Department of Electronics & Communication Engineering

DEPARTMENT OF

HUMANITIES & BASIC SCIENCES

COURSE FILE

Branch: ECE **Class: B.Tech-I Year-II sem**

Subject: APPLIED PYTHON PROGRAMMING LAB **Code: (R22CSE1224)**

Academic Year: 2022-2023 **Regulation: R22**

Core/Elective/H&S: H&S **Credits: 2**

Prepared By

Name: D.MOUNIKA/G.LAVANYA

Assistant Professor.

Verified By:

Head of the Department:

Name: N Shailaja

Lab Course File - Check List

LAB FILE:

S.NO.	NAME OF THE FILE	Y/N
1	V.M,PEO - HoD signed Xerox Copy	Y
2	PO,PSOs - HoD signed Xerox Copy	Y
3	PO,PSOs, COs and Mapping - prepared and signed by faculty in charge	Y
4	List of Experiments as per the syllabus - University Xerox copy	Y
5	List of Experiments including additional experiments and	Y
6	their CO, PO/PSOs mapping - prepared and signed by faculty in charge	Y
7	Class time table highlighting the lab - HoD signed Xerox copy	Y
8	Model practical End exam questions - prepared and signed by faculty in charge	Y
9	Schedule of end practical examinations - HoD signed Xerox copy	Y
10	List of examiners - HoD signed Xerox copy	Y
11	Cycle chart to known the batch size of experiments setup –	Y
12	prepared and signed by faculty in charge	Y
13	Lab occupancy chart (including names of Lab, faculty in charges and support staff)	Y
14	- prepared and signed by Lab in charge	Y
15	List of Major equipment - prepared and signed by Lab in charge	Y
16	List of the equipment(S.No., Description, suppliers, Date of purchase, Unit price,	Y
17	quantity, total) - prepared and signed by lab in charge	Y
18	List of Labeling/Number code of the equipment –	Y
19	prepared and signed by faculty in charge	Y

REGISTER/DOCUMENTS

S.NO.	NAME OF THE REGISTER/DOCUMENTS	Y/N
1	Stock Register (which includes date of purchase, supplier, Indent, GRN, bill number)	Y
2	-prepared and signed by Lab in charge	Y
3	Maintenance register(allocate minimum one page for each equipment)	Y
4	- prepared and signed by Lab in charge	Y
5	Consumables register(allocate minimum one page for each equipment)	Y
6	- prepared and signed by Lab in charge	Y
7	Student Log-in Register -prepared and signed by Lab in charge	Y
8	Service/Repair register - prepared and signed by Lab in charge	Y
9	Equipment operation manual provided by the manufacturer	Y
10	File of filled indents forms/Register - prepared and signed by faculty in charge	Y

Department of Electronics & Communication Engineering

INSTITUTION VISION

To be a premier Institution in Engineering & Technology and Management with competence, values and social consciousness.

INSTITUTION MISSION

IM1 Provide high quality academic programs, training activities and research facilities.

IM2 Promote continuous Industry-Institute interaction for employability, Entrepreneurship, leadership and research aptitude among stakeholders.

IM3 Contribute to the economical and technological development of the region, state and nation.

PRINCIPAL

Department of Electronics & Communication Engineering

DEPARTMENT VISION

To be a centre of excellence in Electronics and Communication Engineering Education to produce professionals for ever-growing needs of society.

DEPARTMENT MISSION

The Department has following Missions:

DM1 To promote and facilitate student-centric learning.

DM2 To involve in activities that enable overall development of stakeholders.

DM3 To provide holistic environment with state-of-art facilities for students to develop solutions for various social needs.

DM4 Organize trainings in Embedded Systems with Industry interaction.

Head of the Department

Department of Electronics & Communication Engineering

PROGRAM OUTCOMES (POs) & PROGRAM SPECIFIC OUTCOMES (PSOs)

PO	Description
PO 1	**Engineering Knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO 2	**Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO 3	**Design / development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO 4	**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO 5	**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO 6	**The engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO 7	**Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO 8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
PO 9	**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO 10	**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO 11	**Project management and finance:** Demonstrate knowledge and understanding of the

	engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO 12	**Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological Change
Program Specific Outcomes	
PSO 1	To manure and empower the SICET-ECE students strong in practical, technical and research domains in the areas of Signal/ Image processing. VLSI and wireless Communication.
PSO 2	To design and develop a prototype system that will incorporate user requirements using modern devices and emerging technology for industry automations.
PSO 3	To make the SICET-ECE students as successful industry ready engineers by imparting essential interpersonal skills and wide spread exposure on multi-disciplinary technologies.

Head of the Department

Program Educational Objectives (PEOs)

Program:B. Tech - Electronics & Communication Engineering

PEO 1: Accomplish technical proficiency for the efficacious ECE Professional.

PEO 2: Pursue higher studies with emphasizing design, test and development of the systems to meet the industry and societal needs**.**

PEO 3: Become entrepreneur by practicing ethics, professional integrity and leadership qualities.

Head of the Department

Academic Year: 2022-23 B.Tech I Year II Sem

COs MAPPING WITH POs & PSOs

(R22CSE1224) APPLIED PYTHON PROGRAMMING LABORATORY

Course Articulation Matrix:

Upon a successful completion of this course, the student will be able to:

C126.1. Build basic programs using constructs fundamental programming(L3-Apply)

C126.2. Write and execute python codes for different applications.(L3-Apply)

C126.3.Illustrate the programs using modular approach file I/O ,python Standard library (L4-Analyze)

C126.4. Capable to implement on hardware boards. (L4-Analyze)

CO's	**Program Outcomes**														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO-1	2	2	2	-	2	-	-	-	1	-	-	-	2	1	-
CO-2	1	2	2	-	2	-	-	-	-	-	-	-	2	1	-
CO-3	1	2	2	1	2	-	-	-	1	-	-	-	2	1	-
CO-4	1	2	2	1	1	-	-	-	1	-	-	-	2	1	-
C126	1.25	2	2	0.5	1.75				0.75				2	1	

High (3) **Medium (2)** **Low (1)**

Department of Electronics & Communication Engineering

Course Outcome Program Outcomes Mapping using - Competencies-Performance Indicators.

