KAKATIYAIN STITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15

DEPARTMENT OF PS & M&H

No. SEM-II /PS/M&H/KITS/2025   Date: 27/01/2025

CIRCULAR

Sub:ILSemester-AllotmentofPracticumtopics–Reg.

Allotment of Practicum topics to students

Section : 2CSE3

S. No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24CS129	Investigating the Effectiveness of Conductometric Titration in Determining the Concentration of Weak Acid and Strong Base	EC	Dr. H. Ramesh Babu
2	B24CS130	Conductometric Titration of Strong Acid and Strong Base: A Study of Equivalence Point Detection and Accuracy.	EC	Dr. H. Ramesh Babu
3	B24CS131	Relative Analysis of Conductometric and Conventional Titration Methods for Determining the Concentration of Electrolytic Solutions	EC	Dr. H. Ramesh Babu
4	B24CS132	A Practicum Study-Estimation of a Metal ion (Ferrous ions) using Potassium Permanganate	EC	Dr. H. Ramesh Babu
5	B24CS133	Relative Analysis of Total Hardness of Ground Water before andafter Demineralization by Reverse osmosis	EC	Dr. H. Ramesh Babu
6	B24CS134	Relative Analysis of Hardness in Water Samples from Waddepally and Nagaram Lakes	EC	Dr. H. Ramesh Babu
7	B24CS135	A Laboratory Investigation-Volumetric Analysis of Ferrous Ions using Potassium Permanganate	EC	Dr. H. Ramesh Babu
8	B24CS136	Relative Analysis of Alkalinity in WaterSamples from Different Sources: A Study of Municipal and Ground Water	EC	Dr. H. Ramesh Babu
9	B24CS137	Verification of Freundlich Adsorption Isotherm for Acetic Acid on Charcoal Surfaces- A Practicum Study	EC	Dr. H. Ramesh Babu
10	B24CS138	Determination alkalinity of waddepally lake water before and after demineralization by Reverse osmosis	EC	Dr. H. Ramesh Babu
11	B24CS139	Determination Chloride ions of ground water before and After demineralization by Reverse osmosis	EC	Dr. H. Ramesh Babu
12	B24CS140	A Practicum Study- Adsorption Isotherm for Weak Acid on Charcoal Surfaces, Verification of Freundlich Adsorption Isotherm	EC	Dr. H. Ramesh Babu
13	B24CS141	Relative Analysis of Chloride ions in Water Samples from Local Lakes	EC	Dr. H. Ramesh Babu
14	B24CS142	Security in Distributed Systems	OS	Dr. N. Gayatri

15	B24CS143	Operating System Performance Tuning		Dr. N. Gayatri
16	B24CS144	Implementing a Real-Time Operating System	OS	Dr. N. Gayatri
17	B24CS145	Mobile Operating Systems	OS	Dr. N. Gayatri
18	B24CS146	Embedded Operating Systems	OS	Dr. N. Gayatri
19	B24CS147	Operating System Security Vulnerabilities	OS	Dr. N. Gayatri
20	B24CS148	Operating System Security Audits	OS	Dr. N. Gayatri
21	B24CS149	Implementing a Simple Virtual Machine Monitor	OS	Dr. N. Gayatri
22	B24CS150	Implementing a Simple Hypervisor	OS	Dr. N. Gayatri
23	B24CS151	Cloud Security	OS	Dr. N. Gayatri
24	B24CS152	Container Security	OS	Dr. N. Gayatri
25	B24CS153	Operating System Performance Monitoring	OS	Dr. N. Gayatri
26	B24CS154	Operating System Debugging	OS	Dr. N. Gayatri
27	B24CS155	Data Structure Analyzer	DS	Dr. P. Kumaraswamy
28	B24CS156	Inventory Management System	DS	Dr. P. Kumaraswamy
29	B24CS157	Dynamic Matrix Operations	DS	Dr. P. Kumaraswamy
30	B24CS158	Expression Evaluator	DS	Dr. P. Kumaraswamy
31	B24CS159	Ticket Reservation System	DS	Dr. P. Kumaraswamy
32	B24CS160	Contact Management System	DS	Dr. P. Kumaraswamy
33	B24CS161	Sorting Algorithm Visualizer	DS	Dr. P. Kumaraswamy
34	B24CS162	Student Roll Number Hashing System	DS	Dr. P. Kumaraswamy
35	B24CS163	Sparse Matrix Handler	DS	Dr. P. Kumaraswamy
36	B24CS165	Real-Time Sorting Manager	DS	Dr. P. Kumaraswamy
37	B24CS166	Custom Dictionary with Hashing	DS	Dr. P. Kumaraswamy
38	B24CS167	Recursive Problem Solver	DS	Dr. P. Kumaraswamy
39	B24CS168	Data Structure Simulator	DS	Dr. P. Kumaraswamy
40	B24CS169	The Curiosity about Entrepreneurship and Start-ups among Modern Students	ECRW	Dr. Asmathunisa Begum
41	B24CS170	Hindi Cinema- losing its Theatre Going Crowd	ECRW	Dr. Asmathunisa Begum
42	B24CS171	Sudha Murthy: Empowering the Common Man Through Simple Yet Profound Stories	ECRW	Dr. Asmathunisa Begum
43	B24CS172	R.K. Narayan: Depicting India's Rural Life in	ECRW	Dr. Asmathunisa Begum

