

CIRCULAR*Sub: IL Semester- Allotment of Practicum topics-Reg.**Allotment of Practicum topics to students*

Section: 2CSN

S.No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24CN001	Simple Touch Switch using transistors	EP	Dr. A.N.Mallika
2	B24CN002	Design and Development of a Current-Carrying Coil System for Magnetic Field Generation	EP	Dr. A.N.Mallika
3	B24CN003	Measurement of the Speed of Light Using Fizeau's Apparatus	EP	Dr. A.N.Mallika
4	B24CN004	Smart Programmable OLED Badge	EP	Dr. A.N.Mallika
5	B24CN005	Logic Gates: Build basic logic gates (AND, OR, NOT) using diodes or transistors and verify their truth tables.	EP	Dr. A.N.Mallika
6	B24CN006	Investigate the properties of sound-absorbing materials and their effectiveness in reducing noise pollution.	EP	Dr. A.N.Mallika
7	B24CN007	Design and Implementation of a Water Level Detection Circuit Using a Transistor Switch	EP	Dr. A.N.Mallika
8	B24CN008	Investigation of Friction: Study the effects of friction on different surfaces.	EP	Dr. A.N.Mallika
9	B24CN009	Study of Total Internal Reflection: Investigate the phenomenon of total internal reflection	EP	Dr. A.N.Mallika
10	B24CN010	Investigating the Properties of Ferrofluids	EP	Dr. A.N.Mallika
11	B24CN011	Design and build a basic electronic circuit using resistors, capacitors, and diodes	EP	Dr. A.N.Mallika
12	B24CN012	Instruction Set Emulator	CAO	M. Susmitha
13	B24CN013	Basic CPU Pipeline Model	CAO	M. Susmitha
14	B24CN014	Memory Hierarchy Simulator	CAO	M. Susmitha
15	B24CN015	Asynchronous Data Transfer Model	CAO	M. Susmitha
16	B24CN016	Evaluating the Impact of Clock Speed on the Performance of a Basic Processing Unit	CAO	M. Susmitha
17	B24CN017	Optimization of Instruction Set Architecture for Power Efficiency	CAO	M. Susmitha
18	B24CN018	Performance Evaluation of Arithmetic Operations in Different Processor Architectures	CAO	M. Susmitha
19	B24CN019	Design and Simulation of a Virtual Memory System with Page Replacement Algorithms	CAO	M. Susmitha
20	B24CN020	Design and Simulation of an Interrupt-Driven I/O System	CAO	M. Susmitha

