Dr. D. Praveena*

*Dr.D.Praveena  
(Signature of class teacher)*