

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 IT-1 section.

Section: IT-1

S.No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24IT001	Application of Linear transformation in classical encryption scheme	Differential Calculus and Ordinary Differential Equations (DCODE)	Dr.T.Raghunatha Rao
2	B24IT002	Estimate the time of death using Newton's law cooling	DCODE	Dr.T.Raghunatha Rao
3	B24IT003	Error Estimation in Numerical Methods using Cauchy's form of remainder	DCODE	Dr.T.Raghunatha Rao

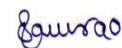
4	B24IT004	Population growth and Carbon Dating: A First-Order Differential Equation Approach	DCODE	Dr.T.Raghunatha Rao
5	B24IT005	Fibonacci sequence: Real life application in plant structures	DCODE	Dr.T.Raghunatha Rao
6	B24IT006	Cauchy's Root Test in Economic and Financial Analysis	DCODE	Dr.T.Raghunatha Rao
7	B24IT007	Radius of convergence for power series (Exponential series and logarithmic series) using Root test	DCODE	Dr.T.Raghunatha Rao
8	B24IT008	Error Estimation in Numerical Methods using Schlomilch- Roche's form of remainder	DCODE	Dr.T.Raghunatha Rao
9	B24IT009	Differential Equations in Simple pendulum	DCODE	Dr.T.Raghunatha Rao
10	B24IT010	Calculation of population decay by Taylor's series expansion	DCODE	Dr.T.Raghunatha Rao
11	B24IT011	Harmonic series in Computer Science: Algorithms and Complexity	DCODE	Dr.T.Raghunatha Rao
12	B24IT012	Application of Linear differential equations in Electrical Circuits: LCR Circuit	DCODE	Dr.T.Raghunatha Rao
13	B24IT013	Radius of convergence for power series (cosine series and sine series) using D' Alembert's ratio test	DCODE	Dr.T.Raghunatha Rao
14	B24IT014	Design and optimization of a conductometric titration cell for precise endpoint detection	Engineering Chemistry (EC)	Dr. M. Gopi Krishna
15	B24IT015	Analysis of water hardness using conductometric titration with EDTA	EC	Dr. M. Gopi Krishna
16	B24IT016	Conductometric determination of chloride content in water samples	EC	Dr. M. Gopi Krishna
17	B24IT017	Analysis of soil pollution using conductometric titration	EC	Dr. M. Gopi Krishna
18	B24IT018	Analysis of heavy metal contamination in river water	EC	Dr. M. Gopi Krishna

		using conductometric titration		
19	B24IT019	Investigation of the effects of temperature on conductometric titration	EC	Dr. M. Gopi Krishna
20	B24IT020	Analysis of total dissolved solids (TDS) in drinking water using conductometric titration	EC	Dr. M. Gopi Krishna
21	B24IT021	Conductometric titration of alkalinity in KITS ground water	EC	Dr. M. Gopi Krishna
22	B24IT022	Analysis of antioxidant activity in fruits and vegetables using colorimetry	EC	Dr. M. Gopi Krishna
23	B24IT023	Colorimetric determination of food dyes in beverages	EC	Dr. M. Gopi Krishna
24	B24IT024	Analysis of total suspended solids in KITS ground water using colorimetry	EC	Dr. M. Gopi Krishna
25	B24IT025	Determination of heavy metals in water samples via potentiometric titration	EC	Dr. M. Gopi Krishna
26	B24IT026	Determination of total alkalinity in surface waters affected by pollution via potentiometric titrations	EC	Dr. M. Gopi Krishna
27	B24IT027	4-bit Binary Adder-Subtractor	Digital Logic Design (DLD)	Dr. B. Kiran Kumar
28	B24IT028	4-bit Binary Carry Look-Ahead Adder	DLD	Dr. B. Kiran Kumar
29	B24IT029	7-Segment Display Decoder	DLD	Dr. B. Kiran Kumar
30	B24IT030	4:1 Multiplexer implementation using Boolean function	DLD	Dr. B. Kiran Kumar
31	B24IT031	Traffic Light Controller using Counters and Flip-Flops	DLD	Dr. B. Kiran Kumar
32	B24IT032	8-bit Gray Code to Binary Code Converter using Flip-Flops	DLD	Dr. B. Kiran Kumar
33	B24IT033	4-bit Binary Multiplier using Adders and Shift Registers	DLD	Dr. B. Kiran Kumar
34	B24IT034	8-bit ALU (Arithmetic Logic Unit) with Addition, Subtraction, AND, OR	DLD	Dr. B. Kiran Kumar
35	B24IT035	SR Flip-Flop implementation	DLD	Dr. B. Kiran Kumar