21	B24CN021	Conversion of Decimal Numbers to Binary Using Different Algorithms"	CAO	M. Susmitha
22	B24CN022	4-bit Binary Counter Using Flip-Flops	CAO	M. Susmitha
23	B24CN023	Develop a Console application to implement Train Reordering Simulation using multiple stacks	DS	Dr. V. Chandra Shekhar Rao
24	B24CN024	Develop a Console application to implement Railway Reservation System	DS	Dr. V. Chandra Shekhar Rao
25	B24CN025	Develop a Console application to Ticket Booking System	DS	Dr. V. Chandra Shekhar Rao
26	B24CN026	Develop a Console application to implement Inventory Management System	DS	Dr. V. Chandra Shekhar Rao
27	B24CN027	Develop a Console application to implement Parking Management System	DS	Dr. V. Chandra Shekhar Rao
28	B24CN028	Develop a Console application to implement Snake Game	DS	Dr. V. Chandra Shekhar Rao
29	B24CN029	Develop a Console application to implement Chat Application	DS	Dr. V. Chandra Shekhar Rao
30	B24CN030	Develop a Console application to implement Healthcare Management System.	DS	Dr. V. Chandra Shekhar Rao
31	B24CN031	Develop a Console application to implement Stock Price Prediction	DS	Dr. V. Chandra Shekhar Rao
32	B24CN032	Develop a Console application to implement Job Portal System	DS	Dr. V. Chandra Shekhar Rao
33	B24CN033	Develop a Console application to implement Movie Recommendation System	DS	Dr. V. Chandra Shekhar Rao
34	B24CN034	Verification of nodal analysis using MATLAB	BEE	Dr.B.Vijaykumar
35	B24CN035	Verification of Superposition theorem using MATLAB	BEE	Dr.B.Vijaykumar
36	B24CN036	Verification of Maximum Power Transfer theorem using MATLAB	BEE	Dr.B.Vijaykumar
37	B24CN037	Measurement of 3-phase power for a star or delta connected load	BEE	Dr.B.Vijaykumar
38	B24CN038	Analysis of half-wave and full-wave rectifier	BEE	Dr.B.Vijaykumar
39	B24CN039	LED blink test using Arduino	BEE	Dr.B.Vijaykumar
40	B24CN040	Control of DC servo motor using Arduino	BEE	Dr.B.Vijaykumar
41	B24CN041	Arduino based traffic signal control	BEE	Dr.B.Vijaykumar
42	B24CN042	Light based street light controller using Arduino	BEE	Dr.B.Vijaykumar
43	B24CN043	Light intensity controller for an auditorium	BEE	Dr.B.Vijaykumar
44	B24CN044	Efficiency calculation of a transformer	BEE	Dr.B.Vijaykumar
45	B24CN045	Analyzing the economic and social impacts of natural disasters in India	ES	Dr.G. Sridhar
46	B24CN046	Evaluation of Irrigation Scheduling Methods for Water Conservation in Agricultural Landscapes	ES	Dr.G. Sridhar
47	B24CN047	Evaluating the Impact of Climate Change on ecosystem	ES	Dr.G. Sridhar

48	B24CN048	Conservation of Endangered Species in Fragmented Landscapes	ES	Dr.G. Sridhar
49	B24CN049	Socio-Economic Impacts of Mining on tribal Communities	ES	Dr.G. Sridhar
50	B24CN050	Assessment of Hydrological Restoration Techniques in Degraded Wetlands	ES	Dr.G. Sridhar
51	B24CN051	Investigating the Effects of Climate Change on Plant-Pollinator Interactions	ES	Dr.G. Sridhar
52	B24CN052	Evaluating the Impact of Environmental Factors on Species Adaptation	ES	Dr.G. Sridhar
53	B24CN053	Assessing the Impact of Industrial Effluents on Water Quality	ES	Dr.G. Sridhar
54	B24CN054	Application of matrices to Analyze a Network Optimization	MTVC	Dr. K.Venumadav
55	B24CN055	Eigen values and Eigen vectors application to a Network Security	MTVC	Dr. K.Venumadav
56	B24CN056	Analysis of a Mass-Spring System using Eigen values and Eigenvectors	MTVC	Dr. K.Venumadav
57	B24CN057	Eigen values and Eigen vectors application to a Network Visualization	MTVC	Dr. K.Venumadav
58	B24CN058	Air Quality Analysis: Calculating the Concentration of Pollutants using Double Integrals	MTVC	Dr. K.Venumadav
59	B24CN059	Triple Integral and its application for analyzing the Design of a Water Tank and Finding the Volume	MTVC	Dr. K.Venumadav
60	B24CN060	Application of Vector Differentiation in Image Processing to Detect Edges in an Image.	MTVC	Dr. K.Venumadav
61	B24CN061	Application of Vector differentiation to calculate the Divergence of the Velocity Field in a Pipe Flow	MTVC	Dr. K.Venumadav
62	B24CN062	Real-World Examples of Gradient Applications	MTVC	Dr. K.Venumadav
63	B24CN063	Gradient Applications in Network Optimization.	MTVC	Dr. K.Venumadav
64	B24CN064	Applications of Curl in Network Testing and Debugging	MTVC	Dr. K.Venumadav

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.

Dr. A.N.Mallika
(Signature of class teacher)