

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 1CSM3 section.

Section : 1CSM3

S. No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty
1	B24AI129	Improving Machine Learning Algorithms for Big data Through Convergence Analysis with Limit Comparison Test.	Differential Calculus and Ordinary Differential Equations(DCODE)	Smt.K.Nirmala
2	B24AI130	Approximating Atmospheric Pressure Variations Using Maclaurin series and Python.	DCODE	Smt.K.Nirmala
3	B24AI131	Image Compression Algorithms Using Taylor's Series Expansions in Computer Vision	DCODE	Smt.K.Nirmala

4	B24AI132	Optimizing Delivery Routes Using Maxima and Minima in Logistic Algorithms.	DCODE	Smt.K.Nirmala
5	B24AI133	Solving Environmental Pollution Dispersion Problems with First Order Differential Equations and MATLAB.	DCODE	Smt.K.Nirmala
6	B24AI134	Applying Rolle's Theorem for Optimizing Speed and Acceleration in Autonomous Vehicles.	DCODE	Smt.K.Nirmala
7	B24AI135	Lagrange's Mean Value Theorem in Predictive Maintenance for Industrial Machinery Using Python.	DCODE	Smt.K.Nirmala
8	B24AI136	Partial Differentiation Applications in 3D Graphics and Game Development.	DCODE	Smt.K.Nirmala
9	B24AI137	Simulating Epidemic Spread Using Higher Order Differential Equations and Data Analysis Tools.	DCODE	Smt.K.Nirmala
10	B24AI138	Solving Multivariable Optimization Problems in Machine Learning Using Partial Differentiation.	DCODE	Smt.K.Nirmala
11	B24AI139	Application of Taylor Series in Machine Learning Gradient Descent Algorithms.	DCODE	Smt.K.Nirmala
12	B24AI140	Predicting the Deterioration of Road Infrastructure Using Harmonic Series and Machine Learning.	DCODE	Smt.K.Nirmala
13	B24AI141	Electrical Circuit Analysis: Solving RL and RC Circuits with Differential Equations.	DCODE	Smt.K.Nirmala
14	B24AI142	Exploring the Relationship Between pH and Electrochemical Reaction Rates.	Engineering Chemistry(EC)	Dr.E.Kalyan Rao
15	B24AI143	Electrochemical Characterization of Corrosion Behavior in Metals.	EC	Dr.E.Kalyan Rao
16	B24AI144	Comparative Analysis of Different Electrode Materials for Energy Storage Devices.	EC	Dr.E.Kalyan Rao
17	B24AI145	Design and Construction of a Simple Electrochemical Battery.	EC	Dr.E.Kalyan Rao
18	B24AI146	Assessment of Water Treatment Plant Efficiency in Removing Contaminants.	EC	Dr.E.Kalyan Rao
19	B24AI147	Development of a Low-Cost Water Quality Monitoring System.	EC	Dr.E.Kalyan Rao
20	B24AI148	Development of a Novel Corrosion Inhibitor for Oil and Gas Industry.	EC	Dr.E.Kalyan Rao
21	B24AI149	Development of a Corrosion Monitoring System for Industrial Pipelines.	EC	Dr.E.Kalyan Rao
23	B24AI150	Development of an IR Spectroscopic Method for Detecting Adulteration in Food Samples.	EC	Dr.E.Kalyan Rao