36	B24IT036	4-bit Synchronous Binary Counter	DLD	Dr. B. Kiran Kumar
37	B24IT037	4-bit Asynchronous Binary Counter	DLD	Dr. B. Kiran Kumar
38	B24IT038	Realization of Full Adder using 8:1 Multiplexer	DLD	Dr. B. Kiran Kumar
39	B24IT039	4-bit Comparator using Multiplexer and Logic Gates	DLD	Dr. B. Kiran Kumar
40	B24IT040	Parking Management System – Track vehicle entry, available parking spaces, and handle payments for parking services.	Programming for problem solving with C (PPSC)	Dr. T. Senthil Murugan
41	B24IT041	Bank Management System – Manage customer accounts, transactions, and generate reports.	PPSC	Dr. T. Senthil Murugan
42	B24IT042	Library Management System – Track books, authors, and borrower information, including issuing and returning books.	PPSC	Dr. T. Senthil Murugan
43	B24IT043	Student Record System – Store and manage student details, including marks, courses, and grades.	PPSC	Dr. T. Senthil Murugan
44	B24IT044	Hospital Management System – Manage patient information, appointments, and medical records.	PPSC	Dr. T. Senthil Murugan
45	B24IT045	ATM Simulation – Simulate ATM transactions like deposits, withdrawals, and balance inquiries.	PPSC	Dr. T. Senthil Murugan
46	B24IT046	Food Ordering System – Implement an ordering system for restaurants, handling orders, menus, and	PPSC	Dr. T. Senthil Murugan

		billing.		
47	B24IT047	Quiz Application - Create a simple quiz with multiple-choice questions and score tracking.	PPSC	Dr. T. Senthil Murugan
48	B24IT048	Parking Management System - Track vehicle entry, available parking spaces, and handle payments for parking services.	PPSC	Dr. T. Senthil Murugan
49	B24IT049	Bank Management System - Manage customer accounts, transactions, and generate reports.	PPSC	Dr. T. Senthil Murugan
50	B24IT050	Parking Management System - Track vehicle entry, available parking spaces, and handle payments for parking services.	PPSC	Dr. T. Senthil Murugan
51	B24IT051	Bank Management System - Manage customer accounts, transactions, and generate reports.	PPSC	Dr. T. Senthil Murugan
52	B24IT052	Library Management System - Track books, authors, and borrower information, including issuing and returning books.	PPSC	Dr. T. Senthil Murugan
53	B24IT053	Success of Elon Musk after Nine Failures	English Communication & Report Writing (ECRW)	Dr. Asmathunisa Begum
54	B24IT054	Role of English language Lab in Shaping and Enhancing the Employability Skills of Students	ECRW	Dr. Asmathunisa Begum
55	B24IT055	Unlocking the Secrets to Winning in Life with Shiv Khera's 'You Can Win'	ECRW	Dr. Asmathunisa Begum

56	B24IT056	Sudha Murthy: The Torch Bearer for the New Generation	ECRW	Dr. Asmathunisa Begum
57	B24IT057	Vocabulary Building Activity -A Word Search Game to Improve Vocabulary	ECRW	Dr. Asmathunisa Begum
58	B24IT058	Empowering Early Career Academics to Overcome Low Confidence	ECRW	Dr. Asmathunisa Begum
59	B24IT059	Human Nature in Ruskin Bond's Short Novel 'The Blue Umbrella'	ECRW	Dr. Asmathunisa Begum
60	B24IT060	Nalanda: The University that Changed the World	ECRW	Dr. Asmathunisa Begum
61	B24IT061	Improving Academic Writing Skills: My Personal Perspective as an ESL Researcher	ECRW	Dr. Asmathunisa Begum
62	B24IT062	Public Speaking - A Tool for Developing Students' Communication Skills	ECRW	Dr. Asmathunisa Begum
63	B24IT063	Role of Yoga in Enhancing Attention, Concentration and Memory of Learners	ECRW	Dr. Asmathunisa Begum
64	B24IT064	A Writing Activity "The Starter Kit - Name-Place-Thing-Animal" to Improve the Writing Skills of Undergraduate Students	ECRW	Dr. Asmathunisa Begum



(Signature of class teacher)
Dr. T. Raghunatha Rao