		Malgudi Days		
44	B24CS173	The Future of Space Colonization: Dreams of Living on Mars	ECRW	Dr. Asmathunisa Begum
45	B24CS174	Modern Music Genres Inspiring Creativity Among Young Learners	ECRW	Dr. Asmathunisa Begum
46	B24CS175	Planet Parade: A Sky Full of Planets	ECRW	Dr. Asmathunisa Begum
47	B24CS176	Donald Trump's Historic Comeback – As The US President	ECRW	Dr. Asmathunisa Begum
48	B24CS177	India's Chandrayaan and Its Discoveries About the Moon	ECRW	Dr. Asmathunisa Begum
49	B24CS178	Overcoming Educational Inequality in *Super 30*	ECRW	Dr. Asmathunisa Begum
50	B24CS179	A Chess Prodigy - Gukesh The Youngest Undisputed World Chess Champion	ECRW	Dr. Asmathunisa Begum
51	B24CS180	Develop a program in a language of your choice to solve of system of non-homogeneous equation by (i) Gauss Elimination method (ii) Gauss Jordan method and (iii) Test your program by solving it directly. (iv) applications of system of non-homogeneous equation.	MTVC	N. Raji Reddy
52	B24CS181	Develop a program in a language of your choice to i) Partition method of finding the inverse of a matrix and then ii) solving the system of equations for order 3 and 4 matrices.	MTVC	N. Raji Reddy
53	B24CS182	Develop a program in a language of your choice to decompose a matrix $\square$ of order 3 & 4 into the form $\square\square$ using partial pivoting. Include the possibility of computing the inverse $\square^{-1}$ & $\square^{-1}$ and also $\square^{-1}$. Test your program by solving it directly.	MTVC	N. Raji Reddy
54	B24CS183	Develop a program in a language of your choice to determine largest eigenvalue and corresponding eigen vector of a matrix $\square$ of order 3 & 4. Test your program by solving it	MTVC	N. Raji Reddy

		directly.		
55	B24CS184	Grad, Div, Curl in Connection with Integrals. Make a list of ideas and results on this topic. Include no proofs but simple typical examples of your own that lead to a better understanding of the material.	MTVC	N. Raji Reddy
56	B24CS185	List the definitions and formulas of Gradient, divergent, curl and most important facts of Gradient, divergent, curl operators.	MTVC	N. Raji Reddy
57	B24CS186	Develop a program in a language of your choice to determine Vibrating System of Two Masses on Two Springs using system of equations	MTVC	N. Raji Reddy
58	B24CS187	Develop a program in a language of your choice to determine Positive definite or negative definite of quadratic form along with its diagrams	MTVC	N. Raji Reddy
59	B24CS188	Develop a program in a language of your choice to determine Norms and Condition Number of a matrix	MTVC	N. Raji Reddy
60	B24CS189	Develop a program in a language of your choice to determineeigenvaluesand the corresponding eigenvectors of the relationship between two populations, N_1 and N_2, is described by the system of ODEs. Interpret the physical meaning of the eigenvalues and the eigenvectors.	MTVC	N. Raji Reddy
61	B24CS190	Write a user-defined MATLAB function that determines the largest eigenvalue of an (n x n) matrix by using the power method. Test your program by solving it directly.	MTVC	N. Raji Reddy
62	B24CS191	Develop a program in a language of your choice to reduce a matrix $\square$of order 3 & 4 to the LU method. Test your program by solving it directly.	MTVC	N. Raji Reddy
63	B24CS192	Develop a program in a language of your choice to calculate (i) the infinity norm of any matrix (ii) the condition number of an (n x n) matrix,	MTVC	N. Raji Reddy

Note:

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.

3. The course faculty are advised to guide the allotted students for practicum during the semester course work.

(Signature of class teacher)

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(Dr. Asrahemiss Begum