Subject Code / Name : **APPLIED PYTHON PROGRAMMING LAB**

R22 CSE 1224 B.TECH I / II SEM

PO/ CO	Competency		Performance Indicators		CO1	CO2	CO3	CO4
PO1: Engineering Knowledge: apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.	1.1	Demonstrate competence in mathematical modeling	1.1.1	Apply mathematical techniques such as linear algebra, differential calculus, differential equations and integral calculus to solve problems	y		y	
			1.1.2	Apply concepts of Complex Variable, probability, linear algebra, vector integration and transformation techniques to model and solve electronics engineering problems.	y			Y
	1.2	Demonstrate competence in basic sciences	1.2.1	Apply laws of natural science to an engineering problem	y			Y
	1.3	Demonstrate competence in engineering fundamentals	1.3.1	Apply engineering fundamentals	y	y	y	
	1.4	Demonstrate competence in specialized engineering knowledge to the program	1.4.1	Apply electronics engineering concepts to solve engineering problems		y	y	
				Average	2	1	1	1
				Average Final	2	1	1	1
PO2: Problem Analysis: identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first	2.1	Demonstrate an ability to identify and formulate complex engineering problem	2.1.1	Articulate problem statements and identify objectives.	y			Y
			2.1.2	Identify engineering systems, variables, and parameters to solve a problem	y			Y
			2.1.3	Identify the mathematical, engineering and other relevant knowledge that applies to a given	y		Y	Y

principles of mathematics, natural sciences, and engineering sciences.				problem				
	2.2	Demonstrate an ability to formulate a solution plan and methodology for an engineering problem	2.2.1	Reframe complex problems into interconnected sub-problems.	y	y	y	Y
			2.2.2	Identify, assemble and evaluate information and resources	y	y	Y	Y
			2.2.3	Identify existing solution/methods for solving the problem, including forming justified approximations and assumptions	y	y	y	Y
			2.2.4	Compare and contrast alternative solution/methods to select the best methods.	y	y	y	Y
	2.3	Demonstrate an ability to formulate and interpret a model	2.3.1	Combine scientific principles and engineering concepts to formulate model/s (mathematical or otherwise) of a system or process that is appropriate in terms of applicability and required accuracy.	y	y	y	Y
			2.3.2	Identify assumptions (mathematical and physical) necessary to allow modeling of a system at the level of accuracy required.	y	y	y	Y
	2.4	Demonstrate an ability to execute a solution process and analyze results	2.4.1	Apply engineering mathematics to implement solution	y	y	y	
			2.4.2	Analyze and interpret the results using contemporary tools.	y	y	y	
			2.4.3	Identify the limitations of the solution and sources/causes of error.	y	y		
			2.4.4	Arrive at conclusions with respect to the objectives.				
	Average				2	2	2	2
	Average Final				2	2	2	2
PO3: Design & Development of Solutions: design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the	3.1	Demonstrate an ability to define a complex/open-ended problem in engineering terms	3.1.1	Recognize that need analysis is key to good problem definition				
			3.1.2	Able to identify and document system requirements from stakeholders.	Y			
			3.1.3	Ability to review state of the art literature to synthesize requirements.	Y		y	Y
			3.1.4	Extract engineering requirements from relevant engineering codes and standards defined by	Y	y	y	Y

public health and safety, and the cultural, societal, and environmental considerations.				ISO/IEC/IEEE.				
			3.1.5	Explore and synthesize engineering requirements considering health, safety, risks, environment, cultural and societal issues	Y	y	y	Y
			3.1.6	Determine design, objectives, functional	Y	y	y	Y
				requirements and arrive at specifications	Y	y		Y
	3.2	Demonstrate an ability to generate a diverse set of alternative design solutions	3.2.1	Ability to explore design alternatives.	Y	y	y	Y
			3.2.2	Build models/prototypes to develop diverse set of design solutions	Y	y	y	Y
			3.2.3	Identify suitable criteria for evaluation of alternate design solutions	Y	y	y	Y
	3.3	Demonstrate an ability to select optimal design scheme for further development	3.3.1	Ability to perform systematic evaluation of the degree to which several design concepts meet the criteria.	Y	y	y	Y
			3.3.2	Consult with domain experts and stakeholders to select candidate engineering design solution for further development		y	y	Y
	3.4	Demonstrate an ability to advance an engineering design to defined end state	3.4.1	Refine a conceptual design into a detailed design within the existing constraints (of the resources)		y	y	
			3.4.2	Generate information through appropriate tests to improve or revise design				
					2	2	2	2
					2	2	2	2

PO4: Conduct Investigation of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.	4.1	Demonstrate an ability to conduct investigations of technical issues consistent with their level of knowledge and understanding	4.1.1	Define a problem for purpose of investigation,its scope and importance				
			4.1.2	Choose appropriate methods, algorithms, hardware/software tools and techniques of experiment design, system calibration, data acquisition, analysis and presentation				
			4.1.3	Apply appropriate hardware/software tools to conduct the experiment				Y
			4.1.4	Establish a relationship between measured data and underlying physical principles				Y

	4.2	Demonstrate an ability to design experiments to solve open ended problems	4.2.1	Design and develop experimental approach, specify appropriate equipment and procedures				Y
			4.2.2	Understand the importance of statistical design of experiments and choose an appropriate experimental design plan based on the study objectives				Y
	4.3	Demonstrate an ability to analyze data and reach a valid conclusion	4.3.1	Use appropriate procedures, tools and techniques to collect and analyze data			y	
			4.3.2	Critically analyze data for trends and correlations, stating possible errors and limitations			y	
			4.3.3	Represent data (in tabular and/or graphical forms) so as to facilitate analysis and explanation of the data, and drawing of conclusions			y	
			4.3.4	Synthesize information and knowledge about the problem from the raw data to reach appropriate conclusions			y	
					0	0	1	1
					-	-	1	1

PO5: Modern Tools Usage: create, select and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.	5.1	Demonstrate an ability to identify/create modern engineering tools, techniques and resources	5.1.1	Identify modern engineering tools techniques and resources for engineering activities	y	y	y	Y
			5.1.2	Create/adapt/modify/extend tools and techniques to solve engineering problems		y	y	
	5.2	Demonstrate an ability to select and apply discipline specific tools, techniques and resources	5.2.1	Identify the strengths and limitations of tools for (i) acquiring information (ii) modeling and simulating (iii) monitoring system performance, and (iv) creating engineering designs	y			Y
			5.2.2	Demonstrate proficiency in using discipline specific tools	y	y	y	Y
	5.3	Demonstrate an ability to evaluate the	5.3.1	Discuss limitations and validate tools, techniques and resources	y	y	y	Y

		suitability and limitations of tools used to solve an engineering problem	5.3.2	Verify the credibility of results from tool use with reference to the accuracy and limitations,and the assumptions inherent in their use.	y	y	y	
					2	2	2	1
					2	2	2	1
PO6: The Engineer and Society: apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.	6.1	Demonstrate an ability to describe engineering roles in a broader context, e.g. pertaining to the environment, health, safety, legal and public welfare	6.1.1	Identify and describe various engineering roles; particularly as pertains to protection of the public and public interest at global, regional and local level.				
	6.2	Demonstrate an understanding of professional engineering regulations, legislation and standards	6.2.1	Interpret legislation, regulations, codes, and standards relevant to professional engineering practice and explain its contribution to the protection of the public.				
					0	0	0	0
					-	-	-	-
PO7: Environment & Sustainability: understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	7.1	Demonstrate an understanding of the impact of engineering and industrial practices on social, environmental and in economic contexts	7.1.1	Identify risks/impacts in the life-cycle of anengineering product or activity				
			7.1.2	Understand the relationship between the technical, socioeconomic and environmental dimensions of sustainability				
	7.2	Demonstrate an ability toapply	7.2.1	Describe management techniques for sustainable development				

		principles of sustainable design and development	7.2.2	Apply principles of preventive engineering and sustainable development to anengineering activity or product relevant to thediscipline				
					0	0	0	0
					-	-	-	-

PO8: Ethics: apply ethical principles and commit to professional ethics and responsibilities andnorms of engineering practice.	8.1	Demonstrate an ability to recognize ethical dilemmas	8.1.1	Identify situations of unethical professional conduct and propose ethical alternatives				
	8.2	Demonstrate an ability to apply the code of ethics	8.2.1	Identify tenets of code of ethics given by theprofessional bodies like IEEE.				
			8.2.2	Examine and apply moral & ethical principles to known case studies				
					0	0	0	0
					-	-	-	-

