KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15

DEPARTMENT OF PS AND M&H

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

CIRCULAR

Sub: II Semester -Allotment of Practicum topics– Reg.

Allotment of Practicum topics to students

Section : 2CSM3

S.No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24AI129	Build Sound Activated Device With Google Teachable Machine	Engineering Physics	Dr.V.Prashanth Kumar
2	B24AI130	Factory Assembly Inspection Using AI-based Quality Control Camera	Engineering Physics	Dr.V.Prashanth Kumar
3	B24AI131	Animal Language Translator Device using Raspberry Pi	Engineering Physics	Dr.V.Prashanth Kumar
4	B24AI132	Smart AI Robot With Gender Recognition Using Voice	Engineering Physics	Dr.V.Prashanth Kumar
5	B24AI133	Smart Number Plate Recognition System For Car Parking Lot	Engineering Physics	Dr.V.Prashanth Kumar
6	B24AI134	Smart Door Camera with Facial Recognition Feature for Thermal Screening	Engineering Physics	Dr.V.Prashanth Kumar
7	B24AI135	Predictive Maintenance Using AI & ML	Engineering Physics	Dr.V.Prashanth Kumar
8	B24AI136	Sign Talk: DIY Gesture Language Translator	Engineering Physics	Dr.V.Prashanth Kumar
9	B24AI137	AI Camera For Tracking Suspicious Activities	Engineering Physics	Dr.V.Prashanth Kumar
10	B24AI138	Fresh and Rotten Fruit Detection Using Raspberry Pi	Engineering Physics	Dr.V.Prashanth Kumar
11	B24AI139	How To Convert ChatGPT Into An Advanced Voice Assistant	Engineering Physics	Dr.V.Prashanth Kumar
12	B24AI140	Designing an Adaptive Traffic Light Controller with Sequential Logic Circuits	Computer Architecture and Organization	Dr.M.Sujatha
13	B24AI141	Design of a Voting Machine with Error Detection Using Logic Gates	Computer Architecture and Organization	Dr.M.Sujatha
14	B24AI142	Building a Basic Arithmetic Calculator with AND, OR, and XOR Gates	Computer Architecture and Organization	Dr.M.Sujatha
15	B24AI143	Design and Implementation of a Binary	Computer	Dr.M.Sujatha

		Adder/Subtractor Using Karnaugh Maps	Architecture and Organization	
16	B24AI144	Designing an Intelligent Temperature Display System with User Interaction and Alerts	Computer Architecture and Organization	Dr.M.Sujatha
17	B24AI145	Development of a Simple Digital Stopwatch Using Sequential Logic Components	Computer Architecture and Organization	Dr.M.Sujatha
18	B24AI146	Development of a Simple 4-Bit Binary Counter Using D Flip-Flops	Computer Architecture and Organization	Dr.M.Sujatha
19	B24AI147	Low-Power Shift Register for Compact Serial Data Systems	Computer Architecture and Organization	Dr.M.Sujatha
20	B24AI148	Designing a Biometric Door Opener Using Microprocessor and Fingerprint Sensors	Computer Architecture and Organization	Dr.M.Sujatha
21	B24AI149	IoT-Based Automatic Attendance System Using RFID and Microprocessor	Computer Architecture and Organization	Dr.M.Sujatha
22	B24AI150	Designing a Simple RISC Processor and Instruction Set	Computer Architecture and Organization	Dr.M.Sujatha
23	B24AI151	Smart Parking System with Queue Management for Entry and Exit	Data Structures Through C	Mr.K.Shiva Kumar
24	B24AI152	*Online Examination System with Dynamic Question Bank Allocation*	Data Structures Through C	Mr.K.Shiva Kumar
25	B24AI153	Real-Time Chat Application with Stack-Based Message History	Data Structures Through C	Mr.K.Shiva Kumar
26	B24AI154	Airline Reservation System Using Multi-Dimensional Arrays	Data Structures Through C	Mr.K.Shiva Kumar
27	B24AI155	Intelligent Task Scheduler Using Priority Queues	Data Structures Through C	Mr.K.Shiva Kumar
28	B24AI156	Personal Finance Tracker with Stack-Based Undo Functionality	Data Structures Through C	Mr.K.Shiva Kumar
29	B24AI157	Restaurant Order Management System Using Circular Queues	Data Structures Through C	Mr.K.Shiva Kumar
30	B24AI158	*Library Book Borrowing System with Double-Ended Queue*	Data Structures Through C	Mr.K.Shiva Kumar
31	B24AI159	*Interactive Sudoku Solver Using Stack-Based Backtracking*	Data Structures Through C	Mr.K.Shiva Kumar
32	B24AI160	*Dynamic Memory-Based Music Playlist Manager*	Data Structures Through C	Mr.K.Shiva Kumar
33	B24AI161	*Customer Support Ticketing System with Priority and Circular Queues*	Data Structures Through C	Mr.K.Shiva Kumar
34	B24AI162	Verification of mesh analysis using MATLAB or any other programming languages	Basic Electrical Engineering	Dr.G.Sudheer Kumar
35	B24AI163	Verification of nodal analysis using MATLAB or any other programming languages	Basic Electrical Engineering	Dr.G.Sudheer Kumar

