# KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15 DEPARTMENT OF PS AND M&H



No. /PS/M&H/KITS/2024 Date: /09/2024

### **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
1	ICSO	sect	ion.									

Section: 1CSO ... ...

S. No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24IN001	Applications of linear differential	Differential	Dr.K.Sandhyarani
		equation-derivation in matlab and	Calculus and	
		applications in everyday life.	Ordinary	
			Differential	
			Equations	
			(DCODE)	
2	B24IN002	Linear programming in	DCODE	Dr.K.Sandhyarani
		optimization and applications.		-
3	B24IN003	Numerical methods such as	DCODE	Dr.K.Sandhyarani
		numerical integration,		
		interpolation and applications.		

4	B24IN004	Statistics and data analysis, its Applications.	DCODE	Dr.K.Sandhyarani
5	B24IN005	Finding the sum of geometric series using C Programming.	DCODE	Dr.K.Sandhyarani
6	B24IN006	Determinants and its properties, applications in everyday life.	DCODE	Dr.K.Sandhyarani
7	B24IN007	Linear equations in one variable and equations reducible to simpler form and its applications.	DCODE	Dr.K.Sandhyarani
8	B24IN008	Deriving heat equations and its applications.	DCODE	Dr.K.Sandhyarani
9	B24IN009	Arithmetic operations and its applications.	DCODE	Dr.K.Sandhyarani
10	B24IN010	Modeling with ordinary differential equations.	DCODE	Dr.K.Sandhyarani
11	B24IN011	Newton's law of cooling and its applications.	DCODE	Dr.K.Sandhyarani
12	B24IN012	Simple harmonic motion and its applications.	DCODE	Dr.K.Sandhyarani
13	B24IN013	Applications of partial differential equations using MATLAB.	DCODE	Dr.K.Sandhyarani
14	B24IN014	Development of Sustainable Polymer Composites from Agricultural Waste	Engineering Chemistry (EC)	Dr.G.Sridhar
15	B24IN015	Electrochemical Studies on the Degradation of Organic Pollutants	EC	Dr.G.Sridhar
16	B24IN016	Investigating the Electrochemical Properties of Graphene-based Electrodes	EC	Dr.G.Sridhar
17	B24IN017	Optimization of Electrochemical Parameters for Water Purification	EC	Dr.G.Sridhar
18	B24IN018	Comparative Study of Different Disinfection Methods for Water Treatment	EC	Dr.G.Sridhar
19	B24IN019	Removal of Emerging Contaminants from Water using Nanofiltration/Ultrafiltration	EC	Dr.G.Sridhar
20	B24IN020	Investigation of Corrosion Resistance in Stainless Steel Alloys	EC	Dr.G.Sridhar
21	B24IN021	Characterization of Thermal Properties in Advanced Ceramic Materials	EC	Dr.G.Sridhar
22	B24IN022	Optimization of Material Selection for Aerospace Applications	EC	Dr.G.Sridhar
23	B24IN023	Investigation of Plant-Based Catalysts for Sustainable Chemical Reactions	EC	Dr.G.Sridhar
24	B24IN024	Green Synthesis of Nanoparticles using Microbial Extracts	EC	Dr.G.Sridhar
25	B24IN025	Development of an Electrochemical System for Renewable Energy Storage	EC	Dr.G.Sridhar
26	B24IN026	Characterization of nanoparticles using UV-Visible and IR spectroscopy	EC	Dr.G.Sridhar