PO9: Individual & Team work: function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.	9.1	Demonstrate an ability to form a team and define a role for each member	9.1.1	Recognize a variety of working and learning preferences; appreciate the value of diversity on a team	y			Y
			9.1.2	Implement the norms of practice (e.g. rules, roles, charters, agendas etc.) of effective team work, to accomplish a goal	y			
	9.2	Demonstrate effective individual and team operations---- communication, problem solving, conflict resolution and leadership skills	9.2.1	Demonstrate effective communication, problem solving, conflict resolution and leadership skills	y		y	Y
			9.2.2	Treat other team members respectfully			y	
			9.2.3	Listen to other members			y	Y
			9.2.4	Maintain composure in difficult situations			y	
	9.3	Demonstrate success in a team based project	9.3.1	Present results as a team, with smooth integration of contributions from all individual efforts	y			
					1	0	1	1
					1	-	1	1

Department of Electronics & Communication Engineering

PO10: Communication: communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	10.1	Demonstrate an ability to comprehend technical literature and document project work	10.1.1	Read, understand and interpret technical and non-technical information				
			10.1.3	Create flow in a document or presentation- a logical progression of ideas so that the main point is clear				
	10.2	Demonstrate competence in listening, speaking and presentation	10.2.1	Listen to and comprehend information, instructions, and viewpoints of others				
			10.2.2	Deliver effective oral presentations to technical and nontechnical audiences				
	10.3	Demonstrate the ability to integrate different modes of communication	10.3.1	Create engineering-standard figures, reports and drawings to complement writing and presentations				
			10.3.2	Use a variety of media effectively to convey a message in a document or a presentation				
					0	0	0	0
					-	-	-	-

PO11: Project management & Finance: demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.	11.1	Demonstrate an ability to evaluate the economic and financial performance of an engineering activity	11.1.1	Describe various economic andfinancial costs/benefits of an engineering activity				
			11.1.2	Analyze different forms of financial statements to evaluate the financial status of an engineering project				
	11.2	Demonstrate an ability to compare and contrast the costs/benefits of alternate proposals for an engineering activity	11.2.1	Analyze and select the most appropriate proposal based on economic and financial considerations				
	11.3	Demonstrate an ability to plan/manage an engineering activity within time and budget constraints	11.3.1	Identify the tasks required to complete an engineering activity and the resources required to complete the tasks				
			11.3.2	Use project management tools to schedule an engineering project so it is completed on time and on budget				
					0	0	0	0
					-	-	-	-

PO12: Life-long Learning: recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.	12.1	Demonstrate an ability to identify gaps in knowledge and a strategy to close these gaps	12.1.1	Describe the rationale for requirement for continuing professional development				
			12.1.2	Identify deficiencies or gaps in knowledge and demonstrate an ability to source information to close this gap				
	12.2	Demonstrate an ability to identify changing trends in engineering knowledge and practice	12.2.1	Identify historic points of technological advance in engineering that required practitioners to seek education in order to stay current				
			12.2.2	Recognize the need and be able to clearly explain why it is vitally important to keep current regarding new developments in your field.				
	12.3	Demonstrate an ability to identify and access sources for new information	12.3.1	Source and comprehend technical literature and other credible sources of information				
			12.3..2	Analyze sourced technical and popular information for feasibility, viability, sustainability etc.				
					0	0	0	0
					-	-	-	-

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

ACADEMIC CALENDAR

SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY
(An Autonomous Institution under UGC, New Delhi)
Recognized under 2(f) and 12(B) of UGC Act 1956
NBA Accredited, Approved by AICTE and Permanently affiliated to JNTUH
Sheriguda (V), Ibrahimpatnam, R.R.Dist, Hyderabad - 501 510

D4
BR-22

Lr.No.SICET/AUTO/DAE/BR-22/Academic Cal./655/2022 Date: 27.10.2022

I B.TECH. ACADEMIC CALENDAR
ACADEMIC YEAR : 2022-2023

Dr.G. SURESH,
Principal,

To,
All the HODs
Sir,

Sub: SICET (Autonomous) - Academic & Evaluation - Academic Calendar for **I B.Tech - I & II Semester** for the academic year **2022-23** – Reg.

****

The approved Academic Calendar for **I B.Tech – I & II Semester** for the academic year **2022-23** is given below:

I SEMESTER

S.NO.	EVENT	PERIOD	DURATION
1.	Induction & Orientation Programme	**03.11.2022**	
2.	1St Spell of Instructions for covering First Two and a half Units	03.11.2022 – 28.12.2022	8 Weeks
3.	I Mid Examinations	29.12.2022 – 04.01.2023	1 Week
4.	Submission of I Mid Term Examination Marks to the Autonomous Section on or before	10.01.2023	
5.	2nd Spell of Instructions for covering Remaining Two and a half Units	05.01.2023 – 02.03.2023	8 Weeks
6.	II Mid Examinations	03.03.2023 – 09.03.2023	1 Week
7.	Preparation & Practical Examinations and Remidial Mid Test (RMT)	10.03.2023 – 16.03.2023	1 Week
8.	Submission of II Mid Term Examination Marks Marks to the Autonomous Section on or before	16.03.2023	
9.	I Semester End Examinations	17.03.2023 – 01.04.2023	2 Weeks
	Commencement of Class-Work for I B.Tech - II Semester 03.04.2023		

II SEMESTER

S.NO.	EVENT	PERIOD	DURATION
1.	Commencement of II Sem Class Work	**03.04.2023**	
2.	1st Spell of Instructions for covering First Two and a half Units (Including Summer Vacation)	03.04.2023 – 10.06.2023	10 Weeks
	Summer Vacation	15.05.2023 – 27.05.2023	2 Weeks
3.	I Mid Examinations	12.06.2023 – 17.06.2023	1 Week
4.	Submission of I Mid Term Examination Marks to the Autonomous Section on or before	23.06.2023	
5.	2nd Spell of Instructions for covering Remaining Two and a half Units	19.06.2023 – 12.08.2023	8 Weeks
6.	II Mid Examinations	14.08.2023 – 19.08.2023	1 Week
7.	Preparation & Practical Examinations and Remidial Mid Test (RMT)	21.08.2023 – 26.08.2023	1 Week
8.	Submission of II Mid Term Examination Marks Marks to the Autonomous Section on or before	26.08.2023	
9.	II Semester End Examinations	28.08.2023 – 09.09.2023	2 Weeks
	Commencement of Class Work for II B.Tech – I Semester - 11.09.2023		

ACE CE DEAN PRINCIPAL

Copy to all the Heads of the Depts. and AO.

CONTROLLER OF EXAMINATIONS
Sri Indu College of Engineering & Technology
(An Autonomous Institution under JNTUH)
Sheriguda (V), Ibrahimpatnam, R.R. Dist-501510.

DIRECTOR
(Academic Audit)
Sri Indu College of Engineering & Technology
Sheriguda, IBP, R.R. Dist-501510.