36	B24AI164	Verification of Superposition theorem using MATLAB or any other programming languages	Basic Electrical Engineering	Dr.G.Sudheer Kumar
37	B24AI165	Verification of Maximum Power Transfer theorem using MATLAB or any other programming languages	Basic Electrical Engineering	Dr.G.Sudheer Kumar
38	B24AI166	Measurement of 3-phase power for a star or delta connected load	Basic Electrical Engineering	Dr.G.Sudheer Kumar
39	B24AI167	Analysis of half-wave and full-wave rectifier using PSPICE or any other programming languages	Basic Electrical Engineering	Dr.G.Sudheer Kumar
40	B24AI168	LED blink test using TINKER CAD or Arduino	Basic Electrical Engineering	Dr.G.Sudheer Kumar
41	B24AI169	Control of DC servo motor using TINKER CAD or Arduino	Basic Electrical Engineering	Dr.G.Sudheer Kumar
42	B24AI170	Arduino based traffic signal control using TINKER CAD	Basic Electrical Engineering	Dr.G.Sudheer Kumar
43	B24AI171	Light based street light controller using Arduino or via TINKER CAD	Basic Electrical Engineering	Dr.G.Sudheer Kumar
44	B24AI172	Light intensity controller for an auditorium using Arduino or via TINKER CAD	Basic Electrical Engineering	Dr.G.Sudheer Kumar
45	B24AI173	Wastewater Treatment Plant Efficiency: Evaluate the performance of a local wastewater treatment plant and suggest improvements.	Environmental Studies	Dr.M.Ranadheer Kumar
46	B24AI174	Noise Pollution Assessment: Conduct noise level surveys in various environments (e.g., industrial, residential, commercial).	Environmental Studies	Dr.M.Ranadheer Kumar
47	B24AI175	Composting and Vermicomposting: Investigate the feasibility of composting and vermicomposting for organic waste management.	Environmental Studies	Dr.M.Ranadheer Kumar
48	B24AI176	Environmental Impact Assessment: Conduct an environmental impact assessment of a proposed development project.	Environmental Studies	Dr.M.Ranadheer Kumar
49	B24AI177	Water quality analysis: Measure the pH, turbidity, and bacterial content of water samples.	Environmental Studies	Dr.M.Ranadheer Kumar
50	B24AI178	Soil analysis: Measure the pH, nutrient content, and heavy metal content of soil samples.	Environmental Studies	Dr.M.Ranadheer Kumar
51	B24AI179	Air quality analysis: Measure the concentration of pollutants, such as particulate matter, NOx, and SOx, in air samples.	Environmental Studies	Dr.M.Ranadheer Kumar

52	B24AI180	Comparative Study on Waste Management Practices:	Environmental Studies	Dr.M.Ranadheer Kumar
53	B24AI181	A Comparative Study of Alternative Fuels on "Sustainable Transportation:	Environmental Studies	Dr.M.Ranadheer Kumar
54	B24AI182	A Feasibility Study on Renewable Energy Sources:	Environmental Studies	Dr.M.Ranadheer Kumar
55	B24AI183	Machine Learning Algorithms for Solving Linear Systems of Equations	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
56	B24AI184	Probabilistic Iterative Methods for Linear Systems	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
57	B24AI185	Machine Learning Techniques Applied to Preconditioning of Linear Systems	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
58	B24AI186	Identification of Linear Dynamical Systems and Machine Learning	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
59	B24AI187	Stable Linear Subspace Identification: A Machine Learning Approach	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
60	B24AI188	Deep Neural Networks for Solving Large Linear Systems Arising from High-Dimensional Problem	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
61	B24AI189	Neural Networks Solving Linear Systems	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
62	B24AI190	Probabilistic Linear Solvers for Machine Learning	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
63	B24AI191	Neural Networks Solving Linear Systems	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
64	B24AI192	Application of Linear Algebra in Machine Learning	Matrix Theory and Vector Calculus	Dr.D.Rajaiah
65	B24AI193	Role of system of linear equations in machine learning	Matrix Theory and Vector Calculus	Dr.D.Rajaiah

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-2CSM3)

Dr.Prashanth Kumar Vaidya