24	B24AI151	Comparative Study of IR Spectra of Different Polymers And their Blends	EC	Dr.E.Kalyan Rao
25	B24AI152	Development of a Nano sensor for Detection of Environmental Pollutants.	EC	Dr.E.Kalyan Rao
26	B24AI153	Study of the Toxicity and Biocompatibility of Carbon Nanotubes.	EC	Dr.E.Kalyan Rao
27	B24AI154	Extraction of precious metals from e-waste	EC	Dr.E.Kalyan Rao
28	B24AI155	4-bit Binary Adder-Subtractor	Switching Theory and Logic Design (STLD)	Dr.T.Sunil Kumar
29	B24AI156	4-bit Carry Look-Ahead Adder	STLD	Dr.T.Sunil Kumar
30	B24AI157	N-Bit Parallel Adder	STLD	Dr.T.Sunil Kumar
31	B24AI158	7-Segment Display Decoder (BCD to 7 Segment)	STLD	Dr.T.Sunil Kumar
32	B24AI159	Priority Encoder (8-to-3)	STLD	Dr.T.Sunil Kumar
33	B24AI160	4:1 Multiplexer Implementation of Boolean Function	STLD	Dr.T.Sunil Kumar
34	B24AI161	Full Adder using Multiplexer	STLD	Dr.T.Sunil Kumar
35	B24AI162	4-bit Synchronous Binary Counter	STLD	Dr.T.Sunil Kumar
36	B24AI163	4-bit Asynchronous Binary Counter	STLD	Dr.T.Sunil Kumar
37	B24AI164	Johnson Counter	STLD	Dr.T.Sunil Kumar
38	B24AI165	SR Flip-Flop Implementation	STLD	Dr.T.Sunil Kumar
39	B24AI166	JK Flip-Flop Implementation	STLD	Dr.T.Sunil Kumar
40	B24AI167	Ring Counter	STLD	Dr.T.Sunil Kumar
41	B24AI168	Implement a Basic Calculator Program	Programming for Problem Solving with C (PPSC)	K.Shiva Kumar
42	B24AI169	<i>Develop a Student Grading System</i>	PPSC	K.Shiva Kumar
43	B24AI170	Build a Library Management System	PPSC	K.Shiva Kumar
44	B24AI171	Develop an Employee Management and Payroll System	PPSC	K.Shiva Kumar
45	B24AI172	Develop a Simple Banking System	PPSC	K.Shiva Kumar
46	B24AI173	Create a String Manipulation Tool	PPSC	K.Shiva Kumar
47	B24AI174	Design an Inventory	PPSC	K.Shiva Kumar

		Management System		
48	B24AI175	<i>Build a File Encryption and Decryption Tool</i>	PPSC	K.Shiva Kumar
49	B24AI176	<i>Create a Quiz Game Application</i>	PPSC	K.Shiva Kumar
50	B24AI177	<i>Implement a Tic-Tac-Toe Console Game</i>	PPSC	K.Shiva Kumar
51	B24AI178	<i>Implement an Online Shopping Cart and Order Management System</i>	PPSC	K.Shiva Kumar
52	B24AI179	<i>Develop a Hospital Management System</i>	PPSC	K.Shiva Kumar
53	B24AI180	Develop a Customer Relationship Management (CRM) System	PPSC	K.Shiva Kumar
54	B24AI181	The role of pronunciation in English Language learning	English Communication and Report Writing (ECRW)	M.Lakma Kumari
55	B24AI182	Women's Rights and Safety in India: Policy Progress and Challenges Since Independence	ECRW	M.Lakma Kumari
56	B24AI183	Balancing Academics and Personal Life: Time Management Tips for a Healthier Student Lifestyle	ECRW	M.Lakma Kumari
57	B24AI184	The Telangana Liberation Movement: Historical Roots and Modern Implications	ECRW	M.Lakma Kumari
58	B24AI185	From Engineering to CEO: The future of Artificial Intelligence, Tracing Sundar Pichai's Journey and Its Lessons for Students to Learn from His Career Path	ECRW	M.Lakma Kumari
59	B24AI186	Choose one of each category: a name, a place, a thing, and an animal. Use these elements to create a short story or narrative by combining these four components to enhance your writing skills	ECRW	M.Lakma Kumari
60	B24AI187	From Print to Digital : The Changing Role of Libraries in Supporting Student Education	ECRW	M.Lakma Kumari
61	B24AI188	The impact of Social media in acquisition of English Language	ECRW	M.Lakma Kumari
62	B24AI189	Challenging Conventional Wisdom: How 3 Idiots movie Redefines the Role of Education in Society	ECRW	M.Lakma Kumari
63	B24AI190	Analyze the theme and technique in the	ECRW	M.Lakma

		Essays of A.G. Gardiner. Focus on anythree essays		Kumari
64	B24AI191	English Articles	ECRW	M.Lakma Kumari
65	B24AI192	Vocabulary Enhancement Activity: Exploring WordsWithin Words	ECRW	M.Lakma Kumari
	B24AI193	Engineering Education and National Development: Building Skills for Tomorrow's Challenges	ECRW	M.Lakma Kumari



Smt.K.Nirmala

(Signature of class teacher)