PRINCIPAL
Sri Indu College of Engineering & Technology
(An Autonomous Institution Under JNTUH)
Sheriguda (V), Ibrahimpatnam, R.R. Dist-501510.

Syllabus Copy

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous Institution under UGC, New Delhi)

B.Tech. - I Year – II Semester

L	T	P	C
0	1	2	2

(R22CSE1224) APPLIED PYTHON PROGRAMMING LABORATORY

Course Outcomes: Upon completing this course, the students will be able to

1. Build basic programs using fundamental programming constructs
2. Write and execute python codes for different applications
3. Capable to implement on hardware boards

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	1	1	1	1	-	-	1	-	1	1
CO2	2	3	2	1	1	2	-	-	1	-	1	1
CO3	2	3	2	1	1	2	-	-	1	-	1	1

LIST OF EXPERIMENTS:

Cycle - 1

1. Downloading and Installing Python and Modules
   a) Python 3 on Linux
      Follow the instructions given in the URL https://docs.python-guide.org/starting/install3/linux/
   b) Python 3 on Windows
      Follow the instructions given in the URL https://docs.python.org/3/using/windows.html (Please remember that Windows installation of Python is harder!)
   c) pip3 on Windows and Linux
      Install the Python package installer by following the instructions given in the URL https://www.activestate.com/resources/quick-reads/how-to-install-and-use-pip3/
   d) Installing numpy and scipy
      You can install any python3 package using the command pip3 install <packagename>
   e) Installing jupyterlab
      Install from pip using the command pip install jupyterlab
2. Introduction to Python3
   a) Printing your biodata on the screen
   b) Printing all the primes less than a given number
   c) Finding all the factors of a number and show whether it is a *perfect* number, i.e., the sumof all its factors (excluding the number itself) is equal to the number itself
3. Defining and Using Functions
   a) Write a function to read data from a file and display it on the screen
   b) Define a boolean function *is palindrome*(<input>)
   c) Write a function *collatz(x)* which does the following: if x is odd, $x = 3x + 1$; if x is even,then $x = x/2$. Return the number of steps it takes for $x = 1$
   d) Write a function $N(m, s) = exp(-(x-m)^2/(2s^2))/sqrt(2\pi)s$ that computes the Normaldistribution

4. The package numpy
   a) Creating a matrix of given order *m x n* containing *random numbers* in the range 1 to 99999
   b) Write a program that adds, subtracts and multiplies two matrices. Provide an interfacesuch that, based on the prompt, the function (addition, subtraction, multiplication) should be performed
   c) Write a program to solve a system of *n* linear equations in *n* variables using matrix inverse
5. The package scipy and pyplot
   a) Finding if two sets of data have the same *mean* value
   b) Plotting data read from a file
   c) Fitting a function through a set a data points using *polyfit* function
   d) Plotting a histogram of a given data set
6. The strings package
   1. Read text from a file and print the number of lines, words and characters
   2. Read text from a file and return a list of all *n* letter words beginning with a vowel
   3. Finding a secret message hidden in a paragraph of text
   4. Plot a histogram of words according to their length from text read from a file

Cycle -2

7. Installing OS on Raspberry Pi
   1. Installation using PiImager
   2. Installation using image file
      - Downloading an Image
      - Writing the image to an SD card
        - using Linux
        - using Windows
      - Booting up

   Follow the instructions given in the URL
   https://www.raspberrypi.com/documentation/computers/getting-started.html
8. Accessing GPIO pins using Python
   a. Installing GPIO Zero library.
   First, update your repositories list:
   sudo apt update
   Then install the package for Python 3:
   sudo apt install python3-gpiozero
   b. Blinking an LED connected to one of the GPIO pin
   c. Adjusting the brightness of an LED
   d. Adjust the brightness of an LED (0 to 100, where 100 means maximum brightness) usingthe in-built PWM wavelength.
9. Collecting Sensor Data
   a) DHT Sensor interface
      - Connect the terminals of DHT GPIO pins of Raspberry Pi.
      - Import the DHT library using *import Adafruit_DHT*
      - Read sensor data and display it on screen.

Department of Electronics & Communication Engineering

	L	T/P/D	C
B.Tech. - I Year - II semseter	**0**	**3**	**2**

(R22CSE1224) APPLIED PYTHON PROGRAMMING LABORATORY

List of experiments

S.No	Name Of The Programs
1	Downloading and Installing Python and Modules a) Python 3 on Linux Follow the instructions given in the URL https://docs.python-guide.org/starting/install3/linux/ b) Python 3 on Windows Follow the instructions given in the URL https://docs.python.org/3/using/windows.html (Please remember that Windows installation of Python is harder!) c) pip3 on Windows and Linux Install the Python package installer by following the instructions given in the URL https://www.activestate.com/resources/quick-reads/how-to-install-and-use-pip3/ d) Installing numpy and scipy You can install any python3 package using the command pip3 install <packagename> e) Installing jupyterlab Install from pip using the command pip install jupyterlab
2	Introduction to Python3 a) Printing your biodata on the screen b) Printing all the primes less than a given number c) Finding all the factors of a number and show whether it is a *perfect* number, i.e., the sumof all its factors (excluding the number itself) is equal to the number itself
3	Defining and Using Functions a) Write a function to read data from a file and display it on the screen b) Define a boolean function *is palindrome*(<input>) c) Write a function *collatz(x)* which does the following: if x is odd, $x = 3x + 1$; if x is even,then $x = x/2$. Return the number of steps it takes for $x = 1$ d) Write a function $N(m, s) = exp(-(x-m)^2/(2s^2))/sqrt(2\pi)s$ that computes the Normal distribution

4	The package numpy a) Creating a matrix of given order *m x n* containing *random numbers* in the range 1 to 99999 b) Write a program that adds, subtracts and multiplies two matrices. Provide an interface such that, based on the prompt, the function (addition, subtraction, multiplication) should be performed c) Write a program to solve a system of *n* linear equations in *n* variables using matrix inverse
5	The package scipy and pyplot a) Finding if two sets of data have the same *mean* value b) Plotting data read from a file c) Fitting a function through a set a data points using *polyfit* function d) Plotting a histogram of a given data set
6	The strings package a) Read text from a file and print the number of lines, words and characters b) Read text from a file and return a list of all *n* letter words beginning with a vowel c) Finding a secret message hidden in a paragraph of text d) Plot a histogram of words according to their length from text read from a file
7	Installing OS on Raspberry Pi 1. Installation using PiImager 2. Installation using image file ▪ Downloading an Image ▪ Writing the image to an SD card • using Linux • using Windows ▪ Booting up Follow the instructions given in the URL https://www.raspberrypi.com/documentation/computers/getting-started.html
8	Accessing GPIO pins using Python a. Installing GPIO Zero library. First, update your repositories list: *sudo apt update* Then install the package for Python 3: *sudo apt install python3-gpiozero* b. Blinking an LED connected to one of the GPIO pin

	c. Adjusting the brightness of an LED d. Adjust the brightness of an LED (0 to 100, where 100 means maximum brightness) usingthe in-built PWM wavelength.
9	Collecting Sensor Data a) DHT Sensor interface ▪ Connect the terminals of DHT GPIO pins of Raspberry Pi. ▪ Import the DHT library using *import Adafruit_DHT* ▪ Read sensor data and display it on screen.