27	B24IN027	Design and simulate 4-bit binary adder/subtractor circuit using Verilog HDL.	Digital Logic Design (DLD)	Smt.B.Smitha
28	B24IN028	Design a circuit that converts a binary number into Gray code.	DLD	Smt.B.Smitha
29	B24IN029	Design a 4 to 1 decoder and a 1 to 4 encoder.	DLD	Smt.B.Smitha
30	B24IN030	Design and Simulation of 2- to-1 Multiplexer and1- to-2 Demultiplexer using Verilog HDL.	DLD	Smt.B.Smitha
31	B24IN031	Design a 4-bit ALU that can perform basic arithmetic and logical operations.	DLD	Smt.B.Smitha
32	B24IN032	Design and Simulation of a 2-bit comparator circuit.	DLD	Smt.B.Smitha
33	B24IN033	Design and Simulation of a parity generator and checker circuit.	DLD	Smt.B.Smitha
34	B24IN034	Design and Simulation of a 7- Segment Display Driver Circuit	DLD	Smt.B.Smitha
35	B24IN035	Design a traffic light controller using flip-flops and counters.	DLD	Smt.B.Smitha
36	B24IN036	Design a 4-bit binary up-counter or down-counter.	DLD	Smt.B.Smitha
37	B24IN037	Design a 4-bit shift register for shifting operations.	DLD	Smt.B.Smitha
38	B24IN038	Design a priority encoder using PLA.	DLD	Smt.B.Smitha
39	B24IN039	Design a sequence detector that identifies a specific bit pattern using PAL.	DLD	Smt.B.Smitha
40	B24IN040	Develop C program that generates a bill for grocery items based on user input.	Programming for problem solving with C (PPSC)	Dr.S.Venkatramulu
41	B24IN041	Develop a basic ATM System which simulates basic ATM functionalities like balance inquiry, cash withdrawal, and pin change.	PPSC	Dr.S.Venkatramulu
42	B24IN042	Develop Inventory Management System to manage the inventory of products in a store, including adding new products, updating stock levels, and generating reports.	PPSC	Dr.S.Venkatramulu
43	B24IN043	Develop a C program to Simple Interest and Compound Interest Calculator	PPSC	Dr.S.Venkatramulu
44	B24IN044	Develop a C program to manage contacts, including adding, deleting, searching, and displaying contact details.	PPSC	Dr.S.Venkatramulu
45	B24IN045	Develop a student Expense Tracker system to track daily expenses,	PPSC	Dr.S.Venkatramulu

		categorize them, and provide a		
		summary at the end of the month		
46	B24IN046	Build a simple system to manage a	PPSC	Dr.S.Venkatramulu
10	D2111 <b>(</b> 010	library's book inventory and	1150	D1.5. Venkatraniara
		issue/return transactions.		
47	B24IN047	Develop C program for Electricity	PPSC	Dr.S.Venkatramulu
	D2111 (01)	Bill Calculator	1100	D1.5. Vermatramara
48	B24IN048	Develop a C program to Binary	PPSC	Dr.S.Venkatramulu
		Search Algorithm on a sorted array		
		of numbers		
49	B24IN049	Build a Employee Payroll	PPSC	Dr.S.Venkatramulu
		Management System using C		
		program to calculate employee		
		salaries, bonuses, and tax		
		deductions		
50	B24IN050	Develop a C program to Generates	PPSC	Dr.S.Venkatramulu
		and displays a calendar for a given		
		month and year.		
51	B24IN051	Implementation of sorting	PPSC	Dr.S.Venkatramulu
		algorithms such as Bubble Sort,		
F0	DO 410 1050	Selection Sort, and Insertion Sort.	DDC C	D CV 1 . 1
52	B24IN052	Build the House Tax Bill Generator	PPSC	Dr.S.Venkatramulu
		system based on various		
		parameters such as the area of the		
		house, location, and property value.		
53	B24INO53	UNKNOWN TEMPLE AT MY	English	Dr.D.Vidyanath
00	D2411\000	HOMETOWN	Communication	D1.D. Viciyanatii
			&Report writing	
			(ECRW)	
54	B24INO54	MY FAVORITE SONNET OF	ECRW	Dr.D.Vidyanath
		SHAKESPEAR		,
55	B24INO55	ONE SHOULD HAVE HEALTH	ECRW	Dr.D.Vidyanath
		CONCIOUSNESS		
56	B24INO56	FAST FOOD CAUSES HEALTH	ECRW	Dr.D.Vidyanath
		ISSUES		
57	B24INO57	VEGITARIANISM IS GOOD FOR	ECRW	Dr.D.Vidyanath
		HEALTH		
58	B24INO58	EACH ONE SHOULD TEACH	ECRW	Dr.D.Vidyanath
FO	DO AINIO CO	ONE DI LOTO CIDA PLINA ICANA PARCIONA	ECDM	D D W 1 1
59	B24INO59	PHOTOGRAPHY IS MY PASSION	ECRW	Dr.D.Vidyanath
60	B24INO60	MY EFFORTS TO BECOME A	ECRW	Dr.D.Vidyanath
(4	DO AD TO CO	SUCCESSFUL ENGINEER	ECDIA	D D III d
61	B24INO61	LESS KNOWN FACTS OF	ECRW	Dr.D.Vidyanath
60	D24INIO/2	WARANGAL	ECDM	D., D.V. 1
62	B24INO62	VILLAGE GODDESSES OF	ECRW	Dr.D.Vidyanath
63	D24INIO/2	TELANGANA CENDER FOLIALITY	ECDM	Du D Vi dana - 11-
US	B24INO63	GENDER EQUALITY. FOLK LORE STORIES.	ECRW ECRW	Dr.D.Vidyanath Dr.D.Vidyanath
64	B24INO64			