Department of Electronics & Communication Engineering

TIME TABLE

Sri Indu College of Engineering & Technology :: Sheriguda (V), R.R.Dist
Department of Humanities & Sciences

I B.Tech II Semester ECE-A – TIME TABLE 2022-23

ROOM NO: F-101 w.e.f: 03-04-2023

Time/Day	9:40am-10:30am I	10:30-11:20am II	11:20-12:10pm III		12:40-01:45pm IV	1:45-2:50pm V	2:50-4:00pm VI
MON	EC	APPL	BEE		← EC LAB →		
TUE	EC	BEE	ODE&VC	LUNCH	← BEE LAB →		
WED	EC	EDC	ODE&VC		← EDC LAB →		
THU	← CAEG →				EDC	ODE&VC	EC
FRI	BEE	EDC	ODE&VC		← CAEG →		
SAT	ODE&VC	EC	EDC		← APP LAB →		

COURSE CODE	COURSE NAME	FACULTY NAME
R22MTH1211	Ordinary Differential Equations and Vector Calculus (ODE&VC)	M Leela
R22CHE1112	Engineering Chemistry (EC)	Dr S Ramu
R22MED1125	Computer Aided Engineering Graphics (CAEG)	B Santosh Kumar / L Ravi
R22EEE1114	Basic Electrical Engineering (BEE)	N Ashlesha
R22ECE1215	Electronic Devices and Circuits (EDC)	G Anitha
R22CSE1224	Applied Python Programming Laboratory (APP LAB)	D Mounika
R22CHE1127	Engineering Chemistry Laboratory (EC LAB)	Dr S Ramu
R22EEE1227	Basic Electrical Engineering Laboratory (BEE LAB)	N Ashlesha
R22ECE1229	Electronic Devices and Circuits Laboratory (EDC LAB)	G Anitha/P Manasa/N Prathibha

CLASS COORDINATOR: Ch Ashok Kumar TIME TABLE INCHARGE: M Leela

Head of the Department Principal

Department of Electronics & Communication Engineering

Sri Indu College of Engineering & Technology :: Sheriguda (V), R.R.Dist
Department of Humanities & Sciences

I B.Tech II Semester ECE-B - TIME TABLE 2022-23

ROOM NO: F-102 w.e.f: 03-04-2023

Time/Day	9:40am-10:30am I	10:30-11:20am II	11:20-12:10pm III	LUNCH	12:40-01:45pm IV	1:45-2:50pm V	2:50-4:00pm VI
MON	←	EDC LAB	→		EC	APPL	ODE&VC
TUE	ODE&VC	EDC	EC		←	CAEG	→
WED	←	CAEG	→		ODE&VC	BEE	BEE
THU	←	BEE LAB	→		ODE&VC	EDC	EC
FRI	←	EC LAB	→		ODE&VC	EC	EDC
SAT	EDC	EC	BEE		←	APP LAB	→

COURSE CODE	COURSE NAME	FACULTY NAME
R22MTH1211	Ordinary Differential Equations and Vector Calculus (ODE&VC)	M Leela
R22CHE1112	Engineering Chemistry (EC)	A Shiva Kumar
R22MED1125	Computer Aided Engineering Graphics (CAEG)	L Ravi / B Santhosh Kumar
R22EEE1114	Basic Electrical Engineering (BEE)	N Ashlesha
R22ECE1215	Electronic Devices and Circuits (EDC)	G Anitha
R22CSE1224	Applied Python Programming Laboratory (APP LAB)	G Lavanya
R22CHE1127	Engineering Chemistry Laboratory (EC LAB)	A Shiva Kumar
R22EEE1227	Basic Electrical Engineering Laboratory (BEE LAB)	N Ashlesha
R22ECE1229	Electronic Devices and Circuits Laboratory (EDC LAB)	G Anitha / P Manasa/N Prathibha
CLASS COORDINATOR: Ch Ashok Kumar		TIME TABLE INCHARGE: M Leela

Head of the Department

Principal

Sri Indu College of Engineering & Technology :: Sheriguda (V), R.R.Dist

Department of Electronics & Communication Engineering

APPLIED PYTHON PROGRAMMING LAB

I B.TECH-II SEMESTER 2022-2023 TIME TABLE **Room No: 105(First Year Block)**

TIME / DAY	09:40am To 10:30am	10:30am To 11:20pm	11:20am To 12:10pm		12:40pm To 1:45pm	1:45pm To 2:50pm	2:50pm To 4:00pm
	1	2	3		4	5	6
MON				L U N C H			
TUE							
WED							
THU							
FRI							
SAT					ECE-A		

I B.TECH-II SEMESTER 2022-2023 TIME TABLE **Room No: 205 (First Year Block)**

TIME / DAY	09:40am To 10:30am	10:30am To 11:20pm	11:20am To 12:10pm		12:40pm To 1:45pm	1:45pm To 2:50pm	2:50pm To 4:00pm
	1	2	3		4	5	6
MON				L U N C H			
TUE							
WED							
THU							
FRI							
SAT					ECE-B		

LAB INCHARGE **HOD** **PRINCIPAL**

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

Lab External Exam Questions:

Exp No	Questions
1	Downloading and Installing Python and Modules Python 3 on Linux Follow the instructions given in the URL https://docs.python-guide.org/starting/install3/linux/
2	Introduction to Python3 a) Printing your biodata on the screen b) Printing all the primes less than a given number
3	Defining and Using Functions a) Write a function to read data from a file and display it on the screen b) Define a boolean function *is palindrome*(<input>)
4	Defining and Using Functions a)Write a function to read data from a file and display it on the screen b) Define a boolean function *is palindrome*(<input>)
5	The package numpy a) Creating a matrix of given order *m x n* containing *random numbers* in the range 1 to 99999 b) Write a program that adds, subtracts and multiplies two matrices. Provide an interfacesuch that, based on the prompt, the function (addition, subtraction, multiplication) should be performed
6	The package scipy and pyplot

	a)Finding if two sets of data have the same *mean* value b)Plotting data read from a file
7	The strings package a) Read text from a file and print the number of lines, words and characters b) Read text from a file and return a list of all *n* letter words beginning with a vowel
8	Installing OS on Raspberry Pi a) Installation using PiImager b)Installation using image file ▪ Downloading an Image ▪ Writing the image to an SD cardusing Windows ▪ Booting up Follow the instructions given in the URL https://www.raspberrypi.com/documentation/computers/getting-started.html
9	Accessing GPIO pins using Python a) Installing GPIO Zero library. First, update your repositories list: *sudo apt update* Then install the package for Python 3: *sudo apt install python3-gpiozero* b)Blinking an LED connected to one of the GPIO pin c)Adjusting the brightness of an LED
10	Collecting Sensor Data a)DHT Sensor interface ▪ Connect the terminals of DHT GPIO pins of Raspberry Pi.

	▪ Import the DHT library using *import Adafruit_DHT* ▪ Read sensor data and display it on screen.
11	Python 3 on Windows Follow the instructions given in the URL https://docs.python.org/3/using/windows.html (Please remember that Windows installation of Python is harder!)
12	pip3 on Windows and Linux Install the Python package installer by following the instructions given in the URL https://www.activestate.com/resources/quick-reads/how-to-install-and-use-pip3/
13	a) Installing numpy and scipy You can install any python3 package using the command pip3 install <packagename> **b)** Installing jupyterlab Install from pip using the command pip install jupyterlab
14	a)Write a function *collatz(x)* which does the following: if x is odd, $x = 3x + 1$; if x is even,then $x = x/2$. Return the number of steps it takes for $x = 1$ b)Write a function $N(m, s) = exp(-(x-m)^2/(2s^2))/sqrt(2\pi)s$ that computes the Normal distribution
15	a) Write a program to solve a system of n linear equations in n variables using matrix inverse b) Finding a secret message hidden in a paragraph of text
16	a)Plot a histogram of words according to their length from text read from a file b) Fitting a function through a set a data points using *polyfit* function
17	a) Finding all the factors of a number and show whether it is a *perfect* number, i.e., the sumof all its factors (excluding the number itself) is equal to the number itself b) Plotting a histogram of a given data set

Faculty in-charge

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

NOTICE

This is to inform all the B.tech1St year 2nd Semester students that your lab external exams (Regular) will be conducted on ---------- The schedule is given below

Sri Indu College of Engineering & Technology :: Sheriguda (V), R.R.Dist

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

APPLIED PYTHON PROGRAMMING LAB
External Exam Time Table for the Year 2022-2023

BRANCH	NAME OF THE LABORATORY	NO. OF STUDENTS	REG. NO.	DATE OF EXAM	EXTERNAL EXAMINORS	TIMINGS
ECE-A						
ECE-B						

HOD **DEAN** **PRINCIPAL**

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

LIST OF EXPERIMENTS CYCLE WISE CHART

S.No	No. of WEEKS	Name of the Experiment	Proposed no of hours	Actual date of handled	CO/RBT
1	I	1. Downloading and Installing Python and Modules Python 3 on Linux Follow the instructions given in the URL https://docs.python-guide.org/starting/install3/linux/	3		CO1/L1
		Python 3 on Windows Follow the instructions given in the URL https://docs.python.org/3/using/windows.html (Please remember that Windows installation of Python is harder!)			CO1/L1
		pip3 on Windows and Linux Install the Python package installer by following the instructions given in the URL https://www.activestate.com/resources/quick-reads/how-to-install-and-use-pip3/			CO1/L1
		Installing numpy and scipy You can install any python3 package using the command pip3 install <packagename>			CO1/L1
		Installing jupyterlab Install from pip using the command pip install jupyterlab			CO1/L1
	II	Introduction to Python3 Printing your biodata on the screen			CO1/L3

2		Printing all the primes less than a given number	3		CO1/L3
		Finding all the factors of a number and show whether it is a *perfect* number, i.e., the sumof all its factors (excluding the number itself) is equal to the number itself			CO1/L3
3	III	Defining and Using Functions a)Write a function to read data from a file and display it on the screen	3		CO3/L4
		Define a boolean function *is palindrome*(<input>)			CO3/L4
		Write a function *collatz(x)* which does the following: if x is odd, $x = 3x + 1$; if x is even,then $x = x/2$. Return the number of steps it takes for $x = 1$ Write a function $N(m, s) = exp(-(x-m)^2/(2s^2))/sqrt(2\pi)s$ that computes the Normal distribution			CO3/L4
4	IV	The package numpy f) Creating a matrix of given order m x n containing *random numbers* in the range 1 to 99999	3		CO2/L3
		Write a program that adds, subtracts and multiplies two matrices. Provide an interfacesuch that, based on the prompt, the function (addition, subtraction, multiplication) should be performed			CO2/L3
		Write a program to solve a system of n linear equations in n variables using matrix inverse			CO2/L3
5	V	The package scipy and pyplot Finding if two sets of data have the same *mean* value	3		CO2/L3
		Plotting data read from a file			CO2/L3
		Fitting a function through a set a data points using *polyfit* function			CO2/L3
		Plotting a histogram of a given data set			CO2/L3

6	VI	The strings package a)Read text from a file and print the number of lines, words and characters	3		CO3/L3
		b)Read text from a file and return a list of all *n* letter words beginning with a vowel			CO3/L3
		c)Finding secret message hidden in a paragraph of text			CO3/L3
7	VII	Installing OS on Raspberry Pi a) Installation using PiImager	3		CO4/L4
		Installation using image file ▪ Downloading an Image ▪ Writing the image to an SD card • using Linux • using Windows ▪ Booting up Follow the instructions given in the URL https://www.raspberrypi.com/documentation/computers/getting-started.html			CO4/L4
8	VIII	Accessing GPIO pins using Python Installing GPIO Zero library. First, update your repositories list: *sudo apt update* Then install the package for Python 3: *sudo apt install python3-gpiozero*	3		CO4/L4
		Blinking an LED connected to one of the GPIO pin			CO4/L4
		Adjusting the brightness of an LED			CO4/L4
		Adjust the brightness of an LED (0 to 100, where 100 means maximum brightness) usingthe in-built PWM wavelength.			CO4/L4

9	IX	Collecting Sensor Data a)DHT Sensor interface ▪ Connect the terminals of DHT GPIO pins of Raspberry Pi. ▪ Import the DHT library using *import Adafruit_DHT* Read sensor data and display it on screen.	3		CO4/L4

Lab in Charge

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

Lab Experiments setup Cycle chart

Roll no	week-1	week-2	week-3	week-4	week-5	week-6	week-7	week-8	week-9
22D41AO401 -464	1(a,b,c,d)	2(a,b,c)	3(a,b,c)	4(a,b,c)	5(a,b,c,d)	6(a,b,c)	7(a,b)	8(a,b,c,d)	9a
22D41AO465 -4C8	1(a,b,c,d)	2(a,b,c)	3(a,b,c)	4(a,b,c)	5(a,b,c,d)	6(a,b,c)	7(a,b)	8(a,b,c,d)	9a

Faculty in charge

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

Students Batches for Lab Experiments setup Cycle chart

ECE –SECTION A(2022-2023)

SL.NO	HTNO	NAME OF THE STUDENT
1	22D41A0401	A LIKHITHA
2	22D41A0402	ABBANAGONI TRISHA
3	22D41A0403	ACIREDDY SNEHALATHA
4	22D41A0404	AEMME SURYA PRAKASH
5	22D41A0405	AKA SANVITHA
6	22D41A0406	ALUGUBELLI SRAVAN KUMAR REDDY
7	22D41A0407	AMARAGONDA VIJAY
8	22D41A0408	AMBADI SHIVAMANI
9	22D41A0409	AMME RAJESH
10	22D41A0410	ANANYA BALLALA
11	22D41A0411	ARKA SUNNY BHARGAV
12	22D41A0412	BANOTH GOPICHAND NAYAK
13	22D41A0413	BANOTH THARUN KUMAR
14	22D41A0414	BINGI SRUTHI
15	22D41A0415	BODA HARIKA
16	22D41A0416	BODDU BHAVITHA
17	22D41A0417	BODDUPALLY SPOORTHI

18	22D41A0418	BODOLLA SANDEEP
19	22D41A0419	BOMMA PRANAVI
20	22D41A0420	BOPPA SHARVAN
21	22D41A0421	BOTTE ANIL
22	22D41A0422	CHAKALI VAMSHI
23	22D41A0423	CHANDANAPU CHANDRA VIKAS
24	22D41A0424	CHELIMANDLA ARAVIND KUMAR
25	22D41A0425	DAMMOJU HARSHITHA
26	22D41A0426	DEVIREDDY HARATHI
27	22D41A0427	DHANAVATH MANJULA
28	22D41A0428	DUMPETA VENKATESH
29	22D41A0429	ERAMALLA VIKRANTH GOUD
30	22D41A0430	G ANJALI
31	22D41A0431	G B SHIVA SAI KRISHNA
32	22D41A0432	GADDAM SRIRAM
33	22D41A0433	GANJI MANOJ KUMAR
34	22D41A0434	GANJI SAI TEJA
35	22D41A0435	GANNEBOINA AADITYA
36	22D41A0436	GOTTIPATI VENKATESWARLU
37	22D41A0437	GUJJETI GANESH KARTHIKEYA
38	22D41A0438	JATAVATH MUNI
39	22D41A0439	JURRU SURESH
40	22D41A0440	K SATHISH KUMAR
41	22D41A0441	KADEM MAITHILI

42	22D41A0442	KAMBALAPALLY MANIKANTA REDDY
43	22D41A0443	KAMSANI NISHITHA
44	22D41A0444	KANCHARLA NANDITHA
45	22D41A0445	KANDURI AKSHAYA REDDY
46	22D41A0446	KANUKULA VAMSHI
47	22D41A0447	KANUKULA VARDHAN
48	22D41A0448	KARANGULA ROSHINI
49	22D41A0449	KARNATI TEJASWINI
50	22D41A0450	KATAM RAKESH
51	22D41A0451	KATHERAPAKA SNEHA
52	22D41A0452	KETHAVATH MOUNIKA
53	22D41A0453	KOMMU SHIVANI
54	22D41A0454	KONGARA RITHIKA
55	22D41A0455	KOPPU RAMYASRI
56	22D41A0456	KOPPULA SHIVA KUMAR
57	22D41A0457	KORRA PAVAN KUMAR
58	22D41A0458	KOTAPATI SRINIVASULU
59	22D41A0459	KOTHAGOLLA MANASA
60	22D41A0460	KOTHAKAPU JAI ADITYA REDDY
61	22D41A0461	KUNDARAPU BHANU PRASANNA
62	22D41A0462	LADE SOWJANYA
63	22D41A0463	LAXMI NAARASIMHA
64	22D41A0464	MADDI MANISHA

ECE –SECTION B(2022-2023)

SL.NO	HTNO	NAME OF THE STUDENT
1	22D41A0465	MADHAGONI RUTHIKA GOUD
2	22D41A0466	MADHAGOUNI DIVYA
3	22D41A0467	MALLREDDY ANANYA
4	22D41A0468	MANCHIRYALA MANASWINI
5	22D41A0469	MAREDDY NAVEEN REDDY
6	22D41A0470	MAROJU PRAVALIKA
7	22D41A0471	MOHAMMED MATEEN
8	22D41A0472	MOHD ABDUL RIYAN
9	22D41A0473	MUDDAM SAI KOUSHIK
10	22D41A0474	MUNUGAPATI SRILAKSHMI
11	22D41A0475	NAGILLA SRAVANI
12	22D41A0476	NAGULA KEERTHI
13	22D41A0477	NALLA RANJITH REDDY
14	22D41A0478	NALLA SIDDARDHA REDDY
15	22D41A0479	NALLA USHASRI
16	22D41A0480	NALLAVELLI KALYAN BABU
17	22D41A0481	NARLAGIRI JAGADEESHWAR
18	22D41A0482	NENAVATH PRIYANKA
19	22D41A0483	OGGU AYODHYA
20	22D41A0484	PAJJURI HARSHITHA

21	22D41A0485	PALLEPATI SAI SHIVA DIKSHITH
22	22D41A0486	PANDI HARSHITHA
23	22D41A0487	PANUGANTI BHARATH
24	22D41A0488	PASUPULA SINDHUJA
25	22D41A0489	PATHULOTHU KRISHNA
26	22D41A0490	PEDDAVENA ANVESH
27	22D41A0491	PEDDI ANJALI
28	22D41A0492	PITTALA NANDINI
29	22D41A0493	POVAKU SHIVANI
30	22D41A0494	PURUSHOTHAM SATHWIK
31	22D41A0495	PUTCHAKAYALA MALLIKARJUNA RAO
32	22D41A0496	PUTTA KAVERI
33	22D41A0497	RAGANAMONI SHIVA SHANKER
34	22D41A0498	RAMADAS HARSHMITHA
35	22D41A0499	RAMAVATH NAVEENA
36	22D41A04A0	RAMAVATH RAGHAVENDRA
37	22D41A04A1	RAYAPU SUDHEER REDDY
38	22D41A04A2	SAIPREETAM VINNAKOTA
39	22D41A04A3	SANDHYA JUPALLY
40	22D41A04A4	SANUVALA KARTHIK
41	22D41A04A5	SAYNI NITHIN KUMAR
42	22D41A04A6	SEELAM SIVA NAGA LAKSHMI
43	22D41A04A7	SHAIK ABID
44	22D41A04A8	SURAM SRIJA

Department of Electronics & Communication Engineering

45	22D41A04A9	SURAPALLY NANDINI
46	22D41A04B0	TANGALAPALLY NARSAIAH
47	22D41A04B1	TENAGA SAI HANSIKA
48	22D41A04B2	THAMMISHETTY SHREEJA
49	22D41A04B3	THANGALLAPALLY AKHILA
50	22D41A04B4	THOKALA SAI CHANDANA
51	22D41A04B5	THOTAPALLI SAI SUBRAMANYAM
52	22D41A04B6	TIRUGAMALLA MUKESH KUMAR
53	22D41A04B7	TOTAPALLI SUSHMA
54	22D41A04B8	TURPU SREEJA
55	22D41A04B9	UDUTHALA RAVI GOUD
56	22D41A04C0	VADDEGONI NAGARAJU
57	22D41A04C1	VADLAMUDI VIJAY KUMAR
58	22D41A04C2	VADLAMUDI YASWANTH
59	22D41A04C3	VALIJALA MAHENDER
60	22D41A04C4	VANAPOSA KRANTHI KUMAR
61	22D41A04C5	VEGINATI RAVI KUMAR
62	22D41A04C6	VEMIREDDY VENKATA SAHITHI
63	22D41A04C7	YADALA SAI
64	22D41A04C8	YERRABOIENA VASANTH KUMAR

Lab In charge

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

List of Equipments

S. No.	Name of the Equipments	Quantity
1	Computer Systems: CPU, LCD Monitor, Intel core i3,2 GB RAM,320 GB Harddisk	120
2	PYHTON 3.7 software	120
3	LAN	120
4	Projector	2

Lab In charge

Sri Indu College of Engineering & Technology :: Sheriguda (V), R.R.Dist

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

List of Equipments for the Programming for problem solving lab-1 As on Sept 4/5/2023

	Name	Make	Date	Quantity	Unit Cost	Total Cost in Rs.	Installed
1	LED Projector	NEC	12/09/2014	1	22,586	22,586	17/09/2014
2	MONITOR	ACER	12/09/2014	60	21,333	1,279980	17/09/2014
3	CPU	ACER	12/09/2014	60			17/09/2014
4	KEYBOARD	-------	12/09/2014	60			17/09/2014
5	MOUSE	ACER	12/09/2014	60			17/09/2014
6	Computer cables 1	------	24/9/2018	80no's	8.47	677	30/9/2018
7	Vga Cable 10mts	--------	24/9/2018	1	423	423	30/9/2018
8	Focus Celling Mount kit	--------	12/09/2014	1	485	485	17/09/2014
9	Focus cable VGS-15mts	-----	12/09/2014	1	1,449	1,449	17/09/2014
TOTAL:1,305,600							

Lab In charge

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

List of Labeling /Number Code of the equipment:

SICET/H&S/PPL/01	SICET/H&S/PPL/41
SICET/H&S/PPL/02	SICET/H&S/PPL/42
SICET/H&S/PPL/03	SICET/H&S/PPL/43
SICET/H&S/PPL/04	SICET/H&S/PPL/44
SICET/H&S/PPL/05	SICET/H&S/PPL/45
SICET/H&S/PPL/06	SICET/H&S/PPL/46
SICET/H&S/PPL/07	SICET/H&S/PPL/47
SICET/H&S/PPL/08	SICET/H&S/PPL/48
SICET/H&S/PPL/09	SICET/H&S/PPL/49
SICET/H&S/PPL/10	SICET/H&S/PPL/50
SICET/H&S/PPL/11	SICET/H&S/PPL/51
SICET/H&S/PPL/12	SICET/H&S/PPL/52
SICET/H&S/PPL/13	SICET/H&S/PPL/53
SICET/H&S/PPL/14	SICET/H&S/PPL/54
SICET/H&S/PPL/15	SICET/H&S/PPL/55
SICET/H&S/PPL/16	SICET/H&S/PPL/56
SICET/H&S/PPL/17	SICET/H&S/PPL/57
SICET/H&S/PPL/18	SICET/H&S/PPL/58
SICET/H&S/PPL/19	SICET/H&S/PPL/59
SICET/H&S/PPL/20	SICET/H&S/PPL/60
SICET/H&S/PPL/21	
SICET/H&S/PPL/22	
SICET/H&S/PPL/23	
SICET/H&S/PPL/24	
SICET/H&S/PPL/25	
SICET/H&S/PPL/26	
SICET/H&S/PPL/27	
SICET/H&S/PPL/28	
SICET/H&S/PPL/30	
SICET/H&S/PPL/31	
SICET/H&S/PPL/32	
SICET/H&S/PPL/33	
SICET/H&S/PPL/34	
SICET/H&S/PPL/35	
SICET/H&S/PPL/36	
SICET/H&S/PPL/37	
SICET/H&S/PPL/38	
SICET/H&S/PPL/39	
SICET/H&S/PPL/40	

Lab In charge

Department of Electronics & Communication Engineering

SICET/H&S/PPL/61	**SICET/H&S/PPL/100**
SICET/H&S/PPL/62	**SICET/H&S/PPL/101**
SICET/H&S/PPL/63	**SICET/H&S/PPL/102**
SICET/H&S/PPL/64	**SICET/H&S/PPL/103**
SICET/H&S/PPL/65	**SICET/H&S/PPL/104**
SICET/H&S/PPL/66	**SICET/H&S/PPL/105**
SICET/H&S/PPL/67	**SICET/H&S/PPL/106**
SICET/H&S/PPL/68	**SICET/H&S/PPL/107**
SICET/H&S/PPL/69	**SICET/H&S/PPL/108**
SICET/H&S/PPL/70	**SICET/H&S/PPL/109**
SICET/H&S/PPL/71	**SICET/H&S/PPL/110**
SICET/H&S/PPL/72	**SICET/H&S/PPL/111**
SICET/H&S/PPL/73	**SICET/H&S/PPL/112**
SICET/H&S/PPL/74	**SICET/H&S/PPL/113**
SICET/H&S/PPL/75	**SICET/H&S/PPL/114**
SICET/H&S/PPL/76	**SICET/H&S/PPL/115**
SICET/H&S/PPL/77	**SICET/H&S/PPL/116**
SICET/H&S/PPL/78	**SICET/H&S/PPL/117**
SICET/H&S/PPL/79	**SICET/H&S/PPL/118**
SICET/H&S/PPL/80	**SICET/H&S/PPL/119**
SICET/H&S/PPL/81	**SICET/H&S/PPL/120**
SICET/H&S/PPL/82	
SICET/H&S/PPL/83	
SICET/H&S/PPL/84	
SICET/H&S/PPL/85	
SICET/H&S/PPL/86	
SICET/H&S/PPL/87	
SICET/H&S/PPL/88	
SICET/H&S/PPL/89	
SICET/H&S/PPL/90	
SICET/H&S/PPL/91	
SICET/H&S/PPL/92	
SICET/H&S/PPL/93	
SICET/H&S/PPL/94	
SICET/H&S/PPL/95	
SICET/H&S/PPL/96	
SICET/H&S/PPL/97	
SICET/H&S/PPL/98	
SICET/H&S/PPL/99	

Lab In charge

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB
SUB CODE: R22CSE1224

APPLIED PYTHON PROGRAMMING LAB

SAFETY MEASURES

Study in the computer classroom is s priority for students. teachers. and parents. To ensure a safe computer classrooms. a list of procedures has been developed and provided to you in this student safety contract These procedures must be followed at all times.
These procedures must be followed at all times.
This contract is to be kept in your notebook as a constant remainder of the safety procedures.

1. **General Safety Guidelines:**

- All users of the laboratory are to follow the directions of Programmer/Laboratory Technician/ staff member.
- Students should not attempt to repair.open.tamper or interfere with any of the computer. printing cabling. air conditioning or other equipment in the laboratory.
- Please treat fellow users of the laboratory. and all equipment within the laboratory. with the appropriate level of care and respect.
- Turn of the computer once you are not using it.
- Do not plug in external devices without scanning them for computer viruses.

2. **DO'S**

- Know the location of the first aid box and the fire extinguisher and how to use them in case of an emergency.
- Read any broken plugs or exposed electrical wires to your faculty/laboratory programmer Immediately.

3. **DONT's**

- Do not open the system unit casing or monitor casing particularly when the power is turned on.Some internal components hold electric voltages of up to 1200volts. Which which can be fatal.
- Avoid stepping on electrical wires if any other computer cables.
- Do not touch. connect or disconnect any plug or cable without your faculty /laboratory Technician's permission
- Do not eat or drink in the laboratory.

Lab In charge

Department of Electronics & Communication Engineering

Course: B.Tech. - I Year – II Semester (ECE)

SUB Name: APPLIED PYTHON PROGRAMMING LAB

SUB CODE: R22CSE1224

APPLIED PYTHON PROGRAMMING LAB

INVENTORY LIST:

S.No	Name of the inventory item	Quantity
1	Laboratory Instructions	1
2	List of equipment's board	1
3	Tube light	4
4	Types of electrical switched board	2
5	Tube lights	4
6	Fans	6
7	Safety guide line board	1
8	Program outcomes board	1
9	System configuration	1
10	List of experiments	1
11	Notice board	1

Lab In charge

Department of Electronics & Communication Engineering